LEADING EDUCATIONAL CHANGE IN PRIMARY TEACHER EDUCATION:

A PAPUA NEW GUINEA STUDY

Submitted by

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STATEMENT OF AUTHORSHIP AND SOURCES

This thesis contains no material published elsewhere or extracted in whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma.
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This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.
All research procedures reported in the thesis received the approval of the relevant Ethics Committee.
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ABSTRACT

Papua New Guinea gained its independence from Australia in 1975. However, as a developing nation, PNG has continued to depend on external assistance for its development programs. Extensive foreign aid has been expended primarily to enhance the quality of education. To explore the issue of foreign aid and its impact on PNG as a postcolonial society, the dependency and postcolonial theories were adopted to guide the discussion. The theorist Beeby argues that in order to improve the quality of education, the level of general education and training of teachers in developing countries must be raised. This has occurred in PNG but it has not significantly enhanced the quality of education. Consequently, the issue explored concerns the type of educational change occurring in PNG primary teachers' colleges (PTCs) and its leadership. Globalization processes were adopted to guide the exploration of the education reform and its impact on the quality of education in primary teacher education in PNG.

The following questions focused the content of the study:

- 1. What is the quality of education being experienced in the Catholic Primary Teachers' Colleges?
- 2. What are the lecturers', students', and recent graduates' perceptions of the recent Primary and Secondary Teacher Education Project innovations occurring in the teachers' colleges?
- 3. How is the curriculum in the teachers' colleges perceived by the lecturers, students and recent graduates?
- 4. How is leadership demonstrated in the three Catholic Primary Teachers' Colleges?

The epistemological framework of the research was constructionism adopting an interpretivist approach. The specific interpretivist perspective employed was symbolic interactionism because symbolic interactionism places emphasis on the importance of understanding, interpretation and meaning. A case study approach was adopted as the methodology for this research because of the nature of the research purpose. This study involved a total of 166 participants consisting of staff and students from the three Catholic primary teachers' colleges, representatives from the Catholic Church, National Department of Education (NDOE), Primary and Secondary Teacher Education Project (PASTEP) and other education officers. The data was gathered through a variety of methods including in-depth interviews, participant observation, focus groups, and documentary analysis.

The major conclusions that emerged from this study revealed that educational change in primary teacher education has been implemented. However, the study concluded that the quality of leadership demonstrated to lead the educational change was disappointing. Inadequate leadership at the administration and curriculum levels had a negative influence on the quality of education. Achieving quality education was also hampered by inadequate funding, scarcity of resources and inappropriate infrastructure in all the institutions. The two-year trimester program has improved access and quantity but at the expense of quality. To assist primary teacher education implement the reform agenda, foreign aid was required. PASTEP was introduced and the contribution made by PASTEP was substantial. However, the study concluded that some of the strategies adopted by PASTEP to conduct its programs were questionable because there was evidence of hegemonic and colonial practices found among some of its workforce. In accepting foreign aid projects, PNG needs to establish strategies to ensure equitable partnerships with all stakeholders for sustainable development in education. In this respect, the findings of this study may serve as a guide for future decisions about educational leadership, curriculum innovation, donor funding agencies and policy generation.

ACRONYMS

ACU Australian Catholic University

ADB Asian Development Bank

AIDAB Australian International Development Assistance Bureau

AusAID Australian Assistance for International Development

CDD Curriculum Development Division

CHE Commission of Higher Education

CRIP Curriculum Reform Implementation Project

DWU Divine Word University

EFA Education for All
EU European Union
HOS Heads of Strand

HTTC Holy Trinity Teachers' College

MOMASE Morobe, Madang, Sepik

MSU Measurement Services Unit

NCG National Curriculum Guidelines

NDOE National Department of Education

NEB National Education Board

NEC National Education Council

NGI New Guinea Islands

NGO Non-Government Organization

OHE Office of Higher Education

OLSH Our Lady of the Sacred Heart

PASTEP Primary and Secondary Teacher Education Project

PNG Papua New Guinea

PNGEI Papua New Guinea Education Institute

PTCs Primary Teachers' Colleges

QUT Queensland University of Technology

SBC St Benedict's Campus

SSCEP Secondary Schools Community Extension Project

TERP Teacher Education Research Project

TSC Teaching Service Commission

UOG University of Goroka

UPE Universal Primary Education

UPNG University of Papua New Guinea

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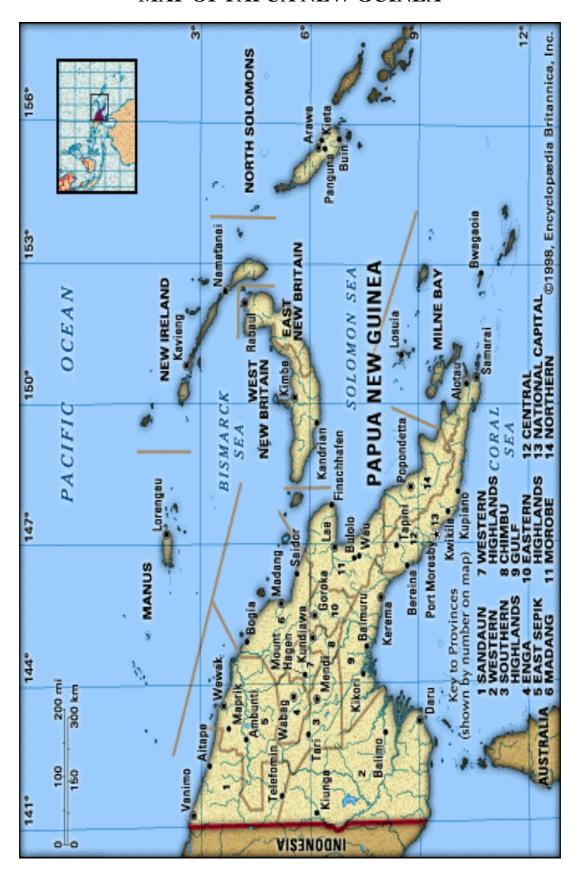
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MAP OF PAPUA NEW GUINEA



CHAPTER ONE

IDENTIFYING THE RESEARCH PROBLEM

1.1 Autobiographical context

The genesis of this thesis lies in the concerns and interests in the training of teachers that the researcher of this thesis had while working with the University of Goroka (UOG), Papua New Guinea (PNG). The concerns evolved from the educational, economic, social, moral, and community expectations required of teachers in schools in PNG. The researcher had been a secondary school teacher at several secondary schools in PNG. As a teacher she was involved in the supervision of teacher trainees in schools. It was during that time that she witnessed difficulties teacher trainees experienced in lesson presentations. She questioned the professional training of teachers and began to reflect on how to improve educational practice. These experiences led her to join UOG as a teacher educator.

As Head of the Expressive Arts and Religious Education (RE) Department at UOG, the researcher worked with other lecturers to develop the content and methodology courses for the Bachelor of Education (BEd) programs. Apart from teaching, the researcher was also involved in the supervision of the student practicum, a major component of the program. The teacher trainees were trained to teach the years 7-12 curriculum. It was also during this time that secondary school principals informed UOG administration that they wanted to terminate their involvement in the student practicum. Anecdotal evidence from these schools suggests that the principals had negative experiences with the teacher trainees. As a consequence of this, the university encountered difficulties placing students for the practicum.

More recently, the researcher left UOG and joined another PNG university where she has been involved in the professional development of primary school teachers. It is in this role as teacher educator that the researcher had the opportunity to explore how educational change is led in primary teacher education in PNG.

1.2 Research context

This section is divided into two parts. The first explores PNG the nation and the second explores how the former impacts on the PNG education context. This is undertaken as it offers some appropriate contextual information for readers to appreciate the cultural context.

1.2.1 PNG's cultural context

PNG currently has a population of about six million people (Editorial, 2007c) with more than 1,000 tribes with distinctive cultures and over 800 identified languages (Department of Education, 2000a). PNG tribes are organized on the basis of kinship, a distinctive feature of tribal societies worldwide (Schwarz, 1995). "Kinship is a system that prescribes how people living together should interact with one another" and within each cultural group "there are usually smaller groups of more closely related people whose loyalties to one another are greater and who interact more frequently with one another than they do with other groups" (Whiteman, 1995, p. 107). The majority of the population lives in small comparatively isolated communities undertaking subsistence farming and fishing. However, there is an increasing drift into the urban areas, since there is an immense gap between the conditions of the urban centres and the rural areas where there is an absence of electricity, schools, banks, running water, shops or libraries (Schwarz, 1995).

Prior to the first European contact in the 1800s, PNG tribes had their own systems of education. The curriculum of traditional education was based on the life experiences and wisdom of 40,000 years of history (D. McLaughlin & O'Donoghue, 1996). The curriculum was informal and fundamentally for survival skills (Louisson, 1974). While traditional education was appropriate for traditional society, it no longer provides the structure, knowledge and skills needed for the twenty-first century. Consequently, PNG is attempting to address this issue in its current education system, which is based on a western ideology. Not unexpectedly, the education system needs to be of quality, relevant, and accessible. This means an education that can respond to the needs of Papua New Guineans and provide them with the appropriate knowledge, skills and attitudes needed to live meaningful lives now and in the future.

1.2.2 PNG's educational context

Education standards in PNG are declining. Media reports indicate that the local communities, as well as the nation as a whole, acknowledge the importance of education but decry the substandard quality of education in schools (Editorial, 2004b, 2004c, 2004d). Indeed research over the past two decades (Avalos, 1989, pp. 107-110; Ross, 1989; Yeoman, 1986) has concluded that, in spite of various innovations and substantial financial assistance poured into the national education system by both foreign aid donors and the PNG national government (Department of Education, 1999b), there appear to be minimal recognizable changes in the quality of the education system in PNG (Department of Education, 2000a). Indeed it would seem that PNG education is at a more serious state of decline than it was in the 1980s (Editorial, 2007b; D. McLaughlin & O'Donoghue, 1996; Tapo, 2004; Zeegers, 2000).

Consequently, PNG has continued to search for ways to address the issue of quality education in its education system. Since the establishment of the Tololo Committee in 1974 (Department of Education, 2001b, p. 6) to the 1993 education reform, PNG has failed to generate an appropriate strategic plan to arrest the decline in education standards. Educational reviews and research have been conducted to find ways to improve the quality of education (Department of Education, 2000a, p. 47; Ross, 1989). This has occurred in conjunction with educational innovations being introduced directly in the schools; these have failed for a variety of reasons (Editorial, 2007b; Clements & Lean, 1981; Crossley, 1983; Lancy, 1983).

As a strategy to improve the quality of education, the quality of primary teacher education invites close scrutiny. Quality teachers can come only from quality educational institutions where there are qualified staff (Maraj, 1974). While quality teachers are perceived as a logical consequence of having quality staff in educational training institutions, this does not happen without competent leadership in these institutions. Leadership is critical in any educational change (Fullan, 2001). However, it is contestable that quality leadership resides in the teacher education institutions in PNG (Pagelio, 2002).

Introduction of western education in PNG

Christian missions introduced schools in PNG in 1874. The goal of their education was conversion to Christianity (P. Smith, 1987). In contrast, when the colonial administrators established schools, the education system was designed to serve the colonial administration's interests (Louisson, 1974). Since independence, the education system has continued to be an adapted version of PNG's colonial administration's system (P. Smith, 1987; Smock, 1981).

Many Papua New Guineans were dissatisfied with the education system prior to independence (Department of Education, 2001b). As a consequence, two committees were convened under the chairmanships of Tololo in 1974 (Department of Education, 2003c) and Matane in 1985 (Matane, 1986). Both reports were concerned with developing ways to make the education system more relevant to PNG. The reforms recommended the use of the vernacular in educational instructions and making education more community based. What was lacking was the provision of appropriate funding and pragmatic structures to implement the recommendations made within the entire education system (Department of Education, 2000a, p. 39). Significant milestones in the education reforms have occurred in PNG since independence in 1975 (Department of Education, 2002b).

One of the reports, the *Matane Report*, was published in 1986 as the "Philosophy of Education" (Department of Education, 2001b). This report was labelled by many as the "birth of the education reforms, in particular the reform of the curriculum" (Department of Education, 2001b, p. 6). However, criticisms have been raised about the *Matane Report* as being overly idealistic and insufficiently pragmatic for teachers to use in their teaching of the curriculum at universities and in schools (Yoko, 2000). Since the Tololo and Matane reports, there have been few recognizable changes in the quality of education (Pagelio, 2002; Tapo, 2004).

In 1991, an *Education Sector Review* was commissioned by the national government to identify, document and develop strategies to rectify problems that had become endemic in the education system over the fifteen years since independence. The sector review confirmed that the attrition rates at the primary level were high; that there were low transition rates at post grade 6 and grade 10 levels; an irrelevant curriculum; weak management and administration; declining resource allocations combined with high unit costs; and a severe imbalance in the allocation of funding to higher education at the expense of other sectors of education. In light of these findings, the review suggested a need for significant change. Consequently an "integrated package of strategies was developed which radically changes the education system in its structure and curriculum and establishes a lower cost base at each level of education" (Department of Education, 2000a, p. 5).

The need for change was aided by major global developments in education. In particular, the *Declaration for Education for All* (EFA) which was signed in Jomtien, Thailand in 1990 and reaffirmed in Dakar, Senegal in 2000 (Department of Education, 2003c, p. 7). The main objectives of EFA are Universal Primary Education (UPE) and that people of all ages should have the opportunity to develop basic literacy. PNG as a signatory of that declaration accepted the responsibility to ensure its education system promotes UPE. Therefore, the current education reform supposedly addresses UPE (Department of Education, 2000a).

Education Reform

In 1993, a national education reform was introduced into PNG education. The main targets of the education reform included:

- Access to nine years of relevant basic education for all children;
- All children to begin their formal school learning at age six in a language they use and understand;

- Strengthening of all areas of the curriculum with improvements in standards and relevance and increased emphasis on relevant practical skills for life;
- Expanded access to secondary and vocational education (Department of Education, 2000a; PASTEP, 2002).

Central to these reforms were the development of elementary education, the restructuring of primary and secondary schooling and curriculum, and the development and refinement of teacher education programs. The development of the teacher education programs was enhanced by an AusAID project called the "primary and secondary teacher education project" (PASTEP) which commenced in 1999-2004 (PASTEP, 2002).

PASTEP was instrumental in supporting improvements to curriculum and academic staff development (Department of Education, 2002c). These targets were relevant to this research because they provided links with the National Department of Education (NDOE), which is the policy maker, and the teachers' colleges, which are responsible for the training of teachers. Others involved are the teachers as the implementers of the policies, and students as the recipients and products of the system. In order for educational change to be effective, it needs to be negotiated within this network of stakeholders (Sarere, 2003).

1.3 Focus of the research

The focus of the research reported in this thesis is the exploration of how three PNG primary teachers colleges have changed as a result of government mandated change financed by foreign donor agencies.

1.4 Significance of the research

This research is significant for the following reasons: Firstly, the quality of PNG education needs improvement. For this to occur there must be quality teachers in the school system. Quality teachers are the products of quality teaching institutions (Maraj, 1974). This statement highlights the important function that teacher education institutions undertake in producing quality teachers for the school system. Therefore, this study is significant as its findings may offer appropriate strategies and structures for teacher education programs.

Secondly, this study is timely since the PNG education system has been undergoing a major reform. Hence, this study is significant because it may provide justification for the fundamental necessity of competent leadership in contributing to authentic educational change.

The third important reason is to illuminate for the government and church leadership the needs of teacher education. If teacher education is important in the delivery and achievement of quality education, appropriate funding must be provided. Thus far, funding has been problematic in the implementation of educational change throughout all the education sectors including teacher education (Department of Education, 2003c). Funding for teacher education includes the general college operations, infrastructure and resources, and staff professional development programs. The role of donor funding agencies is also reviewed in the process to identify priority areas in teacher education, so that adequate funding can be provided to ensure quality education is achieved.

The fourth important reason is to highlight the partnership that church and government share in providing quality teacher education for PNG. The three Catholic PTCs selected for this study are church-conducted institutions. The partnership between state and church entails certain provisions in terms of personnel and funding, infrastructure, curriculum, staff development programs and student selections (Ommerborn, 1996). A key issue in this study is the leadership of these institutions. Consequently, this study may offer possible structures needed to help potential and future leaders of Catholic PTCs.

1.5 Outline of Thesis

Chapter One offers appropriate contextual information to understand the research issues. It describes the research context of PNG as the nation and its educational context, identifies the focus of the research, outlines the significance of the study and concludes with the thesis outline.

Chapter Two defines the research problem. It provides the cultural context and socio-economic background for the study, explores the traditional and western education systems and the processes.

Chapter Three generates a review of the appropriate related literature on teacher education, educational reform, partnerships and leadership. It also reviews the development of education in postcolonial PNG society.

Chapter Four outlines the four theoretical perspectives for this study. These are: Beeby's theory, Postcolonial theory, Dependency and Globalization.

Chapter Five describes and justifies the research design that focussed the conduct of this study. The specific interpretivist approach employed is symbolic interactionism because symbolic interactionism places emphasis on the importance of meaning and interpretation as essential human processes in reaction against behaviourism and mechanical stimulus-response psychology (Merriam & Associates, 2002). A case study methodology is employed.

Chapters Six to Nine document the research findings. Chapter Six presents the findings of Case Study One; Chapter Seven presents Case Study Two; and Chapter Eight presents Case Study Three. Chapter Nine presents the research findings from the other key stakeholders.

Chapters Ten and Eleven contain the discussions of the research topic. Chapter Ten contains the discussions of the research topic drawing on the related literature. Chapter Eleven focuses on the discussions of the research topic drawing on the four theoretical perspectives.

Chapter Twelve concludes with a summary, where the main findings are addressed and the conclusions drawn. Implications for educational change and leadership are highlighted and future research directions are recommended.

CHAPTER TWO

RESEARCH PROBLEM DEFINED

The purpose of this chapter is to provide a substantial contextual understanding of the culture and education systems of PNG. Such an understanding is a prerequisite to defining the research problem underpinning this thesis. Seven major sections comprise this chapter. These are:

- 2.1 Contemporary Papua New Guinea;
- 2.2 The nature of traditional education;
- 2.3 The nature of western education:
- 2.4 Teaching challenges and dilemmas;
- 2.5 Primary teacher education;
- 2.6 The articulation of the problem;
- 2.7 The purpose of the study.

2.1 Contemporary Papua New Guinea

PNG is situated off the northern tip of Australia and occupies the eastern half of the rugged tropical island of New Guinea, which it shares with the Indonesian province of West Papua (formerly Irian Jaya, renamed in 2001) as well as numerous smaller islands and atolls in the Pacific. It comprises over 600 islands and occupies an area of 462,840 square kilometres (Department of Education, 2002c). The central part of the island rises into a topographically difficult terrain such that the island's local peoples remained isolated from each other for millennia. The coastline is endowed with coral reefs. The smaller island groups of PNG include the Bismarck Archipelago, Manus, New Britain, New Ireland and Bougainville. Some of the islands are volcanic, with mountain ranges, and all are relatively undeveloped. PNG is divided into four regions: *Momase*, which is in the northern part of the New Guinea mainland, *Papua*, which is in the south, *Highlands* and *New Guinea Islands*. For political reasons underpinning the need for national unity, these four regions are further divided into 19 provinces (PASTEP, 2002).

2.1.1 Brief history

The first contact with the island by Europeans occurred in the early 16th century, when the Portuguese explorer Jorge de Meneses sighted the country and named it *Ilhas dos Papuas* (Land of the Fuzzy-Haired People). However, it was not until the mid-1800s that European missionaries and traders began to settle on the island, and even those few settlers limited their presence mostly to the accessible coastal areas.

Over the next several decades PNG was claimed by the Germans, British and Dutch; it came under the political control of Australia after World War I (Barrington, 1976, p. 4). The inland Highland region, thought to be impossible for habitation, was not explored until the 1930s. European explorers in search of gold discovered instead over one million people, living in fertile mountain valleys and following a lifestyle that had not changed since the Stone Age. By the 1960s, there had emerged an energetic independence movement in the country. In 1975, after a brief period of internal autonomy, PNG declared its full independence.

PNG is a member of the British Commonwealth and has a Westminster style government. This means it has a democratic parliamentary style one chamber government. Elections are held every five years. The system of government consists of three arms: Legislative, Executive and Judicial (Carrick, 1969). There are three levels of government: National, Provincial and Local level governments. Provincial governments were established in 1977. This was to ensure a unified development of the country through a decentralized system of governance. Local level governments were established within the last five years.

2.1.2 People

Currently PNG has a population of about six million people (Editorial, 2007c) with more than 1,000 tribes with distinct cultures (PASTEP, 2002; Waiko, 2003). Most of the people are dark-skinned Melanesians. The vastness and isolation caused by the mountain ranges and the ocean make parts of the country different from each other. The people are divided into four ethnic groups: New Guineans, Papuans, Highlanders, and Islanders. There is considerable cultural variation within each of these groups.

Of the total population, 85.2% live in rural areas and maintain a rural lifestyle (Giris & Rynkiewich, 2005, p. 3). PNG has a strong subsistence economy and an emerging mineral resource based economy (World Bank Group, 2005). Rural livelihoods are sustained by traditional land tenure systems (Giddings, 1995) and agricultural practices (PASTEP, 2002).

2.1.3 Social organization of society

PNG society is organized on the basis of kinship (McElhanon & Whiteman, 1995). A particular feature of PNG societies is that:

In the small-scale societies of Papua New Guinea, social relations are primarily kinship relations. This means, first of all, that closely related people tend to live together and associate with each other in various enterprises and, second, that all people see and express their relationships in kinship terms regardless of actual genealogical connection. (de Lepervanche, 1973, p. 8)

Within the traditional society, there are differences in patterns or manner in which kinship is organized. However, the prevalent ones are the patrilineal and matrilineal societies. PNG practises both. Matrilineal culture is practised in most of the island provinces and some of the coastal areas of the main island of New Guinea. In a matrilineal system "members trace their descent from a common ancestress through successive generations of women" (McElhanon & Whiteman, 1995, pp. 110-111), while in a patrilineal system the people trace their descent through successive generations of males to a common male ancestor (Flaherty, 1998). Patrilineal societies constitute the larger of the two broader cultures in PNG. Patrilineal culture is practised mostly on the main island of PNG. Although there are wide variations between these two societies, there are clearly defined social roles based on gender, and community bonds which are united and strengthened by a network of economic exchanges (Flaherty, 1998; Giris & Rynkiewick, 2005, pp. 6-7). Reciprocity is another important value within the kinship system (MacDonald, 1995; Tivinarlik, 2000). The concept of reciprocity entails sharing of food and wealth among community members that are living, those that are deceased, and the cosmos (Mantovani, 1995).

Collective or cooperative societies are more concerned with relationships with others and the achievements of the group (Bass & Stogdill, 1990). This is the essence of 'community' within Melanesian societies where the community achievements and obligations are more important than any individual (Mantovani, 1995). This resonates with the ideology of reciprocity and 'wantok system', characteristics of PNG nationals (Tivinarlik, 2000). Wan means one and tok means talk/language. So, wantok refers to people who speak the same language. However, currently wantok has evolved to mean any Papua New Guinean in a foreign country, regardless of the tribal or regional affinity. Within this context, wantok has evolved to mean one nation.

2.1.4 Religion

Prior to the arrival of the European settlers, Papua New Guineans had their own traditional religions, which were based on the spirits. These were the spirits of the ancestors. Others represented natural forces such as the wind, thunder and lightning. These spirits were believed to live in deep pools, large trees, in caves, and other special places. Magic was performed to invoke the spirits to help make the gardens grow and to defend their lands against the enemies.

Christianity came with the arrival of Europeans. Christianity has been widely introduced and accepted throughout PNG; however, traditional religious practices are preserved and used. The main churches are: Roman Catholic, United Church, Lutheran, Anglican, Seventh Day Adventist and Baptist. More recently, the Assembly of God, Christian Revival groups,

Mormons, Jehovah Witness, and local churches have attracted followers. The influence of Christianity by the colonial administration has been well received by the indigenous populace, as evident in the fact that 90% of the nation's population has embraced Christianity (Zocca, 2002). These various churches are particularly instrumental in the provision of education in PNG (Editorial, 2007f; Kaut, 2007).

2.1.5 Economy

Since political independence in 1975, PNG has not developed an economy robust enough to be self-reliant. Consequently, after three decades of independence PNG continues as a developing country. To date, Australia provides a quarter of PNG's national budget expenditure. Australia's aid program to PNG is an estimated annual expenditure of more than \$A300 million which is equivalent to 700 million PNG Kina (Editorial, 2003a, p. 1; 2007a). The aid program is geared towards the delivery of essential services in the rural areas, health assistance, the governance sector, and other areas of need in the country. The education sector receives 20% of the total aid package (Editorial, 2003a). One of the major challenges that PNG faces is to develop its capacity to eschew a dependency on foreign aid and become economically independent. While the current government has policies to stimulate development, the reality is that the country lacks basic services in education and health (Editorial, 2003a, 2007d).

The current population growth is 3% per annum with half of the population under 21 years of age (Editorial, 2003c; Giris & Rynkiewich, 2005). This is a growing concern for the government because the growth of the economy is unable to address the demands of a rapidly growing population (Editorial, 2007c). Not surprisingly, the population increase is affecting the education services (Editorial, 2003a). Schools are overcrowded, while many children are unable to attend school (Department of Education, 2005, p. 89).

PNG is rich in natural resources; however, its economy has continued to decline. The downstream processing of its natural resources to improve its manufacturing base has been stifled by lack of technology transfer from developed nations (Editorial, 2003b).

2.1.6 Languages

English is the official language in the government and in education (Carrick, 1969; Kennedy & Kennedy, 1983), although over 800 identified languages are spoken in the country (Department of Education, 2000a; Whiteman, 1995). The use of the English language in the education system has presented challenges for teachers and students because of their own inadequacies (Kenehe, 1981a, 1981b). Because of the multiplicity of languages, Melanesian Pidgin or *Tok*

Pisin was developed as a language for trade (Whiteman, 1995). Although a trade language, it has developed as a more sophisticated language and is widely spoken throughout PNG especially in the New Guinea region. Moreover, under the new education reform, *Tok Pisin* is one of the languages used in elementary schools. Under the reform, elementary schools form the first level of a child's formal education at the age of six in a language that they use and understand (Department of Education, 2005, p. 21). *Hiri Motu* is spoken decreasingly in much of the Papuan region (Klaus, 2003, p. 105).

2.1.7 Role of women

Traditional society illustrates that women played a private rather than a public role in decision-making (Flaherty, 2003). The woman's role was in the home as mother, caring for the children and the husband, and cultivating the gardens. Women had specific roles and were not without influence, but responsibility for the processes involved in decision-making was mostly the domain of the male members of the society (Giris & Rynkiewich, 2005). In matrilineal societies like New Ireland, East New Britain, parts of Bougainville, and Milne Bay where women exerted considerable power and influence, formal decisions were made in public by male relatives while the women's influence was more subtly detected in private (Kaiku, 2007). In patrilineal societies, as in the Highlands, women in general played a negligible public role (Flaherty, 2003; Giris & Rynkiewich, 2005).

Currently, PNG women have entered a world where the barriers between men's work and women's work as determined by traditional roles have dissipated (Flaherty, 2003, p. 49). Women are in public life as parliamentarians, doctors, teachers, lawyers and engineers. Yet despite equality in the workplace, the majority of women are unfairly treated and represented in the decision-making roles (Flaherty, 1998; Giris & Rynkiewich, 2005). Thus women are denied a role in actively making decisions about the desired changes in their world. Women in developing countries are seen to be victims of change (World Bank Group, 2005). In general, many have poorer health because of their long hours of strenuous work as they struggle to feed their families (Giris & Rynkiewich, 2005). Ironically, women are powerless in making contributions to changes affecting their own lives and that of their families (Flaherty, 2003, p. 49).

2.1.8 Urban drift and squatter settlements

While 85.2% of the population lives in rural areas (Giris & Rynkiewich, 2005) the population of the urban centres is increasing rapidly (Editorial, 2007c; PASTEP, 2002). There is a considerable difference between the conditions of the urban centres and the rural areas where

there is lack of even the basics of services. These conditions offer reasons for the increase in urban migration (Schwarz, 1995). Squatter settlements in urban areas are increasingly becoming a problem for both provincial and national governments (Dorney, 1990). Basic services like health and education are being stretched because of the influx of squatter settlements. Squatter settlers in Port Moresby, Lae and Madang often are blamed for law and order problems.

2.1.9 Unemployment

Youth unemployment has continued to pose a major threat to the social and economic stability of the nation. Initially, this warning was sounded in the House of Assembly in 1967 (P. Smith, 1987). The main problem at that time was the unemployed standard six school leavers (P. Smith, 1987). In 1989, there was considerable indirect evidence to suggest that the overall employment situation had seriously deteriorated in the period 1980-1988 with almost 40% of the new entrants to the labour force not being able to secure full time employment (Commission for Higher Education, 1990). Despite the implementation of the education reform in 1993, the problem of unemployment has continued to escalate but at a more serious level with large numbers of grades eight, ten and twelve students leaving school annually. Currently, the security of full time employment is contestable (Editorial, 2007e). As a result, unemployment has become a breeding ground for lawlessness and criminal activities, which are potential threats for the government and the nation (Dorney, 1990). Such scenarios are a concern to educators in all levels of schooling since education is assumed to be one of the best ways of overcoming the threat that young people pose in society. Increasing law and order problems in the country have been caused by the inability of the education system to adequately cater for this group of young people (Department of Education, 2002b).

2.2 Nature of traditional education

Traditional epistemologies maintained that knowledge is finite and could be assessed by hard work combined with magic incantations and rubrics. There was a finite body of knowledge - practical and spiritual, which was related to survival demands. "New knowledge could be obtained only through dreams or revelations, or by purchase, but not through human intellectual enterprise" (McSwain, 1977, p. 19). Whatever knowledge the young traditional learners were schooled in was guided by the community and was not meant to be challenged. Indeed, the young learners were discouraged from asking questions or initiating innovations. More importantly, young learners were educated in the exact reproduction of received knowledge and customs. Hence the present tendency to resort to rote learning is understandable in the village context (Lindstrom, 1990).

For the uneducated villager, knowledge comes from a divine source to those who possess a collection of magical religious formulae (D. McLaughlin, 1994). However, even for educated people such as teachers, this ritualistic mode of acquiring knowledge is influential. Western education has had muted impact in providing an alternative to this mindset in teachers when they have been asked to do things they inadequately understand (Kenehe, 1981b).

2.2.1 Curriculum

Prior to the first European contact in the 1800s, PNG tribes had their own systems of education. The curriculum was informal and fundamentally for survival skills (Louisson, 1974; D. McLaughlin & O'Donoghue, 1996). The young were taught the appropriate skills needed for survival and for the preservation of their traditional culture (Editorial, 2007e). Generally, boys in the coastal areas, when they came of age were taught how to make a canoe or fish with a net, while the girls were instructed in the various ways of preparing food or tending the crops in the gardens (Tivinarlik, 2000).

The traditional education curriculum was based on the life experiences and wisdom of 40,000 years of history (D. McLaughlin & O'Donoghue, 1996). This included the ethics and morals, religious beliefs and practices, tribal totems and stories. Aspects of the curriculum were taught in the families', men's and women's houses and on special occasions such as during the preparations and celebrations of initiation rituals, feasts, exchanges, weddings and funerals.

2.2.2 Teaching pedagogy

Traditional education was unsophisticated, informal and contextual. The teaching pedagogy was simple. Young learners were told to be silent and listen to the instructor. Questions were not encouraged. They were expected to observe, remember and memorize what was taught so they could successfully imitate what had been demonstrated until they were confident (Sanders, 1989). Once the young learners replicated what had been taught, then they were perceived to be successful. The process could be repeated for as long as was needed until the objectives were achieved. Thus it would seem to the outsider that traditional education encouraged and promoted rote teaching and learning. There was no need for any other knowledge or skill to be taught which was outside their context since it served no purpose.

Interactions with other learners were minimal but purposeful. Indeed, often there were one to one tutorials rather than large groups at specific times and locations. The teaching and learning process occurred according to the need and the context. The major test was whether one could successfully replicate what had been taught. There were no 'failures' in traditional society

because the young were individually catered for until they could replicate what they were taught, no matter how long it took (Barrington, 1976, p. 12; Editorial, 2007e).

Stories and storytelling were important teaching approaches. Stories were used to teach morals, establish codes of behaviour, explain histories, beliefs and customs of the tribes and to interpret events. Stories were told orally to the young and they were expected to remember them and retell those stories to future generations. There were stories containing parables and proverbs that had to be explained and interpreted. These types of stories and proverbs were challenging because the young learners had to understand each category before they could retell the stories. Melanesians demonstrated that they had good memories to be able to remember the stories and pass them on to the next generation. The language of instruction was the local vernacular. Pupils had no difficulty understanding the content since their vernacular was the appropriate medium of representing their reality (Jung, 1964, p. 20). Most of the concepts taught were contextual and practical.

2.2.3 Teachers and pupils

Traditional education employed well-qualified "teachers". These teachers could have been the parents, village elders or older relatives (Louisson, 1974). They did not receive formal training in the way that it is currently understood within the western education system. The qualifications of these teachers included the following: being wise elders, both men and women; having experiences and expertise of specialized knowledge and skills; being well respected members of the community; and individuals possessing the charisma of a teacher (Barrington, 1976). These personal attributes enabled them to assume the role of teacher in the community. Gender was an important mediating factor in traditional societies (Giris & Rynkiewich, 2005; Kaiku, 2007). There were male teachers for the boys and female teachers for the girls because of the specific roles that were expected of them.

The pupils were from the one tribe, mostly young children, but teenagers and young adults were included depending on the need and occasion. They were not grouped in any specific systematic manner such as "age groups" or "year levels" except according to gender. Age did determine the kinds of knowledge, skills and values needed to be imparted to these pupils.

The leadership structure that promoted such a system to function was communal. It was based on complementary roles, which promoted harmony and stability within the society. The leader gave orders and instructions and all were expected to obey unquestioningly. Respect for traditional leadership and society is losing momentum at a rapid pace (Editorial, 2003b).

Summary: Traditional education was appropriate and served its purpose which was the transmission of cultural values, beliefs and morals from one generation to the next, characterised by rote learning and a static knowledge base. This ritualistic form of teaching and learning promoted all the "life skills" needed in traditional PNG communities (Editorial, 2007e). However, it was not easy to adapt to the kind of analytic thinking and deep approaches to learning necessary for success in western education (Ramsden, 1992). Indeed, the best models of western education were very different from the students' experiences of traditional culture. PNG teachers continue to embrace a ritualistic form of teaching and learning as well as a western style of education. Hence, with an understanding of the context from which teacher aspirants come, along with their views/beliefs about teaching and learning, teacher educators are better able to provide quality education for future teachers.

2.3 Nature of western education

The goal of each of the mission schools was to enable the young indigenous children to become literate so they could read the bible and convert to Christianity (P. Smith, 1987). In addition, some church schools such as the Catholic schools sought to provide a curriculum that allowed learners to improve their lives in areas like health and hygiene, home economics, music and vocational trades (Barrington, 1976; P. Smith, 1987). Most Christian missions set up primary boarding schools where students from several villages would board and return home during the holidays at the end of the year (P. Smith, 1987). In school, these children would not speak their mother tongue, but were encouraged to learn and speak the language used by the church as the medium of instruction in the area, as well as English. Likewise, the missionaries energetically "encouraged" Papua New Guineans to adopt a quasi-European way of life.

The Australian colonial administration established its schools in the 1950s (P. Smith, 1985). The purpose of these schools was to address the needs of the bureaucratic machinery established by the colonial administration (Louisson, 1974; P. Smith, 1985, p. 49). Up to the early 1960s, the official education policy aimed at producing an indigenous society where there would be "no elite and no disparity between 'advanced' and 'primitive' or rich and poor. This policy was known as one of gradual, uniform development" (P. Smith, 1985, p. 49). However, between 1960 and 1962, Australia changed its education policy for PNG from gradual uniform development to the deliberate creation of elitism. The change was because PNG would soon become independent and it was considered necessary to educate an elite to take over the administrative and political processes of the nation. Consequently, secondary and higher education began to receive high priority in the nation's educational development. The

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¹ Language here refers to the language that the various Christian churches used for their church services. Some churches used the vernacular of the local area for their schools and church services.

establishment of the University of PNG (UPNG) in 1966 followed by the University of Technology in 1967 illustrates this trend (Barrington, 1976, p. 5; P. Smith, 1985, p. 54). The educational opportunities provided for a national educated work force were predominately geared towards the advancement of the male rather than the female population. Women were expected to care for children, husband and home (Giris & Rynkiewich, 2005).

2.3.1 Curriculum

Since independence significant milestones in the education system have occurred in PNG. As a strategy to improve education standards, the curriculum is a major component. The Curriculum Development Division (CDD) of NDOE is responsible for developing the national education curriculum. This means a centralized curriculum. Based on this curriculum, national examinations for the various levels are centrally developed by the Measurement Services Unit. These examinations are conducted nationally, with the results determining progression or not.

Developing a national curriculum that is relevant has continued to be a subject of debate. Arguably, there are subjects that students undertake in school that do not assist the majority of students who return to the villages. It seems that PNG's current education system caters for the minority elite students who progress to tertiary education. There appear to be few opportunities provided for the majority of students who, for a variety of reasons, do not advance in their formal education (Department of Education, 2000a). Most of the students who fail the examinations at the various exit points return home. These students too often are regarded by the community as "failures" or "drop outs". Some of these students enrol in vocational schools, university centres or open learning centres in an attempt to enhance their results so as to have another chance at further education. However, there are disparities in the provision of such facilities at the provincial levels because of inadequate funding provided by NDOE. Furthermore, NDOE is unable to offer secure employment: "The Department of Education has dynamically created its own embarrassment where the products of the formal education system have far outstripped the urban employment sector" (Matane, 1986, p. i). Clearly, PNG needs a curriculum that is relevant to the needs and interests of PNG.

One of the major problems seems to be a lack of appreciation by curriculum planners of the teachers' realities in their work environment (Department of Education, 2000a, p. 47). This was initially highlighted in a study conducted by Clements and Lean (1981) which revealed that the difficulties experienced by primary school children in understanding English, and especially Mathematical English, explained why many PNG children cannot solve elementary verbal arithmetic problems. The study highlighted the disparity between developing a curriculum that should be pitched at levels where students actually are, rather than at those levels where

curriculum planners believe they ought to be or to have reached (Clements & Lean, 1981; Department of Education, 2000a). To appreciate some of the difficulties, it is necessary for curriculum developers to understand how PNG teachers understand the process of teaching.

2.3.2 Language

Language is a key medium for communication. In PNG, there are more than 800 distinctive languages, a fact that has presented problems in trying to agree on a national language to be adopted in the education system (Grimes, 1989; Department of Education, 2000b). It is official PNG government policy that English is the language of instruction in all educational institutions (Department of Education, 1975). A study of religious conceptual development among *Tolai* children in the East New Britain province asserted that children faced difficulties in communication using a foreign language (Markwell, 1975). Markwell also found that, after several years of experience with PNG student teachers in the teachers' colleges, he was convinced of the difficulties such students experience in grasping not only nuances in meaning, but even basic concepts communicated in English. This was not only in basic communication but was further exacerbated when communicating and teaching religious concepts which are complex and, by nature, abstract (Markwell, 1975).

Similarly, the teaching and explanation of the range of mathematical concepts and their relationships are complex and teachers face difficulties in their teaching because the local languages of PNG are extremely limited (D. McLaughlin, 1997b). Given this situation, it is understandable that children learn to tolerate a high degree of incomprehension because of a lack of theoretical equivalence between their vernacular and English. Many concepts taught using the English language are beyond the level of comprehension for most students because their vernacular is so limited. In addition, there are western concepts taught in English which have no parallels in PNG culture. Hence, there is little grounding and understanding of these concepts.

Consequently, the move away from students' traditional learning environments to schools with other students, who speak another vernacular, is a new phenomenon in PNG. This is further exacerbated when these students have to learn in an entirely new environment, in mixed groups and in a foreign language, namely, English. The situation is compounded when primary schools are taught by PNG teachers, many of whom have an extremely facile grasp of English (Kenehe, 1981a; D. McLaughlin, 1997b). This reality generates questions about the quality of education that the PNG children receive in the primary years of schooling.

However, in the implementation of the 1993 education reform, vernacular education is being used with positive signs in the elementary schools in rural communities (Department of Education, 1996). In contrast, urban elementary schools encounter problems deciding which language to use for children, because there are so many different vernaculars among the children. Some are using *Tok pisin* as the *lingua franca* and there are others using English. Such a situation impedes the successful adoption of vernacular education. There are related difficulties in training qualified teachers to teach in the vernacular. However, there are encouraging results about using one's vernacular in the initial stages of formal education.

2.3.3 Pupils

By 2004, there were over one million students in schools with 33,700 teachers. This means 20% of PNG's population are students in an educational institution (Department of Education, 2000b, p. 18). Within the 1993 education reform, there are four levels. The first level is the Elementary Prep to Year Two. At this level, the pupils enrolled are between the ages of six to eight. The second level is the primary school which goes from Year Three through to Year Eight. The third is the secondary level commencing with Year Nine to Year Twelve. The fourth level is the tertiary level. The entry and exit points from one level into another are determined by a national examination system which is determined externally.

Summary: A formal western system of education has to address the needs of the students from all areas of PNG. They speak a multiplicity of languages and have varied cultural practices. Students are expected to communicate using the English language in school while outside of the school hours they speak their own vernacular or *Tok Pisin*. Such a formal educational experience invariably affects the social, intellectual, emotional and spiritual dimension of students, many of whom do not want to return to the villages or, if they do return, seem alienated from village life. Western formal education is both an agent of change and a destructive tool of traditional education.

2.4 Teaching challenges and dilemmas

Until recently, traditional education provided purpose and a means of survival and identity for Papua New Guineans. Consequently, an appreciation of how Papua New Guineans understood their own context and the appropriate education strategies would seem appropriate for all teacher educators. In PNG tertiary institutions, lecturers were advised to

research their own traditional ways of knowing, not to romanticize their culture and past, but to protect against 'intellectual colonization'. Thus Papua New Guinean lecturers can deal critically with the present realities of teachers' colleges in order to improve them (Burke, Elliot, Lucas, & Stewart, 1997, p. 36).

In a study conducted on *Education and the image of western knowledge in Papua New Guinea*, educated Papua New Guineans described traditional knowledge as 'primitive' (R. E. Young & Bartos, 1977). Traditional knowledge was perceived to be limited to the village context, informal and of little value to non-village contexts. Thus the dilemma that educated Papua New Guineans face operating under a dual system of beliefs and practice – the traditional and the western concepts of knowledge (Tivinarlik, 1996). There comes a time when educated persons begin to reject traditional knowledge and to think in western modes compatible with their complex living. As a consequence, some modern PNG critics accept only concepts and issues that explain phenomena and reject that which cannot be explained logically. Jung (1964) challenged this rejection:

There are no longer any gods whom we can invoke to help us. The great religions of the world suffer from increasing anemia, because the helpful numina have fled from the woods, rivers, and mountains, and from animals, and the god-men have disappeared underground into the unconscious. There we fool ourselves that they lead an ignominious existence among the relics of our past. Our present lives are dominated by the goddess Reason, who is our greatest and most tragic illusion. By the aid of reason, so we assure ourselves, we have conquered nature. (p. 101)

Although traditional knowledge is perceived as primitive by some educated Papua New Guineans, it is useful because of its spiritual and practical values. There are concepts and issues within the Melanesian tradition that cannot be explained from a Western perspective and, traditionally, people have accepted these without question. However, this is no longer the case with educated Papua New Guineans. An objective cultural analysis of the teachers' and students' cultural background assists in the generation of an integrated lens for the two systems - traditional and western education.

2.4.1 Clashes between traditional and western knowledge systems

In addition to the practical knowledge previously described, PNG entertained the existence of special secret knowledge. Within the Melanesian system, special knowledge was acquired primarily through ritual, dreams or through hallucinatory experiences with the spirit world (D. McLaughlin, 1997a). This is in contrast to western learning where insight or knowledge is generated through interaction with persons, texts or contexts. Moreover, western education emphasizes validity and reliability in its perspective of valued knowledge. These distinct epistemologies of the West and of traditional Melanesia create problems for the teachers and

students because there is a lack of consistency between the concepts in the academic discourse and students' existing theoretical structures.

This phenomenon was illustrated in a study which concluded that many PNG students faced dilemmas when exposed to new concepts in science lessons (George, 1990). The following offers a traditional explanation of the universe, origin and existence:

The universe and everything in it was created by a powerful super-natural spirit called 'Patip'/Yanigela. Each component of the universe is associated with its own spirit, like the spirit of the garden, spirit of the animal, spirit of weather, etc. The spirit of lightning is considered to be an angry spirit. The people are fearful of him. (George, 1990, p. 4)

While science offered scientific explanations of natural phenomenon, this was quite independent of their traditional beliefs and ideas. Students studied science as a school requirement chiefly for the purpose of passing examinations. Traditional beliefs and ideas likewise were valued in their own right. This study corroborated the incongruence that exists between the two knowledge systems (George, 1990, p. 5). Thus, appropriate understanding of the cultural context is necessary so academics appreciate some of the reasons for problems experienced by their students.

Cognitive processes inherent in western education are widely divergent from the traditional Melanesian process. Western education demands a "linear, logical, sequential product, as well as preciseness of expression", while traditional education is circular and repetitive, "going around the point again and again in ever widening circles" (Markwell, 1975, p. 85). The latter avoided direct confrontation with one's opponents and encouraged negotiations, which could extend indefinitely until all parties were satisfied. Consequently, there is inconsistency between traditional ways of solving problems and logical step-by-step writing that western education advocates. While there may be some disagreement about the place of traditional education in the twenty-first century, there is value in taking time to reflect on one's past, in the case of education, both traditional as well as western education, in order to move forward with cultural integrity (De Pree, 1986; Tivinarlik, 1996).

The western system of education demands different sets of processes, such as a new language for communication that the teacher must learn competently in order to pass on western knowledge and concepts to the children. The organization, structure and curriculum are foreign, not just to students but to teachers as well. Thus, cultural analysis is an appropriate initiative offered in the search for better education standards in PNG; otherwise what Beeby (1980b)

asserted continues to resonate with what is occurring in contemporary PNG teacher education:

Teacher trainers in developing countries who do try to break the old pattern, usually get their ideas from travel in rich countries, or from books written there, and often hand them on, in the form of indigestible theory, to teachers who need practical guidance to take even simple steps forward. (pp. 465-466)

Consequently, student teachers are left with a facile and inadequate understanding of foreign concepts and have difficulties with meaningful transmissions of these concepts to their students. Research has demonstrated that there is a lack of variety of logical operation in teachers (Avalos, 1985). As a result, children undertake minimum learning except to respond to the structuring, soliciting and reacting by PNG teachers (Dunkin, 1977). In contrast, similar studies conducted in New York, Brisbane and Sweden illustrated that pupils were more active participants because of the challenges provided by teachers. Thus, among the recommendations made was one for carefully designed programs for in-service and pre-service training of teachers to be developed, to equip teachers with concepts that would assist them to identify and think about the aspects of classroom behaviour in planning teaching strategies more effectively (Dunkin, 1977). Since this study, little has changed in the area of classroom teaching and learning strategies (Tapo, 2004).

It is necessary to explore how current teacher educators assist PNG teachers to modify such traditional teaching strategies to involve students at all stages of education to be critical thinkers and active participants in any learning environment. Cultural analysis may offer a basis for examining the programs offered in PTCs for the appropriate education and training of aspiring teachers.

2.4.2 Ritual in teaching and learning

The tendency to resort to rote teaching and learning is typified by constant repetitiveness within traditional education. In contrast, Western learning promotes skills to apply learning from one context to a variety of others because knowledge is perceived to evolve, not remain static (D. McLaughlin, 1996). PTCs are once more viewed as the foundation for any innovations in the classroom teaching and learning. This implies that colleges must have qualified staff to be able to implement new innovations. In addition, Turner (1994) emphasizes the importance of regular staff development training programs to enhance their skills and qualifications. If teachers are challenged to reflect critically and participate actively in their own education, this is more likely to be reflected in their teaching. Teachers are the leaders in their classrooms because all activities are under their guidance. Hence, if teachers provide strategies for students to apply

learning from one context to a variety of others in their teaching strategies, then students are more likely to respond accordingly.

The greatest inhibiting factor to quality education is rote teaching and learning (Beeby, 1966). Interestingly, in the *National Curriculum Guidelines (NCG) for Diploma in Teaching (Primary)*, there was acknowledgement in the Mathematics Section of the use of rote learning and repetitive examples based on the teacher-centred approach of the past. Hence, to counter this practice of rote learning, there is a unit on problem solving included, which is more likely to encourage understanding instead of rote teaching and learning (Department of Education, 1998). However, the curriculum articulation alone cannot solve this issue of rote learning.

Reflective teaching challenges rote teaching and learning because the process invites teachers to reflect on the 'how' and 'why' of teaching. Reflective teaching encourages variety and leads to better practice (Zeichner & Liston, 1996). This is an area research has identified that needs further exploration in the training institutions (Avalos, 1991; Zeegers, 2000).

2.4.3 The challenges of transition

One of the challenges that PNG is currently facing is the issue of change. Generally, people are uncomfortable with changes affecting their lives. Papua New Guineans have to make choices about their future and how this future is going to be achieved. This process may entail sifting through the traditional system and judiciously selecting from it what is appropriate. This may be one way in which Papua New Guineans take ownership of their own future.

Education is one of the possible avenues where the process of critical analysis of one's culture is encouraged. Traditionally, being silent, listening and not asking questions when an elder is talking was a sign of respect in PNG culture (R. E. Young & Bartos, 1977). In contrast, western formal education encourages learners to ask questions. This implies that adjustments need to be made by teachers and students. Thus, student teachers can analyse critically their own traditional educational beliefs and practices and hopefully pioneer similar processes in the school system. This can be encouraged by competent educational leaders in the teacher training institutions through the provision of a framework for critical analysis in a collective endeavour to evaluate aspects of the traditional and western education systems. Reflective teaching offers such processes (Zeichner & Liston, 1996). Indeed competent PNG teacher educators have already pioneered critical framework for students in PTCs (D. McLaughlin, 1990).

2.5 Primary teacher education

As a strategy to improve the quality of education, there appears to be an acceptance of the common belief that teachers should have carried their own education at least one stage further than the stage they will teach (Elvin, 1974). Since the responsibility for improving the quality of education in a developing country is often the responsibility of those in teacher education, it is important for teacher educators to understand teachers and the context in which they teach.

Teaching and teacher education in PNG is undergoing reform and renewal as a consequence of the national education reform. The fundamental purposes for teacher education are to produce teachers who are "self-reliant, independent professionals who are prepared and able to think critically about the curriculum and their teaching; and adjust the learning environment to meet the needs of different children and classrooms situations" (Department of Education, 2000b, p. 47). Under the direction of NDOE, pre-service primary teacher education is conducted in seven colleges. Currently, there are more than 2300 students enrolled in the diploma of teaching, a two-year trimester program since 2002. Improvements to curriculum enhancement and academic staff qualification have been supported by PASTEP (Department of Education, 2002b). PASTEP was an AusAID project designed to support the primary and secondary teacher education institutions to implement the education reform agenda. More detail of PASTEP is provided in Section 3.4.2.

While the focus of the reform is on the development and refinement of teacher education programs, it is misleading to assume that the programs can succeed without competent leadership in these institutions (Department of Education, 2000b). Educational leadership is pivotal in any change process (Fullan, 2001). Therefore this has to be an integral component of the education reform.

2.5.1 Teaching pedagogy

Teaching pedagogy refers to the art and science of teaching. The discussions on teaching pedagogy include the curriculum content, structure, and organization of the teaching process. The rigid interpretation of what constitutes curriculum development, coupled with the rigorous and pedantic accountability structure of lecturer inspection, has contributed to the adoption of a questionable paradigm of teaching (D. McLaughlin, 1996). Research has indicated a lack of proper lecture preparation by lecturers, which is a major cause for concern in the quest for quality teacher education for schools in PNG (Avalos, 1989; D. McLaughlin & O'Donoghue, 1996; Russel, 1993). An example of lecturers' inability to promote student-lecturer interactions is provided below:

Much of the time is taken up with note taking. ... quite often lectures can be taken up almost entirely with note taking, with the lecturer writing on the chalkboard and the students, without receiving any explanation on the content, copying it down at high speed. The situation can sometimes reach the ridiculous with lecturers giving out notes about the notes. (D. McLaughlin & O'Donoghue, 1996, pp. 36-37)

Such practices are a cause for concern because of the lack of quality role models by teacher educators for the student teachers. However, there are some positive developments provided in the national curriculum guidelines for PTCs. One such example is a unit on "Teaching Methodology". Other topics include: Guided Discovery, Demonstration and Practice, Case Studies and Discussions (Department of Education, 1998). Such topics do not promote nor lend themselves to rote teaching and learning. Instead, such methodologies allow teachers to be innovative in their lesson preparations and presentations. If such teaching methods are presented effectively, it could be assumed that the teachers graduating from such colleges will be provided with alternative approaches to rote teaching and learning. This could be a contributing factor to improving the quality of education.

Research has shown that the more time spent in instruction in a given area, the greater are student-achievement gains. The time spent in instruction is more important than the type of curriculum, the teacher's level of training and teaching style (Lancy, 1983). In comparison, time spent in instruction was "unacceptably low for the majority of pupils in PNG" (Lancy, 1983, p. 189). There were basically two reasons for this occurrence: 1) the teachers' sheer inefficiency, where great periods of time were taken up for activities like construction of materials, lesson preparation and drawing or writing on the blackboard, and 2) the teachers' very tentative understanding of the material they were to teach (Lancy, 1983, pp. 189-190). This teaching pedagogy was a replica of the traditional style of teaching where the young had to master a skill. This example demonstrates the difficulties teachers face in grasping mathematical concepts and is further complicated by their inability to transmit the concepts in English, often their third or fourth language. Thus, the need for better education and training in the teaching pedagogy of the every curriculum in school is reinforced.

In the pursuit of quality education, the quality of lecturing staff in PTCs should be of high calibre. This has not always been the case, particularly in Church agency PTCs where there has been difficulty in the recruitment of sufficient staff numbers with the required qualifications to fill all positions. In some cases, this has led to the situation where staff employed have been minimally qualified or even under qualified for the positions (Kenehe, 1981a). However, currently the situation in these Catholic PTCs has improved with an increase in the calibre of its qualified teaching staff (Department of Education, 2005, p. 83).

2.5.2 Teaching in PNG

The way PNG teachers teach has a peculiar dynamic based on their cultural experience. Teaching in PNG is best characterized as a rote style teaching along with rote style learning (Fife, 1993; Pearse, Sengi, & Kiruhia, 1990; Roberts & Kada, 1979). Teachers seem to follow a "recipe" formula approach while the children respond ritually:

The classrooms appear to be operating at peak efficiency when children are given rote tasks such as writing, spelling, and mechanical arithmetic or reading comprehension exercises. Repetitive writing activities remove the uncertain aspects of teacher/pupil relationships, but more importantly, 'writing down' is perceived by children as 'work'... Children say they are 'learning English' (mathematics, reading etc) when asked why they are writing which suggests that they conceive the classroom experience in a deterministic sense...Outcomes are guaranteed in a sense when correct procedures, such as the sequencing of activities and rituals are brought together in village life. Teacher behavior too might well be seen in this way as they strive to work in a situation where their formal teaching "methods" are perceived to be a guarantee that students will learn. (R. Smith, 1975, p. 8)

Consequently, there appears to be little communication in the lessons taught. This is further illustrated in a study by Otto (1989) focusing on community life in PNG. Otto's observations led her to conclude that much of what was observed was a communication of labels, in contrast to a communication of concepts. She recorded that in a lesson on China, the teacher wrote the names of the major religions of China on the blackboard and the children ritually copied those in their books: "The teacher ...told me that 'to have heard the words' would help the students who were going to high school and who would deal with China again" (Otto, 1989, p. 28). Similar occurrences were observed by Markwell: "...in all subjects in the primary school, teachers in PNG lean heavily on lesson plans provided for them, often resulting in little or no communication between teacher and child" (1975, p. 84). Why this occurs is complex. However, some understanding of traditional education processes offers insights. Since most teachers have grown up in a village environment, they have had substantial exposure to traditional education.

Given this unique cultural context, an appreciation of the traditional education already experienced by most PNG tertiary students forms the bases to understand future PNG teachers in negotiating a western form of education. Such a cultural sensitivity assists teacher educators in ensuring that understanding is emphasized in contrast to selected behaviours. Even in the twenty-first century, a case can be made that teaching in PNG can be described as remaining at the stage of formalism (Avalos, 1989). Beeby (1980b) offers an explanation:

...the average practitioner has all his [sic] education, training and experience, from the age of six, in the very system he [sic] is expected to change. A narrow, formal style of

teaching in primary schools passes on to the secondary schools...and to the teacher training schools, and is reflected back onto the primary schools in every generation of trainees. In nearly all countries rich or poor, the staff of training institutions tend to lose touch with the average classroom teacher and his daily problems...(pp. 465-466)

Some foreign educators mistakenly believed that the way forward from formalism to meaning was to provide curricula, which required teachers to adopt teaching methods of those at the "meaning" stage. PNG teachers in general operate at the stage of formalism so it would have been unusual to expect teachers to implement innovations and expect them to teach at the stage of meaning. Even though PNG teachers were trained, they did not have the ability to promote change because of the limited levels of general education (Lancy, 1983) and so they experienced difficulty in implementing the innovations (Clements & Lean, 1981; D. McLaughlin & O'Donoghue, 1996). Beeby himself repudiated the idea that the way forward in his stage theory was to assist teachers to adopt teaching methods at a higher stage (Beeby, 1966). He believed that improvement would occur only when teachers were confident in their teaching because they understood the content, and made it their own (Beeby, 1979).

2.5.3 Student Intakes

The seven pre-service PTCs recruit students from all over the country (Department of Education, 2002b) in an effort to create a common PNG identity amongst the culturally diverse groups (D. McLaughlin & O'Donoghue, 1996). In doing so, the colleges hope that they in turn, as teachers, will develop a national awareness amongst their students while respecting these differences. Until 1998, entrants to PTCs were grade 10 graduates. They graduated from a structured four-year formal type secondary school system, with its narrow skills based curriculum, into teachers' colleges operating within a similar model (Ross, 1989).

Since 1998, more than 80% of teacher entrants are grade 12 graduates (Department of Education, 2000b). This should be seen as a positive move since teacher applicants' longer formal education ought to be expected to develop better quality teachers (Beeby, 1980a, p. 441). This premise is supported with research from developing countries which concluded that there is direct link between student achievement and the "teachers' length of post-secondary schooling or the number of teacher training courses completed" (Fuller, 1987, p. 281; Throsby & Gannicott, 1990). Furthermore, "Beeby and others have asserted with reason, that quality in education depends largely on the quality of teachers...but quality teachers emerge from institutions where high quality teacher educators are to be found" (Maraj, 1974, p. 147).

However, there needs to be some caution about the grade 12 student entry policy since the vast majority of "bright" students opt to go to university while students with lower passes are

attracted to PTCs often because nothing better is available to them (Waninga, 1998). The conclusion drawn is that these new graduates are not necessarily likely to improve the quality of teaching at least in the short term.

2.5.4 Curriculum

The call for change in the teachers' college curriculum and structure to accommodate the needs and aspirations of contemporary PNG society was made in the *Ministerial Committee Report* (Matane, 1986). Prior to the introduction of the three-year diploma program at the Community Teachers' Colleges² (CTC), there was a two-year certificate program, which was offered by the colleges based on a set of Ministerial Approved National Objectives printed in 1977-1979 and revised in 1986. However, with the establishment of the three-year diploma course a new framework was developed in the *National Content Guidelines* (NCG) was given Ministerial approval in 1993 (Department of Education, 1998).

Between 1994 and 1998, a major review was conducted in consultation with stakeholders. Emerging from that process was the NCG for the *Diploma in Teaching (primary)*. The Curriculum guidelines were the product of the collaborative effort of both local and international expertise. The curriculum was implemented in 2000. This curriculum is the basis on which all PTCs in PNG design their programs. These curriculum guidelines consist of core and electives. The core curriculum (practicum, academic studies) is compulsory for all colleges. The electives include student electives and college-based activities which allow for flexibility in college programs (Department of Education, 1998). The electives are determined by each college in response to community needs, agency philosophy, college resources and student needs. College-based activities include examination weeks, agency retreats and cultural activities but yield no credit points. The total program comprises 150 credit points; this entails approximately 12 hours per credit point organized as a trimester program over two years. In addition, the Catholic PTCs offer two other certificates – one in teaching religious instruction and the other in special education. These are integrated into the current diploma program and are optional for students (Department of Education, 1998).

2.5.5 Assessment

Assessment is a critical issue in improving the quality of education of the national education system. The focus of assessment in the PTCs is broader than tests and examinations. These assessments include assignments, written examinations, projects and teaching practice

² Community Teachers' College (CTC) is the same as the current PTC. CTC was used prior to the education reform when primary schools were called community schools.

supervision. Student assessments are devised and marked internally by college lecturers. This includes the supervision of the teaching practice sessions which are carried out by the lecturers who supervise the program along with the associate teachers in the schools. The NCG for the Diploma in Teaching (primary) contain suggested assessment tasks that allow flexibility for lecturers in assessing their students (Department of Education, 1998).

From the late 1980s to early 1990s, a program entitled *Basic English and Mathematical skills* was incorporated into the teachers' college curriculum. The rationale for this was because too many student teachers were incompetent in Basic English and Mathematics. The task of training these students as competent teachers of primary schools seemed an impossible one (D. McLaughlin, 1996). The examinations for the English Basic Skills (EBS) and Mathematics were devised externally by NDOE in order to increase standards in all the colleges. The program was simplistic both in design and application and not unexpectedly, the program was abolished in 1992 (D. McLaughlin & O'Donoghue, 1996).

The difficulties in improving assessment experiences are illustrated by this example in which a national system (EBS) failed. Lecturers coached students in the answers required rather than teaching content. Students did not achieve much in terms of new knowledge and being able to apply such knowledge, because they were constantly bombarded with assessments (D. McLaughlin & McLaughlin, 1995).

The entire education system seems to encourage coaching, rote teaching and learning for examinations, not for knowledge. As a result, students tend to pass the examinations without a deep development of conceptual knowledge. Research has shown that excessive coaching by teachers for passing exams disadvantages students from receiving a balanced education (Vulliamy, 1987, pp. 11-12). Consequently, students cannot apply knowledge learned to any other contexts except to pass examinations, which defeats the whole purpose of education.

2.5.6 Conclusion

PNG is unique because of the dilemma that it is constantly faced with in trying to cope with the demands of both the traditional and western worlds. Contemporary PNG provides an overview of the difficult task of building a nation of more than 1,000 tribes, speaking more than 800 languages and living in four distinctive regions. PNG's traditional education system provides a "window" into the methods adopted in the organization and preservation of the culture and the processes adopted in handing on this culture to the next generation. In contrast, Western education highlights the introduction of another ideology. The transition has been challenging because of its complexities. PNG is changing rapidly but not all changes have been positive.

The perceived dilemma is how to make the education reform relevant so that it responds to PNG's needs. One area that this study is pursuing is primary teacher education. Primary teacher education has been explored to highlight the peculiar problems that PNG teacher educators and teachers have to negotiate if the quality of education is to be enhanced. To enable this to happen, these PTCs need to be adequately supported.

2.6 Articulation of the Research Problem

Consequently, given all these identified difficulties and the previous many failures of educational innovation in PNG, this research problem concerns those leading educational change in contemporary PNG PTCs and how this change is being negotiated in a complex context of perceived competing realities. This study considers the perspectives of those working in the Catholic PTCs (administrators, lecturers and students), the Catholic Agency, NDOE as well as those external funded agencies guiding government mandated educational change.

2.7 Purpose of the study

This being the case, the purpose of this thesis is to explore how educational change is being led in primary teacher education in PNG.

CHAPTER THREE

LITERATURE REVIEW

The purpose of this thesis is to explore how educational change is being led in primary teacher education in PNG. This chapter reports and critiques the literature pertaining to the educational processes deployed in the pursuit of improving the quality of education in developing countries (Beeby, 1966); in particular, the education and professional development of primary school teachers (Musonda, 1999; Sikwibele, 1989). In addition, the literature review aims to identify and critique the types and levels of educational change and the issue of leadership (Fullan, 2001). Five themes emerge from the literature and are presented within a conceptual framework. A diagrammatic overview of the conceptual framework is offered in Figure 3.1. This overview conceptualizes issues from the literature embedded in the research. The use of "broken lines" emphasizes that all the themes are related but often the relationship is tenuous. The interrelatedness of these themes has specific links that connect them to the research purpose. However, they are all situated within the one circle, which underscores the importance of collaborative partnerships. Many of the dimensions that encompass the education, training and professional development of teachers and the various factors that impact on them provide the framework for the insights into the role of leadership. The theory that underpins the quality of education in teacher education is Beeby's theory³ of teaching and learning for developing countries.

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³ Beeby's theory is referred to in the literature review as it explains the application and misapplication of a number of educational initiatives in PNG. However, Beeby's theory is explained in detail as part of the theoretical framework in Section 4.1.

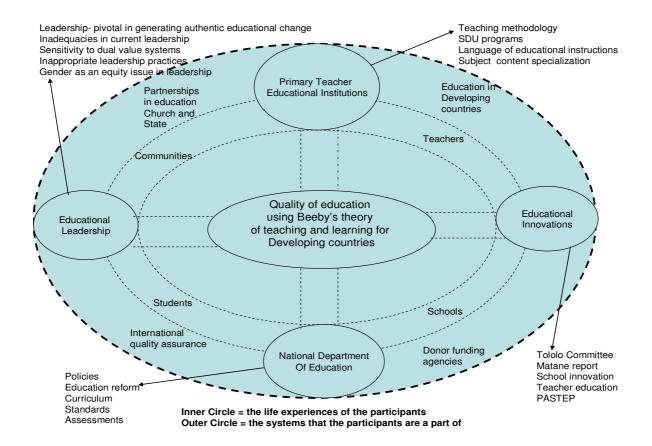


Figure 3.1 The conceptual framework for the literature review

The main body of this chapter is divided into the following sections representing each of the five themes:

- 3.1 The nexus between teacher education and quality of education in developing countries;
- 3.2 Need for education reform;
- 3.3 Need for higher education policies;
- 3.4 Role of donor funding agencies;
- 3.5 Leadership.

3.1 The nexus between teacher education and quality education in developing countries

Improving the quality of education in a developing country is the responsibility of those who teach in higher education. Appropriate understanding of the cultural context prior to any promotion of western educational innovations is essential (D. McLaughlin, 1996). In reviewing the literature on education and teacher education in developing countries, there are some

common issues that have been identified. Firstly, there is a universal understanding by governments of developing countries that education is critical for the development of its people (Delco, 1992; Department of Education, 2000a). This may explain why developing countries have focused heavily on the merits of widening the educational base for all instead of improving it for some (Department of Education, 2000a, p. 8; Guthrie, 1985). Secondly, there is a recognition that to improve the quality of education, appropriate teacher education is a prerequisite (Lindsay, 1993), in particular, primary teacher education (Musonda, 1999). Thirdly, any initiation and implementation of educational reforms require funding which is not readily available in developing countries (Sikwibele, 1989). The scarcity of resources has led such countries to look abroad to global funding institutions to provide the necessary assistance (Guy, Bai, & Kombra, 2000, p. 17; Musonda, 1999; Sikwibele, 1989). Donor funding agencies appear to be the major source of support for education (Department of Education, 2000a, pp. 15-19). While dependence on donor agencies has been necessary, it has also proven to be controversial (Musonda, 1999; Sikwibele, 1989). Too often such partnerships are perceived to serve the interests of the donor agency more than the recipient country (O'Neill, 1997). This has resulted in an absence of local or national ownership during the implementation of educational reform programs. As far as aid utilization is concerned, key personnel coordinating such enterprises are from the donor country. This may explain why many of the reform programs in developing countries have failed as soon as the donor agencies depart (D. McLaughlin & O'Donoghue, 1996; Musonda, 1999; Sikwibele, 1989).

Furthermore, review of previous research about educational factors which raise achievement in developing countries suggests a positive correlation between student achievement and the teachers' length of post-secondary schooling or the number of teacher training courses completed (Fuller, 1987, p. 281; D. McLaughlin, 1990). However, this is not universally accepted. Economists seriously question the efficiency of the schooling system (Beeby, 1966). Avalos and Haddad's (1981) study of 589 studies in a number of developing countries concluded that teacher qualifications and training are related to teacher behaviour and pupil achievement, but that the relationships are complex.

In the PNG context, research conducted on the teaching practice component of the training of primary school teachers, concluded that the duration of training was too short and needed to be lengthened from two to three years (Avalos, 1991). The goal was to ensure an increase in the quality of subject matter learning by allowing some degree of specialization in what is currently the training of a 'generalist' primary school teacher (McNamara, 1989). The study indicated that more information needed to be provided to assist trainees to address individual differences, including language differences, and differences produced by age variation. For PNG, teacher

education reform without curriculum reform is futile (Avalos, 1991). This implies a need for better coordination of the reform processes within the education system to ensure consistency and partnership between all the stakeholders involved in the education process. Reform initiatives must address research issues experienced by PNG educators, not ones identified by foreign aid donors.

Another area of concern is that most primary school teachers in PNG remain at Beeby's (1966) stage of formalism (Avalos, 1991; McNamara, 1989; D. McLaughlin & O'Donoghue, 1996). This fact raises more concerns about the effectiveness of the professional development courses offered in the PTCs. According to Beeby:

Experience does seem to show that there is a connection between the primary school teachers' inadequate general education and the type of thin, dreary formalistic schooling found at stage II and the lower levels of stage III. Observers in countries widely varying in ethnic and cultural backgrounds report, with surprising regularity, that the effectiveness of the school systems is sadly reduced because the majority of teachers are satisfied if their pupils acquire a few mechanical skills in reading, writing, and arithmetic, and learn by heart small packets of isolated facts. (Beeby, 1966, p. 85)

Such experiences reflect the state of primary education in developing countries. Primary education tends to begin and end with rote memorizing which is consistent with stages I and II so that one is led to look for some cause common to all cases. Most educators agree that the reasons for this sad state of affairs is the low level of education and the inadequate professional training of the teachers (Beeby, 1966, p. 72). Anthropologists and sociologists would probably identify a third factor common to most of these cases. That is, the classroom at stage II resembles the "traditional" society in which it is embedded (Beeby, 1966, p. 50). Traditional societies tend to be custom-bound, hierarchical, prescriptive, and unproductive (Hagen, 1962). The indigenous forms of education in many countries closely reflect the attitudes of traditional society and it seems likely that these same attitudes have continued to affect teaching practices even in schools modelled on a different pattern (Beeby, 1966).

Beeby (1979) suggested that the way forward to improving the quality of education in developing countries is when teachers are confident in their teaching because they understand the content, and make it their own. The term that Beeby preferred to use was "qualitative change" in terms of *what* is taught and *how* it is taught (Beeby, 1979, p. 17). Consequently, Beeby's model (1966) is adopted in this study to provide an appropriate lens to understand more insightfully the educational dynamics occurring in the PTCs. The quality of education being offered in the teachers' colleges is investigated from the perspectives of the lecturers, students

and recent graduates of the colleges. Therefore the first specific research question is: What is the quality of education being experienced in the Catholic PTCs?

From the literature review three variables have been identified as pivotal in improving the quality of education in developing countries. They are: the need for educational reform, the need for appropriate higher education policies and the role of donor funding agencies as illustrated in Figure 3.1. These three variables have been explored because they directly influence the quality of education in primary teacher education in developing countries. Each of these issues is addressed consecutively.

3.2 Need for education reform

There is limited literature on how teachers make differences in the educational environment to improve schooling outcomes in a manner appropriate for developing countries (McLaughlin, 1990). In order to appreciate the difficulties that educators in non-Western countries face when adopting a Western system of education, it is important to understand their contexts. The appropriate transferring of Western ideas is difficult especially in educational innovations for basically three reasons: Firstly, the products of other countries' reform efforts are not overt. There are subtleties and espoused values that may not be stated but practised. Secondly, transferability is complex and therefore may not be replicated because of the conditions under which the ideas can flourish. Thirdly, transferability depends on the development of local capacity to manage the innovation (Fullan, 1999, pp. 63-65). These three reasons are important considerations when exploring complex educational change and their impact in developing countries.

Some countries have undergone few fundamental changes in the training of primary school teachers (Harrington, 2002; Musonda, 1999). Zambia had not initiated changes to the way primary school teachers were trained for twenty-five years to 1999 (Musonda, 1999). Since then, teacher education reforms have been implemented in all ten primary teacher training colleges with the assistance of the Danish International Development Aid Agency. The reform has been perceived as a radical shift in theory and practice of teacher education. The reform has de-skilled and destabilized the professional practice of tutors. Tutors have struggled "to find their own feet" in a way that they understand rather than ways envisaged by the reform prescription (Musonda, 1999). This suggests two things: 1) these tutors have not understood the reform adequately to be able to own the process, and 2) the reform has not been adapted to suit their needs.

3.2.1 Educational innovations in PNG

As a strategy to improve the quality of education, it seems that some educators have applied Beeby's (1966) theory inappropriately in their initiating of educational reforms. Some educators have focussed on reforms in higher education by changing their policies as illustrated in Section 3.3, while others have targeted schools and implemented innovations in their programs. PNG has witnessed a number of innovations, which were implicitly or explicitly based on the latter (D. McLaughlin, 1990). Most of these reforms have failed, resulting in little improvement in the quality of education in the school system while incurring significant waste of finance (Beeby, 1966; D. McLaughlin & O'Donoghue, 1996).

The Territory Mathematics Laboratory was one of the innovations inaugurated by Dienes, a pioneer mathematics educator of the 1960s. The program introduced to PNG the new Maths through pupil-centered, individual-discovery methods, similar to that in operation in Australian schools (D. McLaughlin, 1996). The program failed because "it assumed far too high a level of general knowledge and competency on the part of teachers" (Lancy, 1983, p. 174). Furthermore, it was erroneously based on the assumption that PNG children progressed at roughly the same rate from concrete to symbolic thinking as Western children (M. Kelly & Uriari, 1970).

Mathematics for Community Schools was another innovation designed for community schools (Roberts, 1978). Compared to Australian schools, this innovation was relatively sophisticated and ambitious for PNG. Not unexpectedly, the innovation was unsuccessful "since even experienced teachers found difficulty in implementing it" (Clements & Lean, 1981, p. 61). This failure was attributed to the difficulties teachers had in teaching mathematical concepts and problem solving procedures.

In the mid 1970s, the Generalist Teaching Program was initiated which attempted to provide an integrated multi-subject approach for grades seven and eight (G. Smith, 1975). This innovation demanded from teachers better preparation to ensure they understood the content and taught it meaningfully (Guthrie, 1980, p. 426). Once more, the program failed because teachers were expected to develop their own materials and could not at the same time cope with the daily demands of other classroom duties. Furthermore, there was the problem of teachers not understanding the English language so as to teach the content meaningfully (G. Smith, 1975). The lack of appropriate resources in some areas, particularly rural, compounded and/or hampered teaching which led to more frustration for teachers.

One of the innovations for secondary schools was the Secondary Schools Community Extension Project (SSCEP) in the 1970s. SSCEP was funded initially by the National Public Expenditure for the years 1978-1982, to be piloted in five schools throughout the country (Vulliamy, 1981). The project was designed partly as a response to the problem of increasing unemployment of school leavers and partly to address the growing concern about the irrelevancy of secondary school education for the majority of Papua New Guineans (Vulliamy, 1980). The emphasis in SSCEP was on developing skills relevant to the local community needs, and thus the programs were school-based, and appropriate to each environment. The project was discontinued because there was too much expectation placed on the creativity and initiative of individual teachers (Crossley, 1983).

The failure of the four aforementioned educational innovations was because Beeby's theory was applied inappropriately. What some educators had done was to decide that their students should be inducted towards the Stage of Meaning by adopting styles of teaching characterized by Beeby as indicative of the Stage of Meaning. When adopting Beeby's four stages of teaching and learning, movement through each stage is evolutionary and essential (Beeby, 1966). PNG teachers they did not have the ability to promote change because of their own limited levels of general education (Lancy, 1983).

Another reason was that "successful reforms in one place are partly a function of the conditions under which the ideas flourished" (Fullan, 1999, p. 64) and therefore difficult to disseminate. Consequently, these teachers experienced difficulty in implementing these innovations (Clements & Lean, 1981; D. McLaughlin & O'Donoghue, 1996). There were too many assumptions made regarding the ability of these PNG teachers in the implementation of the innovations. This situation was exacerbated because the entry requirements to PTCs at the time when the innovations were implemented in the schools were relatively low (Kenehe, 1981a). Furthermore, educational innovators cannot assume that PNG children learn the same way as Australian children. This factor needs to be taken into account when planning teacher education programs in PNG using western materials. This is why Fullan (1999) asserts that reform depends on the "development of local capacity to manage multiple innovations simultaneously" (p. 65). Beeby (1966) himself repudiated the idea that the way forward in his stage theory was to assist teachers to adopt teaching methods at a higher stage. He was emphatic that improvement would occur only when teachers were confident in their teaching because they understood the content, and made it their own (Beeby, 1979). In light of Beeby's (1966) model, research has shown that PNG teachers in general operate from the stage of formalism (Avalos, 1991; Dunkin, 1977; Markwell, 1975). Consequently, authentic educational change in PNG

teacher education can occur only when educational leaders honour this axiom: teachers must be assisted to understand what they teach.

3.2.2 Innovations for staff professional development

To remedy the situation and paralleling these innovations in general education, there have been a number of initiatives aimed at improving the quality of teacher education. These include:

- First Primary Education Project funded by World Bank locally known as Education II (1982-1988) (McNamara, 1989; O'Toole, 1989; Ross, 1987);
- Teacher Education Research Project (TERP) (1987-1989) (Avalos, 1989; Ross, 1989; Yeoman, 1988);
- Lecturer Development Program (1991-1995) (Burke et al., 1997; Department of Education, 1996, p. 58).

These past innovations had an explicit mandate to improve the quality of teachers' college lecturers and thereby improve the quality of education in the PNG education system. However, the impact of these initiatives has been mixed. Research of the impact of Education II (1982-1988) and TERP (1987-1989) revealed that lecturers exhibited evidence of increased education; however, "the programs of study have not, in general, produced lecturers who have influenced significantly the Community Teachers' College workforce" (Australian International Development Assistance Bureau, (AIDAB) 1989, p. vii). Further research concluded that lecturers felt that the programs were not always tailored to address their needs or the PNG context (O'Toole, 1989). This could explain why lecturers, though academically qualified, have not made any significant impact in the college workforce as asserted by AIDAB (1989). Furthermore, recent research has illustrated that college lecturers who had earned a first degree in education had gained expertise in general curriculum and general educational psychology areas but little attention had been paid to the areas of subject specialization (O'Donoghue & Austin, 1995). Clearly then, the challenge is to assist lecturers to gain substantial expertise in their area of specialization.

Research conducted on the development, implementation and evaluation of the BEd (tertiary) program at UPNG concluded that there were two factors that influenced teachers' learning (D. McLaughlin, 1990). First were their own misconceived expectations of learning compared with university expectations. Learning through English as a second language exacerbated this, where the main problem was the lack of conceptual equivalence between Western and Melanesian epistemologies. Second, McLaughlin's (1990) intervention curriculum did promote significantly

greater cognitive development in the BEd tertiary students. However, the fullness of curriculum appeared to be potentially muted by the mechanistic curriculum operating in the colleges, as well as by the conservative bureaucratic administrative practices of government agencies (D. McLaughlin, 1990).

Earlier research advocated for a more holistic approach that would provide a learning environment to promote learning for meaning (McNamara, 1989, p. 6). However, further research conducted on tertiary teaching in PTCs revealed that most of the staff in all colleges acknowledged that students were "spoon-fed" (D. McLaughlin, 1996). While lecturers acknowledged that the process was inappropriate, there were other factors, such as the students' lack of knowledge, skills, and initiative, the quantity of content to be taught and their own limited time, which forced this process on to them. Both research studies had particular references to teacher education and highlighted the need for better-trained teachers as pivotal in the generation of quality education.

Another area of interest is the implementation of the curriculum. Curriculum development projects have failed because teachers were not helped to implement the new curriculum and also teachers perceived a lack of ownership of the new curriculum. Teacher educators, curriculum developers, school inspectors and advisors must cooperate for successful outcomes (J. D. Turner, 1994). Collaboration of all parties involved in the education system must be encouraged rather than abandoning teachers to work in isolation to improve the quality of education. This proposition appears feasible for PNG, since quality in education depends largely on the quality of teachers. This implies that teaching institutions should have high quality teacher educators (Maraj, 1974). However, there is a paucity of literature regarding the role of leadership in teaching institutions in generating such quality.

3.2.3 Change in teacher education programs

Teacher education has undergone considerable change since the 1960s. In 1971, nearly two thirds of the primary teachers in PNG themselves had only primary education and one year of teacher training. Their primary education was indifferent and their training meagre (Barrington, 1976, p. 13). By 1973, there were nine PTCs with a total enrolment of 1,461 students. These students were entering the colleges with Form 2 (Grade 8) high school certificates (Trevaskis, 1976, p. 145). By 1980, the entry level into PTCs was grade 10 (Kenehe, 1981b; McNamara, 1989; Ross, 1987). Teachers with grade 10 education could have only a limited impact on qualitative change. In 1990, the National Education Board (NEB) approved the document titled *Towards a New Three Year Curriculum*, a modified version of another document that was prepared by the Association of Teacher Education (Staff Development & Training Division,

1990). Its vision was to reform PTCs. In particular, its aims were to: (a) improve the status of the colleges in order to be seen as tertiary institutions; (b) offer a three year diploma in teaching (primary) program; (c) recruit better college entrants, preferably year 12; (d) recruit quality staff; (e) have a degree of standardization and comparability between colleges in regard to courses and their credit point allocations; and (f) have college documents which support and enable the above as a means of quality assurance. Consequently, the change from a two-year certificate to a three-year diploma program was introduced in 1991 (Norman, 2003).

The introduction of the national education reform in 1993 exposed a substantial shortfall in the number of teachers for primary schools. To address the teacher shortfall, the two-year trimester program superseded the three-year diploma program. Under the trimester program, the six semesters were reduced to six trimesters in two years. Furthermore, PTCs increased the annual enrolment and consequently their teacher output (Department of Education, 2002b). This administrative step doubled the annual output of teachers of past years and made a valuable contribution to addressing the teacher shortage in primary schools. Furthermore, the trimester program reduced the unit cost of producing a primary school teacher by 33% (Department of Education, 2002b). While the trimester program may be a cost-effective measure for the country, the quality of teachers it generates is debatable. Under the trimester program, PTCs continue to utilise the programs they developed under *Program 2000*.

During 1995 and 1996 *Program 2000* was introduced in the PTCs. Some of the guidelines for *Program 2000* were: (a) to offer courses under five strands: Professional Development, Language Development, Maths-Science Education, Social & Spiritual Development and Community Development; (b) have common core courses across colleges, plus electives and college options; and (c) 150 credit points towards the Diploma in Teaching (primary) (Norman, 2003). It seems the colleges worked and developed their new curriculum at different paces and with varying degrees of success. Nevertheless, it was critical that there be continuous support in terms of organization, training and support for lecturers and that links with other colleges be maintained for the success of the education reform (Norman, 2003). Apart from the changes in the curriculum, there have been changes in the student entry requirements. The entry requirement into the PTCs has been raised to grade 12. Currently more than 80% of the colleges' intakes are grade 12 graduates (Department of Education, 2002b).

AusAID supported the educational change in the curriculum and quality assurance schemes in PTCs under PASTEP (Department of Education, 2002b). PASTEP developed a core curriculum supported with resources for the different subject departments in PTCs. However, what was

lacking regarding the trimester model was a process in place for colleges to use in producing qualified primary school teachers in two instead of three years.

One key component in the success of the trimester model and any other changes introduced in the colleges was the student body. An important question to pursue was whether the grade 12 students who were entering PTCs were really committed to teaching. Previous studies demonstrated that most students viewed teaching to be their only option for getting into tertiary education (Waninga, 1998). These students failed to enrol in the universities or other tertiary institutions because of their poor examination results. However, they seemed to meet the requirements of PTCs. One likely explanation was that the entry requirements for the teachers' colleges were relatively lower than other tertiary institutions.

Despite constant activity over the past thirty years since independence to professionalize teacher education, the literature concludes that much still remains to be done to provide a set of teacher education experiences that would develop the cognitive abilities of teachers, thereby enabling them to move from Beeby's (1979) Stage of Formalism to the Stage of Meaning (McNamara, 1989). Beeby asserted that qualitative changes in classroom practice could occur if teachers understood what they taught (Beeby, 1979). Until now there has been an over-emphasis on teaching strategies and a substantial neglect of assisting teacher educators to be scholars in their area of expertise. This deficiency results in teachers having a facile understanding concerning the content of what they supposedly teach. In addressing the need to assist teacher educators to enhance their area of expertise, appropriate higher education policies need to be established.

3.3 Need for higher education policies

The key challenges for higher education in a globalized environment are: "assuring quality in higher education, promoting equal access..., and empowering learners for informed decision-making" (UNESCO, 2004, p. 20). As a strategy for improving the quality of education in developing countries, it is important that the types of policies operating in higher education are reflectively scrutinized. A review of the literature on higher education in developing countries highlights the importance of setting relevant policies to enhance practice. Several studies carried out on higher education policies in developing countries show a correlation between the need for sound policies in higher education, educational reform and quality of education: the Sudan (Ismail, 1991), Zambia (Musonda, 1999), PNG (Epeli, 1996; Murphy, 1991; Quartermaine, 2001), Fiji (Ishwar Lingam, 2004) and El Salvador (Harrington, 2002). These studies conclude that the higher education policies of developing countries are highly centralized, with excessive power and authority compromising efficiency.

Inefficiencies in higher education policies in developing countries are perceived to be caused by the unreflective adoption of western theoretical models, methodologies and constructs. Subramani (2000) argues that these models continue to predominate, holding the educated in developing countries captive and dependent on western perspectives while striving for development. Too many higher education policies and models adopted by developing countries are foreign and therefore too often lack congruency with the realities of developing countries (Musonda, 1999; Sikwibele, 1989). The development of appropriate models and policies to improve educational practice in developing countries seems to be lacking.

3.3.1 Quality assurance policy

In its relatively short history of formal, western education, PNG has struggled to find ways to improve the quality of education for its indigenous populace. Research studies have been conducted and recommendations have been made to improve the quality of education but few have been successful (Lancy, 1983). Furthermore, various innovations were introduced in the 1970s and 1980s in the school system, and again a meagre number of these innovations has been successful for a variety of reasons, among which the more common one was that teachers were inadequately prepared to implement such innovations (Clements & Lean, 1981; Crossley, 1983; Vulliamy, 1980). The failures of all the innovations implied that the school was probably not the appropriate place to start any innovations. What Beeby proposed made sense, that is, to begin at the teacher education institutions. However, in starting with primary teacher education, the levels of general education of teachers were critical since they helped determine the kind and amount of professional development in the teacher training institutions (Beeby, 1966). In addition, the failures of the innovations were exacerbated by the teachers' inadequate understanding of the English language (Kenehe, 1981a, 1981b).

PNG needs to develop an efficient higher education system to establish quality assurance policies (Epeli, 1996). Of particular interest to this study are the accreditation, affiliation and/or amalgamation policies (Commission for Higher Education, 1996a, 1996b, 1999). In 1995-1996, two major policies were implemented within the Higher Education Sector. The first policy directive was the authorization of CHE to establish a policy of accreditation for higher education. This policy was released in late 2003 and identified processes for formal accreditation for higher education institutions and programs, and sought ways to guarantee academic quality assurance. The policy of accreditation arose from a concern about the number of tertiary institutions granting academic awards, which in turn raised questions about accountability and the need to guard the standards of such awards. This implied that higher education should establish policies on quality assurance and the need to provide "consumer protection from non-reputable providers or 'diploma mills'" (UNESCO, 2004, p. 9). The second

policy directive from NEC was for all higher education institutions to affiliate with one of the approved universities in PNG, to ensure appropriate academic quality and provision of educational services.

3.3.2 Language policy

The literature review on the language policy of developing countries colonized by Britain in the South Pacific, Asia and Africa presented common trends. Firstly, all these countries adopted English as one of the languages of instruction within their education systems: "Post-colonial educational policies in South Pacific island nations continue to oscillate between the security of instituted colonial models and the pressing need to shelter and nourish Pacific cultures and languages. Practices, though, promote English" (Lotherington, 1998, p. 65). The English language has caused tensions for these nations since teachers themselves have "inadequate proficiency levels in English and lack confidence in using the language in the classroom" (Lotherington, 1998, p. 69). The national policy of the Solomon Islands states that children are to be educated in English. Vanuatu adopted a similar policy which stipulates that education is to be conducted in English or French. In policy, English is spoken in the classroom; in practice, however, teachers often rely on vernacular communication. So, while children are expected to acquire literacy skills in English in order to do cognitively demanding work, there is insufficient oral support for this to occur (Lotherington, 1998, p. 70).

Similar practices have been identified in PNG where its teachers have an inadequate grasp of English and this affected students' learning (Kenehe, 1981b; D, McLaughlin, 1997b). The legislation of English as the official medium of instruction in 1975 has continued to pose problems for teachers and students (Department of Education, 1975, p. 215; Louisson, 1974; Markwell, 1975). Teachers themselves have a tenuous grasp of English (Avalos, 1991; Kenehe, 1981a, 1981b; D. McLaughlin, 1997a). As soon as both teachers and students step out of the classroom they resort to *Tok pisin*, the PNG *lingua franca* or *Tok ples*, their own vernacular (D. McLaughlin & McLaughlin, 1995). It is understandable then that the quality of education given by these teachers is suspect if the language of instruction is incompletely understood by teachers. Not unexpectedly, the children's capacity to learn is adversely affected and the quality of their English is poor given the modelling they have had.

Another contributing factor to the language saga was the lack of conceptual equivalence between Western and Melanesian epistemologies (D. McLaughlin, 1990). Given the difficulties described in Section 2.3.2 regarding mathematics and religion, it is understandable that children learn to tolerate a high degree of incomprehension because of a lack of theoretical equivalence between their vernacular and English. Their vernacular is a symbolic way of representing their

reality (Jung, 1964, p. 20). However, because their vernacular is limited, the many concepts taught in school using the English language are beyond the level of comprehension for most teachers. In such a situation, students developed a tolerance of not understanding, in contrast to acquiring learning strategies (D. McLaughlin, 1996). This means that in order to function, students developed tactics which included remembering the right answers, the correct labels, and most of all trying to memorize the exact words of the teacher. In essence, meaningful conversations between teachers and students concerning for example clarity of conceptual understanding were closed down. Students tended not to ask questions because there was very little understanding and application of the concepts. This process is illustrated in the dialogue below:

Teacher: A gibob is a zingut and is used for willoting things together. Alfred, what is a gibob?

Alfred: Sir, a gibob is a zingut and it is used for willoting things together.

Teacher: Excellent answer (D. McLaughlin, 1996, p. 112).

Unless the institutions of higher education do something about the reflective acquisition of English, there is little chance that this school situation will improve since "most community [primary] school teachers, and a large proportion of high school teachers do not speak English well enough to be able to teach the language effectively. So across much of the country there is a situation where teachers lacking in knowledge are expected to do something that they cannot do" (Kenehe, 1981a, p. 31). Though vernacular education is encouraged (Department of Education, 1996) in PNG's official Philosophy of Education (Matane, 1986), it has been agreed by NDOE's bureaucracy that it is not feasible to successfully mount vernacular education programs in a nation of 800 languages (Department of Education, 2000a).

Since the implementation of the education reform in 1993, the adoption of vernacular education as the key medium of instruction in the elementary schools in rural communities has been positive (Department of Education, 1996). From grade three onward, English becomes the medium of instruction (Department of Education, 2003c). The way forward would be to assist teachers to improve their own English language competency. Unless classroom teachers are competent in the understanding, teaching and learning of the English language, students will continue to have a tenuous grasp of English and this vicious circle of incomprehension in learning will continue to be perpetuated.

Thus, authentic educational change in PNG can emerge only when educational leaders actually appreciate the realities of classroom teaching and develop appropriate strategies to address these

in the teacher education programs. Also, professional development for practising teachers is needed. This must acknowledge the current problem of English as the language of instruction.

3.3.3 Incongruencies between pronouncements and implementation

The literature review highlights incongruencies between pronouncements and implementation (J. D. Turner, 1994). Translating recommendations based on research to improve the quality of education seems to be an area that is highly lacking in PNG education. Avalos (1985b) laments that the majority of research conducted in developing countries has not assisted in the generation of better education practice. Similar insights were contained in a *UNDP/ILO Mission* report:

The education sector has been well researched both before and after independence, and the country is awash with research papers, scholarly monographs and reports of national committees, commissions, external consultants, missions, workshops and seminars. There is no dearth of suggestions – good, bad or indifferent – and there is a high degree of awareness of the problems and constraints, but these suggestions do not appear to get translated into meaningful action. There is a wide gap between pronouncements and their implementation. (UNDP/ILO, 1993, p. 132)

Lack of action by education authorities can be a contributing factor to the gradual decline in the quality of education services in PNG. The likely reason for this inaction is the paucity of qualified personnel and resources (Department of Education, 2000a, p. 40). This problem begs the question: why is it that, given all the substantial funding allocated to research conducted on education and the subsequent innovations that have been implemented in the education system, there is nominal transformation in the quality of education in PNG? The answer may have been provided by Beeby when he stated that "the drive for educational reform is most likely to be successful if it is not an isolated phenomenon, but part of a nationwide movement for modernization under a strong national leader" (Beeby, 1966, p. 81). In addition, Fullan (1999, p. 63) posits that innovations are difficult to disseminate and replicate because the "products of other people's reform efforts hide many of the subtleties of the reform in practice". This implies that educational successes in one context must be critically analysed before any application to another context; otherwise there is no guarantee for quality and success in a new context. This would suggest two axioms: 1) Higher education policies need to be relevant to the context and 2) Higher education needs the political will and resources to implement and support its policies. In the next section, the literature review explores the role of donor funding agencies in assisting developing countries implement their education policies.

3.4 Role of donor funding agencies

Research has illustrated that the implementation process of higher education policies in developing countries has depended on donor funding agencies (Editorial, 2003b; Hawksley, 2006). The role of donor funding agencies is pivotal in improving the quality of education in developing countries. However the "success of aid depends crucially on numerous background conditions that relate to the political and economic policies of the recipient as well as the aid policies of the donor" (O'Neill, 1997, p. 2). Furthermore, there is also the perception that "aid is wasted in countries that do not have technical or administrative ability to absorb and use it properly" (O'Neill, 1997, p. 2). In reviewing the role of donor funding agencies in teacher education, the literature highlights the importance of collaborative partnerships.

3.4.1 Partnerships in education

Education needs to be promoted as a collaborative endeavour rather than a government agenda. The Declaration from the World Conference on Education for All (WCEFA) held in Jomtien Thailand in 1990 offers some valuable insights:

National, regional, and local educational authorities have a unique obligation to provide basic education for all, but they cannot be expected to supply every human, financial or organizational requirement for this task. New and revitalized partnerships at all levels will be necessary: partnerships among all sub-sectors and forms of education; ... partnerships between government and non-governmental organizations, the private sector, local communities, religious groups and families.... Genuine partnerships contribute to the planning, implementing, managing and evaluating of basic education programmes. When we speak of 'an expanded vision and a renewed commitment', partnerships are at the heart of it (WCEFA article 7 cited by Bray, 1999, p. 1).

The literature on partnerships emphasizes many types of partnerships operating in diverse settings and public policy discourse. Education is a shared partnership. It begins in the home with the parents and progresses through school with the teachers and continues through life with people in society (Matane, 1986, p. 1). In teacher education, partnership has been described as a strategic lynchpin in addressing gaps between theory and practice by fostering closer and differently configured relationships between universities and schools (Vick, 2006). Indeed, this is a key concept that needs to be addressed when establishing partnerships to enhance the quality of professional collaboration to stakeholders (W. Turner & Sharp, 2006, p. 286). Partnerships are relationships that develop in the process of finding ways to work effectively an outcome rather than a starting point (Vick, 2006). This implies that partnerships need "careful consideration and thoughtful research is they are to be efficient in the long term". Furthermore, the "most effective partnerships are formed within safe collegiate relationships

where equality amongst stakeholders is the norm" (W. Turner & Sharp, 2006, p. 288). The measure of partnership is quantified in the commitment of stakeholders.

3.4.2 State and donor funding agencies

Donor funding agencies play a critical role in the PNG education system. Specifically within teacher education, donor funding agencies such as AusAID, EU, and ADB, have funded various projects to assist the development of teacher education (Department of Education, 2000a).

The most recent innovation vital to this study in primary teacher education was PASTEP. This project was funded by the Australian Government through the auspices of PNG NDOE. Its general aim was to raise the quality and relevance of teacher education to meet the requirements of the PNG national education reform agenda. This was achieved through the strengthening and improvement of teacher education in primary, secondary and special education, and by promoting and implementing gender equity and change management (PASTEP, 2002). To achieve this aim, a number of activities were initiated including the:

- provision of consultancy services;
- procurement of curriculum resources, computers and equipment;
- development of curriculum support materials;
- provision of in-PNG and in-Australia training;
- "twinning" activities with UOG;
- refurbishment and construction of facilities;
- initiation of a feasibility and design study of distance education in teacher education;
- establishment of Information and Communication Technology Learning Centres and programs (PASTEP, 2002).

Recent research has indicated that there were three key areas where progress had occurred. These were: developments of programs and courses, lecturing, and graduating students (Clarkson, 2003). As a consequence of PASTEP, teaching conditions have improved, with more resources for teaching and learning accessible by both staff and students. However, concerns were raised about the practicum programs because of poor organization, complicated administrative procedures and budget constraints (Clarkson, 2003). The college practicum has been an area of concern for some time (Avalos, 1991; Zeegers, 2000). This is important because the practicum is the key catalyst that links college experience to teaching realities. However, PASTEP has failed to address this concern.

Furthermore, PASTEP innovations aimed at enabling lecturers to adopt a more learner-centred approach in their lectures and to concentrate on "bridging", multi-grade teaching, teaching grades seven and eight in the primary schools, support for special education and approaches to equity issues (PASTEP, 2002). While evaluative research has concluded that this goal has been achieved with the lecturers, the results have to be treated with some caution because staff in general had doubts about the quality of their graduates (Clarkson, 2003, p. 25).

Recent evidence identifies that teachers are reluctant to adopt multi-grade strategies (Department of Education, 2002d; Tapo, 2004). The teaching strategies required of multi-grade teachers are more challenging because teachers are required to reorganize existing subject content using a thematic approach for their classes (Department of Education, 1999c). This can be a daunting task for teachers who possess a weak understanding of the subject content and as a result are unable to situate pupils' learning in meaningful learning environments (Tapo, 2004). Clearly, there is a mismatch between teacher education goals and the realities for teachers in schools.

Practical teaching skills of recent graduates seem to have improved. However, concern has been raised about the low proficiency level in the mathematical and language abilities of student teachers (Clarkson, 2003). Prior to PASTEP's innovations, there was evidence to demonstrate that this was an area of concern in teacher education (D. McLaughlin & McLaughlin, 1995). It would seem that even with PASTEP's innovations, this continues to be a problem that needs to be investigated further and addressed in teacher education. This will not be addressed by a continued emphasis on skill acquisition, but only through an exclusive focus on subject content specialization.

While it would seem that the areas that PASTEP focused upon are important, the impact of PASTEP may be reduced if subject competency of lecturers is still confined to the level of a generalist BEd degree. Subject specialization is more likely to assist lecturers to understand their teaching content, feel secure with it and accept it as their own (Beeby, 1979, p. 291). Furthermore, subject specialization is the catalyst that links college curriculum experience to the teaching realities of the school curriculum.

It is ironic that, with so much funding provided by the Australian government to improve PNG teacher education and subsequently the quality of education in schools, PASTEP has identified its own priorities and subject specialization is not one of those, even though research had already identified this as an important issue (D. McLaughlin, 1996; O'Donoghue & Austin, 1995). Not unexpectedly, a recent teacher education project sponsored by PATTAF in

partnership with Charles Sturt University and UOG has designed another generalist Master of Education (MEd) degree for PTC lecturers. With such a degree, more lecturers will be academically more qualified; this is a positive move. However, the impact of these lecturers in their area of specialization will continue to be limited since their degree is confined to a generalist competency level. This does not address the lacunae in their content knowledge which is a prerequisite for the promotion of deeper learning of lecturers and students (Biggs, 1979, 1986).

In this thesis, the perceptions of the lecturers, students and recent graduates about PASTEP innovations have been explored to gauge the linkage between teachers' college innovations and the quality of teaching in the schools by recent graduates. If PASTEP innovations have improved the quality of education in the teachers' colleges, then lecturers, students and recent graduates will be competent in using the knowledge and skills acquired as their own because they understand them (Beeby, 1979). Authentic educational change in PNG teacher education can occur only when leaders actually make changes consonant with this axiom. Hence, the second specific research question is: What are the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges?

3.4.3 State and church

Education is a shared venture of the PNG national government with other agencies. One of the major agencies that is particularly relevant to this study is the Catholic Church. Churches were the pioneers of Western formal education in PNG. Initially, the churches concentrated on religious evangelization. Later they established primary schools prior to venturing to the other levels of education. The three Catholic PTCs involved in this study were established in the late 1960s by different religious congregations⁴ of priests, brothers and sisters of the Catholic Church as discussed in Sections 6.1, 7.1 and 8.1. While each religious congregation had its own vision and mission in establishing each of the colleges, the common goal was to prepare teachers for the 'mission' primary schools. Children were educated in the Bible and also given knowledge, skills and attitudes to "improve" their own lives.

Since the establishment of these colleges, the Catholic Education Agency has always had a leading role in their administration. The Agency had the sole responsibility for staff

⁴ Religious orders or congregations in the Catholic Church are groups of priests, brothers or sisters founded at a particular time in history to address a particular need in the Church. The religious orders who founded the PTCs under study were concerned about the education of youth in mission countries like PNG.

employment, developing their curriculum, and providing funding and resources to support their needs. This study established that the initial infrastructure developments of each of the colleges were financed by "*Misereor*", an international funding agency of the German Catholics. During that period, the Catholic Church Agency was self-reliant and independent. The Church's presence and authority in education demonstrated control and power in their institutions.

Since PNG's independence in 1975 assistance from the Church Agency to its PTCs has been declining gradually and in some cases withdrawn. Personnel and funding for church projects are no longer forthcoming from overseas church donors. Financial support has to be generated locally and the Agency has not been able to financially support its colleges as it did in the 1960s.

Since joining the national education system, there have been some positive developments which have made it easier for the Catholic Agency to maintain its schools and colleges. The major developments include TSC payment of staff salaries and the development of a common curriculum. However, the Church agency is still responsible for infrastructure development and maintenance (Department of Education, 2001a, Section 56, 2a, (ii & iii) and 3d, (ii & iii)). Since funding no longer comes from overseas Church donors, it has become increasingly difficult for the Agency to secure adequate financial commitments and therefore compromises have been made. The provision of staff salaries also implies a greater influence on staff appointments by the TSC. This has caused some concern for the Agency. In the endorsements of staff employments by the TSC, there are variations identified in the selection criteria. Unlike the Church Agency, which emphasizes the church codes for employment, TSC places more emphasis on academic qualifications and minimal consideration for the Church affiliations of staff. This has become problematic in the partnership.

3.4.4 Curriculum developers and implementers

Partnership between curriculum developers and implementers is essential. The curriculum of educational institutions is important because this is where the content and teaching strategies are embedded. Research has demonstrated that often the school curriculum in developing countries is ineffective (Department of Education, 2000a; Ishwar Lingam, 2004; Musonda, 1999). A recent study on the pre-service primary teacher education in Fiji reveals that lack of physical facilities and resources together with an outdated curriculum, impacted negatively on the teachers' college's educational impact (Ishwar Lingam, 2004). Fiji needs to establish relevant policies and programs that ensure the provision of an adequate and enriching professional preparation of teachers. Zambia had similar experiences where the primary teacher education

curriculum was inappropriate for the needs of the students and the society. The situation was exacerbated by teachers who were themselves inadequately trained (Musonda, 1999).

Moreover, a demanding examination system based on an inappropriate and outdated curriculum encourages rote learning. Such a curriculum promotes rigid teacher-centred methodologies. This is a point lamented by Kelly et al. (1986): "the staffing level and tradition – training as one was oneself trained – tend to result in no encouragement given to the use of initiative and innovative teaching techniques. Hence students leave college trained to perform in the classroom as they were drilled". This is applicable to PNG. Each teachers' college is responsible for detailed course development and programs for each department and strand based on the *National Content Guidelines* developed and produced by NDOE. Lecturers are encouraged to develop a specific rationale, general aims and objectives, content outlines, teaching strategies and assessment guidelines for each specific course (Department of Education, 1998). Approval for implementation is provided by the College administration and the Governing Council.

While quality assurance mechanisms (Section 3.3.1) are important, what is more important is to address the realities that PNG teachers face. Quality leadership is pivotal in providing directions for curriculum implementation. The teachers' colleges' curriculum has to be realistic in its content and delivery if what is taught in the teachers' colleges is to have impact in the classrooms of recent graduates. Hence, the third specific research question is: **How is the curriculum of the teachers' colleges perceived by the lecturers, students, and recent graduates?**

3.5 Leadership

In reviewing the literature on leadership, a number of issues emerged. First, there is lack of unanimity concerning the meaning and understanding of the word "leadership" and this creates confusion over its usage (Richmon & Allison, 2003). Second, the concepts and theories of leadership are constantly evolving in both meaning and emphasis. Clark and Clark (cited in Leithwood & Duke, 1999, p. 45) argue that one cannot research leadership until there is agreement on how one defines it. This suggests the need for an appropriate understanding of the organizational context. This is an important insight because most of the literature on leadership has been based on the experiences and perspectives of the Western world since there is limited literature on leadership and its application in the developing world. Third, across theories, the concept of leadership has been understood as a "process of exercising influence, a way of inducing compliance, a measure of personality, a form of persuasion, an effect of interaction, an instrument of goal achievement, a means of initiating structure, a negotiation of power relationships or a way of behaving" (Richmon & Allison, 2003, p. 34). While it has been

difficult to agree on a universally accepted meaning about leadership, it is critical that the conceptual features found across different leadership theories be explored to allow practitioners to critique the appropriateness of leadership theories to educational contexts. The following definition of "leadership" has been adopted to suit the research purpose: "Leadership is an influencing process between people, groups and whole organizations ... seen through the lens of the outcomes that result from these interactions" (Elliot, 2002, p. 127).

For the purpose of this research, such a definition is apt because it directs attention beyond the individual to the interactions among individuals and among groups of people in teams, in and among departments and whole organizations. All these levels of influencing are the domain of leadership. In leading educational change, this definition of leadership can be "person oriented, group oriented, system oriented, strategically oriented, socially oriented and politically oriented" (Elliot, 2002, p. 127). This implies that there is no spectator in the leadership stakes, "everyone is involved in influencing others ... for better or worse" (Elliot, 2002, p. 127). This definition offered by Elliot resonates with the concept of educative leadership defined as a responsible involvement in the politics of the organization (Crowther & Olsen, 1996).

Taking into account the diverse practices in different cultural contexts, leadership theories derived from studies conducted in Western developed countries that are different economically, socially, and culturally from developing countries may not accurately represent how leadership is practised internationally. Serious consideration of non-Western conceptions of leadership can broaden one's view of theoretical treatments derived from very different intellectual traditions such as Confucian, Muslim and Buddhist (Heck & Hallinger, 1996).

Research and further study will need to account not only for potentially different conceptualizations of leadership but also for different views on the desired outcomes of leadership across cultures. Future research in school leadership should consider the cultural context as an integral component of any study (Hallinger & Leithwood, 1996). This claim is affirmed in recent research studies conducted in a non-Western context which found that cultural traditions of a society strongly influenced leadership behaviours (Malpo, 2002; Tivinarlik, 2000).

3.5.1 PNG traditional leadership

Within PNG, there are traditional styles and practices of leadership in each locality. It is important to remember that while PNG is one nation, it is diverse in its many cultural practices. No generalizations should be made about anything within the traditions and cultural practices of the different cultural, tribal and language groups including leadership practices. Having said

that, it is important to note that there are some common leadership traits that can be identified across Melanesian societies. First, leaders did not own wealth but rather they were the trustees or custodians of it (Narokobi, 1983). Second, leaders gained their status, wealth and reputation because they cared for the people, through warfare, distribution of food during feasts, and the safeguarding of wealth through exchanges, which ensured the well being of their people and the cosmos. In return, the people gave them the respect and wealth and these leaders were expected to maintain the status quo.

Currently, there is a lack of respect for traditional and contemporary leaders by PNG's current youth. Traditional leaders are not respected and obeyed in the same way as they were in the past (Narokobi, 2005). The western system of education has been blamed for the lack of respect for traditional leaders and the traditional cultures (Louisson, 1974). Education is perceived to have power because the young people are able to read and write and so they tend to view their traditional leaders as being uneducated (*no gat save*) because they are illiterate.

Furthermore, the absence of good leadership role models from the contemporary educated leaders exacerbates the problem. The image of the contemporary educated leader in PNG is at variance with the traditional leader who had the interest of the tribe at heart. Contemporary leaders are perceived to be more "individualistic" than "collective" in their deliberations (Narokobi, 2005). This suggests a shift in leadership behaviours.

In the education arena, there is evidence of some integration of different value systems in the execution of leadership (Tivinarlik, 2000). Arguably, for leaders who lead a people within a multiplicity of cultures, it is imperative that the cultural context of the leadership phenomenon be understood to assist educational institutions become effective in their delivery of new learning (Tivinarlik, 2000). The conclusions are enlightening for this research because of the cultural issues that national leaders exhibit when they assume their leadership roles. In pursuit of the best solution, often principals and deputy principals of educational institutions have to make decisions that cannot please both NDOE and the Agency that controls the institution. At times, questions are raised as to how and why certain decisions are made and what set of criteria is used. There are different value systems from which people operate to make decisions as well as different models and leadership practices that are exercised. Tivinarlik's (2000) study concludes that there are two different value-systems that these leaders operate from when making decisions - traditional communal values and NDOE bureaucracy. These conclusions are informative in determining whether similar processes are employed by leaders in this study when making decisions. Leadership traits are also part of a person's cultural background and thus play a significant role in how leadership is exercised (Narokobi, 2005). Thus, culture,

personal traits, religious orientation, educational qualification and experience are important considerations in unpacking the concept of leadership in leading educational change.

Another insight into the PNG Melanesian culture relating to leadership is the influence of women in decision making processes. This is particularly important within the matrilineal culture where women participate and influence inter-clan relations through their knowledge of land history, migratory movements of the clan and as the custodians of oral traditions. New Ireland, East and West New Britain and Milne Bay provinces have matrilineal traditions as part of their identity and heritage. The absence of women in leadership positions in education is a lack of appreciation of Melanesian traditions (Kaiku, 2007). This practice contradicts the national goals and directive principles of PNG which call for equal participation and the philosophy of education which promotes Integral Human Development. While such values are embedded within the national goals, in practice there is little done to promote such goals (Waide, 2007). The paucity of women in the PNG political and educational arenas reflects the lack of political will and awareness by the male leadership of the nation (Kaiku, 2007).

3.5.2 Leading educational change

Leading educational change is a complex process. In this complex process Fullan (2001, p. 4) proposes a leadership framework that he believes is necessary to bring about successful change in the modern era. This framework has five components: (1) moral purpose; (2) understanding change; (3) relationship building; (4) knowledge creation and sharing; and (5) coherence making.

Moral purpose means "acting with the intention of making a positive difference in the lives of employees, customers, and society as a whole" (Fullan, 2001, p. 3). Understanding change is essential for leaders. The "goal is to develop a greater feel for leading complex change, to develop a mind-set and action set that are constantly cultivated and refined" (p. 34). Relationship building is closely linked with moral purpose because it is the people and the relationships formed that make the difference (Fullan, 2001, p. 51). Lewin and Regine (2000) explained that relationships are not just a product of networking but "genuine relationships are based on authenticity and care" (p. 27). One of the trends of successful companies is a new style of leadership – one that focuses on people and relationships as essential to getting sustained results (Fullan, 2001, p. 53). Knowledge creation and sharing is connected to the other three components - moral purpose, an understanding of the change process, and good relationships. There are three conditions that underpin knowledge sharing: First, people will not voluntarily share knowledge unless they feel some moral commitment to do so; second, they will not share unless the dynamics of change favour exchange; and third, that data without relationships

merely causes more information glut. Knowledge sharing is a social process, and good relationships are essential (Fullan, 2001, p. 6). Coherence making is a perennial pursuit. Leading in a culture of change is difficult because disequilibrium is common. Therefore, the five components presented by Fullan (2001) are useful in this study because they offer a framework for leadership in leading change. Furthermore, these five components are well supported by Lewin and Regine (2000) who developed the concept of leaders cultivating leadership in others.

Strong institutions have many leaders at all levels. Those in a position to be leaders of leaders, such as CEOs, know that they do not run the place. They know that they are cultivating leadership in others; they realize that they are doing more than planning for their own succession – that if they "lead right," the organization will outgrow them. Thus, the ultimate leadership contribution is to develop leaders in the organization who can move the organization even further after they have left. (p. 220)

This is an important concept that needs to be developed further.

3.5.3 Educational Leadership

Contemporary definitions recognize a range of theoretical viewpoints and allow for diversity in both situations and individuals. A study conducted on the accession paths to the principalship was explored in both the PNG primary and secondary schools (Maha, 1993). The results revealed that the factors which influence promotion in western countries are similar to those in PNG. These factors are: educational and professional qualifications, teaching experience, deputy principalship experience, mentoring, competence, getting the attention of superiors, gender and serendipity. The explanation provided for the similarities was that schooling and the concept of principalship are western concepts imported to PNG and so they need to be explored (Maha, 1993). However, given a diverse political, economic, social and cultural context, that study did not address teacher education issues that do influence accession paths to the principalship for teachers' colleges. Furthermore, the study did not identify the appropriate leadership models needed for an educational institution, in particular the primary teacher educational institutions. It follows then that the leadership of an educational institution, such as a teachers' college or a school, is significant in advocating for positive changes towards the improvement of the quality of education.

Educational leadership has been systematically developed across a period of time within the last fifty years (Crowther & Olsen, 1996). An example of this is educative leadership. Educative leadership is:

a deliberate attempt at cultural elaboration. ...it follows that educative leadership must closely respond to the cultural context, be critically aware of the long-term practices of participants in educational processes, and when action is proposed, justify ends and processes using an educative philosophy. Hence, educative leadership implies a responsible involvement in the politics of organization. (Crowther & Olsen, 1996)

Traditional propensities to link leadership with administration are in some respects now weakening, but the work of classroom teachers has not been explored extensively in relation to authoritative leadership approaches. There is also a gap in the literature in the area of leadership and educational change in primary teacher education. Thus, this study on leading educational change in primary teacher education in PNG represents a step into relatively uncharted territory.

At times leadership and management talent reside in the same person; at other times those talents are found in different people (Sergiovanni & Starratt, 1993, p. 190). The experience in PNG has been that leadership and management are expected to reside in the same person. The result has been disappointing because of the scarcity of qualified personnel and resources. Leaders alone cannot get the job done; they need other people to administer schedules, complete reports, manage budgets and resources. "One of the most congruent findings from recent studies of improving schools is that authority to lead need not be located in one person but can be shared or distributed more widely" (Spillane et al., cited in Harris, Brown, & Abbott, 2006, p. 397). Distributing leadership means a "shift away from 'top-down' model of leadership to a form of leadership that is collaborative and shared. This implies a departure from the view of leadership that resides in one person to a more complex notion of leadership where developing broad based leadership capacity is central to organizational change and development" (Harris cited in Harris et al., 2006, p. 397)

Another proposition is that leaders should live or exemplify when they call others to do (Starratt, 1993). This offers credibility to what leaders advocate for their institution. In talking about schools, educators need to expand their views of leadership to include some flexible, inclusive, and varied leadership models (Hart, 1994). A leader is supposedly one who has the ability to get other people to do what they don't want to do and like it. In contrast, De Pree (1986) perceives the leader as one who becomes a servant and a debtor. This definition of leadership is based on the words of the gospel writer Luke, which says that a leader is the servant of all. "Leaders don't inflict pain; they bear pain" (De Pree, 1986).

Leadership is pivotal in generating authentic educational change (Fullan, 1993, 2001). The educational innovations that were implemented in PNG schools from the 1960s to the 1980s failed for a variety of reasons as explained in Section 3.3.1. However, it would seem that another likely reason for the failures is a lack of competent leadership in these schools. A

number of recent studies which explored educational leadership in PNG are particularly relevant to this study (Lahui, 1997; Maha, 1993; Malpo, 2002; Pagelio, 2002; Tivinarlik, 2000). While each of these studies explored different aspects of leadership within the education system, the general conclusion was that PNG needs competent leaders in its education system. This implies that leadership is a critical concept that needs to be addressed for success in the quality of education.

While western concepts of leadership may be appropriate in non-western contexts, they may also be inappropriate. This is illustrated in a study which investigated whether secondary school principals in New Ireland, were engaged in actions consistent with instructional leadership when executing their duties (Lahui, 1997). The study concluded that while principals demonstrated instructional leadership strategies, teachers felt that principals dedicated more time to performing their administrative roles than negotiating relational contracts with teachers, a process necessary for authentic instructional leadership (Leithwood & Duke, 1999, p. 47). This was partly because of the inconsistencies arising from the demands of the secondary school inspectors and partly due to the lack of appropriate leadership training. This study highlights the inadequacies of current educational leaders to address the new challenges that they encounter in their positions because of a lack of education in leadership linked to student learning.

Culture is a key ingredient in how leadership is exercised especially in decision-making processes in non-western countries (Sergiovanni, 2000). In PNG, traditional values still largely influence people's lives. This was revealed in a research which concluded that secondary school administrators operated from a dual value system (Tivinarlik, 2000). These were the bureaucratic system of NDOE and their traditional value system. Traditional values such as the "wantok system", community, and reciprocity, played a major role in influencing decision-making processes of these school administrators. For the "outsider" the "wantok system" has often been frowned upon as "corrupt". However, the study offered a counter view of how participants applied this value to serve altruistic purposes. Furthermore, the "wantok system", community and reciprocity are based on genuine relationships essential to getting sustained results (Fullan, 2001). Therefore, the study advocated sensitivity to PNG's dual value systems – traditional and western. PNG leadership should honour both dynamics in decision-making processes in schools.

Colonial practices may be influential in a postcolonial society. This was demonstrated in a study which explored the leadership of NDOE head office personnel in Port Moresby (Pagelio, 2002). The study concluded that the type of leadership exercised by education authorities in the head office was a post-colonial construct, which was inappropriate to the PNG context and therefore

had a negative impact on subordinates in the work environment. While post-colonial constructs may not always be negative, there are "power plays" underpinning these constructs which result in the creation of different classes of people (J. McLaughlin, 2003). The findings conclude that the post-colonial leadership practices adopted in NDOE head office were inappropriate. The study recommended transformational leadership as the appropriate type of leadership for PNG's education system. The study also concluded that good relationships between leaders and subordinates are important. People are important and ought to be treated respectfully (Lewin & Regine, 2000). Studies have demonstrated that "successful organizations combine tough commitments to results underpinned by a deep regard for people inside and outside the organization" (Lewin & Regine, 2000, p. 57). Thus, the relationship issue needs to be explored together with leadership.

Gender is an emerging issue in PNG educational leadership. Malpo (2002) investigated gender differences in school leadership in PNG. She concluded that, while international research indicated marked differences between male and female leadership styles in education, there were only marginal differences in the gender practices in PNG. The results need to be treated cautiously because, in the same study, Malpo (2002) contradicted herself when her findings illustrated that regardless of whether PNG women are competent; there are relational issues within the cultures that limit women leaders to promotional levels.

Culture and religion, especially Christianity, are the catalysts in promoting female leadership in schools. In some cases the matrilineal cultures assisted women to gain leadership positions, while in other cases the patrilineal cultures were an obstacle for women gaining such positions. For that reason, Malpo (2002) advocated encouraging more women into leadership roles because of their influences in curriculum development and enhanced learning. It would seem that this study did not adequately acknowledge the contributions that women leaders in PNG had made to education.

In another study on Catholic leadership in PNG secondary/high and teachers' colleges, the results indicated a lack of good leadership in the Catholic institutions (Tivinarlik & Nongkas, 2002a). The reasons identified for this lack of good leadership included the lack of professional leadership training and mentoring, lack of support from both the Agency and NDOE and poor terms and conditions.

Since this study is concerned mainly with the educational leadership of the Catholic PTCs in PNG, the findings obtained may provide a useful framework for prospective educational leaders of teachers' colleges when performing their respective roles and functions. Fundamentally, it is

expected that good leadership in these Catholic PTCs contribute to improving the quality of the education system. This study could also provide strategies for better working partnerships and understanding and thereby improve cooperation and dialogue between NDOE and the Catholic Church Agency. An indication of this need for better working partnerships was made by the principal of OLSHTC Kabaleo during their college graduation (Sarere, 2003) when he called on the appropriate authorities (NDOE and the Church Agency) to work together in partnership so that the institution could contribute to the increasing demand for teachers in PNG.

The paucity of research in this area indicates that the contribution of the educational leadership role of the principals in leading educational change, in order to qualitatively improve the quality of teacher education, remains uncertain in PNG PTCs. This study attempts to redress this inadequacy by exploring whether principals, deputy principals and heads of strands in the Catholic PTCs engage in tasks which contribute to competent leadership practices in effecting change.

The literature on leadership in general, and educational leadership in particular, exposed gaps between the PNG traditional leader and the Western leader. The traditional leader is expected to maintain the status quo and guard the tribal mores to promote peace and harmony in the tribe. In contrast, Western theories and models of leadership present a leader as someone with vision to lead change. These theories are foreign to the cultural experiences of most Papua New Guineans. However, the literature also reveals that there are efforts being made by leaders to bridge the gaps by incorporating the two systems – traditional and western - to lead educational institutions in PNG and make them work (Malpo, 2002; Tivinarlik, 2000). The literature on educational leadership indicates that important contributions have been made in leadership and/or administration within the context of the secondary and primary schools. However, there are gaps in the area of leadership in primary teacher education in PNG.

The conclusions drawn from these recent studies on leadership emphasize an urgent need for identifying appropriate types of leadership needed for PNG. It would appear that the needs of the various educational contexts, the cultures (including the values and belief systems of leaders, gender and relationships) need to be included in the consideration of the appropriate types of leadership. Consequently, this may not necessarily be limited to just one particular style of leadership but it could be a combination of a number of leadership strategies dependent upon the contexts. Leadership is a critical issue in PNG, not just for the education sector alone. However, because this thesis focuses on leadership and educational change in the PNG Catholic PTCs, discussions will focus on the appropriate types of leadership needed to promote quality education in the teachers' colleges and subsequently in schools. Therefore, the fourth specific

research question is: How is leadership demonstrated in the Catholic primary teachers' colleges?

3.5.4 Conclusion

The literature review presented the literature within five sections. The first section, on the nexus between teacher education and quality education in developing countries explored theoretical developments in relation to teacher education and quality education. Three variables were identified as pivotal in improving the quality of education in developing countries. These were: the need for educational reform, appropriate higher education policies and the role of donor funding agencies. The second section addressed the need for education reform. It analysed the difficulties developing countries encounter in their struggle to achieve quality education and highlighted the correlation between educational change and quality education. In particular, it highlighted an over-emphasis on teaching strategies and a substantial neglect of assisting teacher educators to be scholars in their area of expertise. The third section focussed on the need for higher education policies. It noted that developing countries needed to develop appropriate higher education policies to enhance the quality of education. The fourth section explored the role of donor funding agencies in assisting developing countries to improve the quality of education. The fifth section explored the importance of leadership in change processes. Literature on leadership for educational change demonstrated the importance of contexts and cultural value systems.

CHAPTER FOUR

THEORETICAL FRAMEWORK

The purpose of this thesis is to explore how educational change is being led in primary teacher education in PNG. The purpose of this chapter is to explain and justify a theoretical framework which would provide a more sophisticated understanding of the research purpose. The theoretical framework incorporates the following:

- 4.1 Beeby's theory of improving quality of education in developing countries;
- 4.2 Postcolonial theory;
- 4.3 Dependency theory;
- 4.4 Globalization.

4.1 Beeby's theory

Informative insights concerning teacher education in developing countries have been offered by Beeby (1966; 1979; 1980a). Beeby has developed a theory of educational development based on four basic theoretical stages concerning the growth of quality education in developing countries. The four stages are described in terms of teaching/learning processes and characteristics (Beeby, 1966, p. 72).

Table 4.1 Beeby's stages of teaching and learning

Stages	Teachers	Teaching Characteristics
I. Dame school	Ill-educated, untrained	Unorganised, relatively meaningless symbols; very narrow subject content – 3 Rs; very low standards; memorizing all-important.
II. Formalism	Ill-educated, trained	Highly organized; symbols with limited meaning; rigid syllabus; emphasis on 3 Rs; rigid methods – "one best way"; one text-book; external examinations; inspection stressed; discipline tight and external; memorizing heavily stressed; emotional life largely ignored.
III. Transition	Better- educated, trained	Roughly same goals as stage II, but more efficiently achieved; more emphasis on meaning, but it is still rather "thin" and formal; syllabus and text books less restrictive, but teachers hesitate to use greater freedom; final leaving examination often restricts experimentation; little in classroom to cater for emotional and creative life of child.
IV. Meaning	Well-educated, well-trained	Meaning and understanding stressed; somewhat wider curriculum, variety of content and methods; individual differences catered for; activity methods, problem solving and creativity; internal tests; relaxed and positive discipline; emotional and aesthetic life, as well as intellectual; closer relations with community; better buildings and equipment essential.

Movement through the four stages of teaching and learning is evolutionary. This implies that the ability of teachers to advance from one stage to the next is not automatic but contingent on many factors. Firstly, the process is closely aligned with the education and professional training of teachers. The ability of teachers to promote change is limited by levels of general education and professional training of teachers (Beeby, 1980b, p. 441) Secondly, movement between the stages is dependent on teachers' understanding and appreciation of the context and their students' needs. Thirdly, understanding of the curriculum content is essential. These factors are critical in achieving quality in education in developing countries.

This theory is insightful for a number of reasons. Firstly, it provides a conceptual understanding of potential growth of a school system in developing countries. Secondly, the model can be a "launching pad" for research into enhancing the quality of an education system. Thirdly, it offers a conceptual as well as a concrete understanding of the term "quality". The term that Beeby prefers to use is "qualitative change" in terms of *what* is taught and *how* it is taught (Beeby, 1979, p. 17) as well as providing innovators with a criteria to test the authenticity of educational interventions in the pursuit of quality. "Qualitative changes in classroom practice will occur only when the teachers understand them, feel secure with them, and accept them as their own" (Beeby, 1979, p. 291). In the implementation of Beeby's theory, the importance of teachers' understanding of the education process rather than advocating certain methods or styles of teaching or outcomes of curriculum as superior in themselves, irrespective of context, is highlighted (D. McLaughlin, 1990). Qualitative change and how this is negotiated to enhance students' learning has implications for teacher education (O'Donoghue, 1994).

The advantage of Beeby's stages is that it can "form a starting point, a launching pad for ... individual research into the process of change and growth that underlies the difficulties developing countries have met in improving their schools" (Beeby, 1980b, p. 469). Beeby proposes that a helpful starting point may be in the examination of two interrelated factors of teacher education (Beeby, 1966). The first is the level of general education of teachers. This factor focuses on the length of formal education that teachers have had before they begin professional education. The second is the number of years and the type of professional training teachers have had in their pre-service programs (Beeby, 1966, p. 67).

These two factors that have been identified as pivotal in improving the quality of education in developing countries seem to be insightful in exploring the problem that this thesis seeks to understand. Firstly, by raising the level of general education of teachers, teachers acquire broad knowledge bases about life and living skills. This broad knowledge base can contribute towards a degree of self-confidence. In the past, nationals with limited education could not perform tasks

or could perform tasks only with assistance (Lancy, 1983). The lack of confidence to venture out of the safe environment of the prescribed textbook, syllabus and inspection systems was due to their low level of general education. These characteristics are reflected in Beeby's stage of formalism (Table 4.1). Secondly, the level of general education of teacher aspirants determines the amount and kind of professional training teachers receive in PTCs. This implies that if the general level of education is raised, this will influence the provision of the type and quality of teacher education.

4.1.1 Criticism of Beeby's Model

Though Beeby's model appears useful, it is not without its critics. Beeby acknowledges that his theory is the "result of administrative experience rather than scholarly research" (Beeby, 1966, p. 50) and as such the theory has not been empirically validated. However, scores of scholars have accepted this theoretical framework for education (D. McLaughlin, 1990) and "commended the apparent validity of the stages" (Guthrie, 1980, p. 416). Even though Beeby's (1966) theory is over forty years old, it seems that the four stages are still applicable to PNG teacher education. The current education reform has initiated policy change concerning the level of general education and the type of professional training provided for the teachers. However, the impact has been muted. Therefore Beeby's (1966) theory is appropriate for this study as it can provide an appropriate lens to understand more insightfully the impact of the change occurring in primary teacher education.

Guthrie (1980) challenged Beeby's theory, though the main issue of contention was the proposition of stages. His main criticism of Beeby's stage proposition centred on the assumption of desirable ends. On theoretical grounds he evoked Mydral (1968), who argued that stage theories could have no validity, since they must be teleological by nature. A teleological approach is one in which a purpose which is not explicitly intended by anyone is fulfilled while the process of fulfilment is presented as an inevitable sequence of events. Beeby acknowledged that there could be some truth in this assertion, but argued that education theory in general and planning in particular by definition must be concerned with ends, and that the value judgments entrenched in these objectives should be analysed and carefully articulated (Beeby, 1980b, p. 446). However, Guthrie's (1980) central criticism was that Beeby's criteria of stages, and particularly the stage of meaning, were essentially those of western countries. This was an accurate conclusion. "The area where the stage analysis was vulnerable was the unexamined cultural assumption of the stage of meaning and its emphasis on individual learning" (Guthrie, 1980, p. 427).

Western models of thinking and learning are foreign to the cultural experiences of developing countries. In traditional education in PNG, young learners were not encouraged to innovate. Indeed innovation might be regarded as rebellion against the superior knowledge and power of the elders. They are called upon to observe, learn and replicate received knowledge and tribal mores (Wong & Swan, 1984, p. 7). Thus, Beeby's (1966) theory may be perceived as insensitive to the cultural conditioning that affects the learning process in developing countries.

As valid as Guthrie's (1980) observation may be, it is not necessarily the foreign experts like Beeby or other western education consultants who imposed western models on newly independent nations like PNG, but rather it is the governments of developing nations which demand a western style of education. This is an education system that can graduate national students who could effectively assume key positions in society as well as implement government policies (D. McLaughlin, 1996). While this may be the goal of newly independent developing nations, the critical predicament of such nations is how to make this goal become a reality (Dahlstrom, 1999). This is where independent developing nations are struggling continuously because of the lack of resources (in terms of personnel, finance and infrastructure) and governance that are needed to develop and improve the quality of education for their own citizens. Like other developing nations, PNG has continued to struggle to find ways to improve the quality of its education system. In pursuing such improvements/reforms, one approach is to critique appropriate established models to measure quality and growth. Hence, even with its inherent limitations, Beeby's (1966) model has been considered as a helpful model to use as opposed to other models because this model was developed specifically for developing countries like PNG. Some of the criticisms of Beeby's (1966) theory with regard to its over valuing of Western education can be balanced by an appreciation of Postcolonial theory.

4.2 Postcolonial theory

Postcolonial theory is also employed as a contributing theoretical lens for this study. Postcolonial theory focuses on the ideologies implemented during the colonial era and its occupation that currently continue to be reflected through the political, economic, social and cultural practices in former colonized states. The theory provides insights into past practices and assists in challenging the current negative legacies while retaining the positive features which may contribute to development and social equity. The following definition of post colonialism is insightful:

Definitions of the 'post-colonial' of course vary widely, but for me the concept proves most useful not when it is used synonymously with a post-independence historical period in once-colonized nations, but rather when it locates a specifically anti- or post-colonial discursive purchase in culture, one which begins in the moment that colonial power

inscribes itself onto the body and space of its Others and which continues as an often occulted tradition into the modern theatre of neo-colonialist international relations. (Slemon cited by Childs & Williams, 1997, p. 3)

Clearly then, postcolonial theory is a theory in development. The status of postcolonial theory is described as "an episteme in-information" (Derrida cited in Hall, 1996, p. 255). The existence of postcolonial theory and its function as a system which is in conceptual opposition to elements of both modernist and post-modern theories attracts criticisms. Postcolonial theory "involves a studied engagement with the experience of colonialism and its past and present effects, both at the local level of ex-colonial societies as well as at the level of more general global developments thought to be the after-effects of the empire" (Quayson, 2000, p. 2). This is significant for this study because as a former colony, PNG finds itself in a situation where, after political independence, it needs to respond not only to its colonizers but also to global organizations for development including education.

In order to appreciate postcolonial theory the following concepts invite further exploration: knowledge and power, colonial discourse, ambivalence, resistance, hybridity, representation and hegemony.

4.2.1 Knowledge and power

Postcolonial theory can be traced to Said through his work *Orientalism*, published in 1978. Postcolonial theory makes a distinction between knowledge and power. From his analysis of colonial discourses contained in written texts, Said theorizes that the colonizers had power and because of this they were able to conquer and colonize and then developed their knowledge about the colonized without regard for the reality of the colonized or for the local indigenous knowledge which existed prior to colonization. This "new" knowledge about the colonized is then disseminated and expended in ways that are accepted both by the colonizers and the colonized. This in turn seeks to legitimize domination and authority over the quasi-colonized. The key instrument of power is knowledge through which subjects are identified and re-formed. In this way, knowledge and power produce and mould identity.

Foucault associated all forms of knowledge and modes of cultural representation of the "Other" to the exercise of power (Moore-Gilbert, 1997, p. 36). Said's (1993) adaptation and extension of Foucault's arguments critiqued the absence of a commitment to change power relations in society and articulated the potential to resist and recreate. Foucault's conceptions of knowledge-power structures as adapted by Said (1978) are important because this knowledge-power structure assists in understanding colonial legacies which influence foreign aid relationships and the bureaucratic practices in educational departments and institutions.

One of the common criticisms of *Orientalism* is that the theory is monolithic, totalizing, or just insufficiently nuanced, (Bhabha, 1994; Clifford, 1988; MacKenzie, 1995; Porter, 1991; R. Young, 1990). It is perceived to ignore resistance within or outside the West, or that the binary West/East division projects outward, and thus masks divisions within Western society. Furthermore, there appears to be a lack of clarity in Said's model of culture, especially "the absence in his book of any developed theory of culture as a differentiating and expressive ensemble, rather than as simply hegemonic and disciplinary" (Clifford, 1988, p. 263). The thrust of *Orientalism* is more to demonstrate the continuing power of Western ways of representing and behaving towards other cultures and in so doing to examine the relatively high degree of internal consistency which *Orientalism* as a discourse achieves and without which it would not have survived as it has. *Orientalism* illustrates that the relation of colonizer and colonized is one of imbalance, an unequal distribution of power, not total possession of the colonizer (Childs & Williams, 1997, p. 116).

The distinctive characteristic of postcolonial theory is its attempt to interpret the colonial experience and decolonization in relation to each other. Postcolonial theory seeks to understand the relationship between the colonizers and colonized. It explores the continuing influence of neo-colonialism and the emergence of newly independent national and individual identities (Brooker, 1999). This is relevant for this study, when knowledge and power structures are legacies of colonization that have continued to be perpetuated and imposed not so much by colonial powers but from within the colonized.

4.2.2 Colonial discourse

Colonial discourse is critical because it seeks to unite power with knowledge (Ashcroft, Griffiths, & Tiffin, 1998, p. 72). This link between knowledge and power is particularly important in the relationships between the colonizers and the colonized and has been extensively elaborated by Said (1978). *Orientalism* is a discourse constructed by the West and inextricably linked to colonialism (Ashcroft & Ahuwalia, 2001, p. 57). "Discourse" constructs the objects of its knowledge. For Foucault,

Discourse is a strongly bounded area of social knowledge, a system of statements within which the world can be known. The key feature of this is that the world is not simply 'there' to be talked about; rather, it is through discourse itself that the world is brought into being. It is also such a discourse that speakers and hearers, writers and readers come to an understanding about themselves, their relationship to each other and their place in the world. It is a complex of signs and practices which organizes social existence and social reproduction. (Ashcroft et al., 1998, pp. 70-71)

One of the major criticisms highlighted in *Orientalism* is the misrepresentation of the East. The discourse that the West engaged in when using its knowledge and power to represent the East is exploitative. This embodiment is conceived and presented in a manner that is deeper than surface rhetoric. The primary representations of the East then become part of the literature which is written, circulated and commented upon to form part of a system of scholarship in which the Orient is portrayed from a Western perspective (Moore-Gilbert, 1997, p. 40). The western concept of the Oriental is based on the Manichean metaphor which views the world as divided into mutually excluding opposites. This representation generates a set of dichotomies, black or white, that has potential for identity-destroying power (JanMohamed, 1986, p. 79). This is because the "Other" is highly diverse in nature and tradition. Postcolonial theory is built around the concept of "otherness", and so there are complexities to the concept of "otherness" in terms of the writing and reading situation of the "Other". The presentation of literature in colonizing countries and the way language, images, scenes, traditions etc. of colonized countries are represented are significant considerations in postcolonial discourses (Lye, 1998).

Colonial discourse is a complex of signs and practices that organizes social existence and social reproduction within colonial relationships. Colonial discourse is thus a system of statements that can be made about the colonies and colonial peoples, about colonizing powers and about the relationship between these two. It is a system of knowledge and beliefs about the world within which acts of colonization take place. (Ashcroft et al., 1998, p. 42)

This definition of colonial discourse is useful in this study to critique the literature on PNG education and the education policies that have been implemented under the national education reform and to investigate how accurately these policy documents reflect the needs of PNG society as well as identify any residues of colonial education.

4.2.3 Ambivalence

Ambivalence is one of the most common words used in postcolonial theory. The term is adapted from Freud (1986) who defines ambivalence as an expression of the co-existence of "two classes of instincts", which are the sexual instincts (Eros) and the death instinct" (Thanatos) (Freud, 1986, p. 338). In adapting this duality, Bhabha (1994) identifies that the object of colonial discourse is marked by ambivalence because there is an element of derision and one of desire, to be colonizer and colonized. Thus ambivalence involves a process of identification and of denial (Childs & Williams, 1997, p. 124). The subject of identification

is never the affirmation of a pre-given identity, never a *self*-fulfilling prophecy – it is always the production of an image of identity and the transformation of the subject in assuming that image. The demand of identification – that is, to be *for* an Other – entails the representation of the subject in the differentiating order of otherness. (Bhabha, 1994, p. 45)

From a postcolonial perspective, the issue of identity in relation to ambivalence is not about the self, but rather a relationship to the "Other". Denial also contributes to ambivalence and identity since denial is a partial acknowledgement of the otherness that is denied, and may also be desired. This is representative of the colonial subject's attitude towards the "Other" which is not a simple rejection of difference but a recognition of the "Other" that holds an attraction and poses a threat (Childs & Williams, 1997, p. 125). In this situation, the representations of the colonized are shifting and unstable. They illustrate the impact of anxiety and contradictions stemming from the structure of the colonizer's multiple and contradictory beliefs. Ambivalence means that the colonized is capable of resistance to the colonizer and the colonizer is susceptible to influence from the colonized (Bhabha, 1994). Ambivalence is an important concept as it can provide an appropriate viewpoint to understand more insightfully the educational dynamics occurring in the implementation of educational change in primary teacher education.

4.2.4 Resistance

The concept of resistance implies ideas of freedom and identity, which may or may not be held in the same way in the colonized culture's view of humankind (Lye, 1998). Tracing the history of resistance in this study is limited to ideas of a few of the major thinkers to show important connections and differences between them and thereby give a sense of the way in which resistance to imperialism in its colonial and neo-colonial moments was organized around shared topics within specific contexts. The connections have been ideological, tactical and inspirational. At the inspirational level, one liberation struggle can spark another. At the tactical level, forms of resistance from other countries have been studied and replicated, adapted or rejected according to need. At the ideological or theoretical level, resistance has drawn upon the works of writers from other times and places (Childs & Williams, 1997, p. 27). The process of engaging with and disengaging from Western concepts, forms or texts is inevitably a complex one for colonial and post-colonial scholars.

The paths by which intellectuals, who have been educated under the colonial system, arrive at involvement in cultural or armed resistance go through three broad stages of assimilation, uneasiness and outright rejection. The first stage produces works which imitate European models, styles or genres; the second involves historical and cultural rediscovery, though often in a shallow way; while the third sees the emergence of a "literature of combat", revolutionary and

national. The fact that the literature of the third stage is frequently produced by people who had previously thought themselves incapable of that kind of activity exemplifies the potential of ordinary people and their ability to be active participants in their own liberation, as well as in the fundamentally transformative nature of this type of struggle (Fanon, 1967, pp. 196-197). Culture can be both site and means of resistance:

For with a strong indigenous cultural life, foreign domination cannot be sure of its perpetuation. At any moment, depending on internal and external factors determining the evolution of the society in question, cultural resistance (indestructible) may take on new forms (political, economic, armed) in order to fully contest foreign domination. (Cabral, 1973, p. 62)

Culture remains "an essential element of the history of a people...simultaneously the fruit of a people's history and a determinant of history" (Cabral, 1973, p. 54). History and culture are profoundly connected. The liberation struggle may be "an act of culture", but it is also grounded in the rights of peoples to have their own history. History reveals social conflicts and contradictions at economic and political levels, while culture reveals attempts to overcome these obstacles and allow society to progress.

History offers important lessons for the present and future conditions in terms of the struggle against imperialism. The rejection of the forces of divisiveness is essential because resistance to imperialism as an external force is not the whole story. The "internal" battle is the most challenging. The compromised intellectual is happy to promote a version of history which exonerates the West. In contrast, the resistant post-colonial for whom an accurate collective memory and representation of history are part of the larger struggle against imperialism challenges the former (Ngugi, 1993, p. 171). When the battle is within the colonized, the lines of resistance are blurred too often.

Colonialism imposed its control of the social production of wealth through military conquest and subsequent political dictatorship. But its most important area of domination was the mental universe of the colonized, the control, through culture, of how people perceived themselves and their relation to the world. (Ngugi, 1986, p. 16)

Resistance is an important aspect of postcolonial theory and discourse. The literature on resistance demonstrates that resistance is influenced by the historical context and culture. Indeed to control a people's culture means to control their identity (Ngugi, 1986). Furthermore, there seems to be two positions in the struggle – the external and the internal, and both are significant in the struggle for freedom and identity.

As a former colony, PNG achieved political independence from Australia in 1975 without bloodshed. The transition to independence was relatively smooth compared to other developing countries that struggled for their political independence. This reality at times seems to be resented by some Papua New Guineans as they would like to blame Australia as a more overt scapegoat for many current problems. However, there are aspects identified in the concept of resistance that can be applied to PNG and its education system.

4.2.5 Hybridity

Hybridity refers to the integration of cultural signs and practices from the colonizing and the colonized cultures. Cultural changes manifest themselves in literature, art, and music. Racial and cultural purity do not exist and all cultures are to some degree hybrid. In addition, hybridity has the ability to take one beyond essential identities (Bhabha, 1994, p. 37).

The schooling system established by the colonizers has been one of the major conduits of transmission. Within the school system, the process of assimilation was employed to persuade the colonized to conform to the traditions of the colonizer. Whatever the outcome, hybridity demonstrates a new world culture that cannot be compartmentalized according to language, land, race and political borders. Each language embodies a view of the world peculiarly its own. Hybridity delineates the way in which language, even within a single sentence, can be double-voiced.

It [hybridization] is a mixture of two social languages within the limits of a single utterance, an encounter, within the arena of an utterance between two different linguistic consciousnesses, separated from one another by an epoch, by social differentiation or by some other factor. (Bakhtin, 1981, p. 358)

Contrary to the implication of Said's (1978) concept of *Orientalism*, "hybridity shifts power, questions discursive authority and suggests that colonial discourse is never wholly in the control of the colonizer. Its authority is always re-inflected, split, syncretised, and to an extent menaced, by its confrontation with its object" (Emerson & Holquist, 1981, p. 304).

From a postcolonial discourse, hybridity implies the end of the diverse forms of purity encompassed within essentialist theory. Essentialism is the notion that the identity of each group is unitary, fixed, and unchanging (Childs & Williams, 1997, pp. 157, 230). A group's traits are considered inherent and inalienable and the group's nature is outside history and impervious to the forces of history (W. Kelly, 1999).

The colonization process is driven by the colonial power over the colonized through the establishment of highly-sophisticated strategies of control and dominance to guarantee its economic, political and cultural endurance. Within such a process, the colonizer creates an image of the colonized such as "second class citizens" with labels like "black skin/white masks" (Fanon, 1986) or as "mimic men" (Moore-Gilbert, 1997, p. 195). These authorized versions of otherness, "part-objects of a metonymy of colonial desire end up emerging as inappropriate colonial subjects". They produce a "partial vision of the colonizer's presence, destabilize the colonial subjectivity, unsettle its authoritative centrality, and corrupt its discursive purity" (Bhabha, 1994, p. 90). Mimicry tends to repeat rather than re-present and in the very act of repetition, originality is lost, and centrality de-centred. What is left is the trace, the impure, the artificial, and the second-hand.

Hybridity undermines the narratives of colonial power and dominant cultures. The series of inclusions and exclusions on which a dominant culture is premised are deconstructed by the very entry of the formerly excluded subjects into the mainstream discourse. The dominant culture is contaminated by the linguistic and racial differences of the native self. Hybridity can thus be seen as a counter-narrative, a critique of the canon and its exclusion of other narratives (Bhabha, 1994).

The main criticisms of Bhabha (1994) concern his vagueness over the application of his concepts and theories. It is unclear to his critics whether the use of psychoanalytic terms was for illustrative purposes as analogies or whether he believed colonial relations actually involve Freud's psychic categories. There appears to be a failure to reconcile his psychoanalytic approach with actual colonial events. Moreover, Bhabha (1994) is criticized because, while he maintains that the construction of anti-colonial discourse necessitates different questions and different strategies, they seem to lead to an almost complete lack of engagement with liberation movements and moments of insurrection (Parry, 1987, p. 45). In addition, Bhabha is criticized for not offering any textual representation that can respond to colonialism and while all "discourse is resistant, because ambivalent and hybridized, there is no discourse of resistance" (Childs & Williams, 1997, p. 145). Hybridity works as a form of resistance in the postcolonial arena as it worked in the colonial. Hybridity offers valuable insights to understand more insightfully the educational dynamics occurring in the training of teachers.

4.2.6 Representation

Post-colonial studies have placed critical theory in a new context, challenging its precepts and its applicability outside the West. No critic better exemplifies this practice than Spivak (1996, pp. 309-323). Her main concern is the position of the subject: the place from which someone

addresses or conceives of an issue and formulates its area of importance. From this perspective she also analyses the dynamics of teaching and learning: "the micro-politics of the academy and the macro-narrative of imperialism" (MacCabe, 1988, p. x). The link between imperialism and neo-colonial practices is the starting point:

The contemporary international division of labour is a displacement of the divided field of nineteenth-century territorial imperialism. Put simply, a group of countries, generally first-world, are in the position of investing capital; another group, generally third world, provide the field for investment. (Spivak, 1993, p. 83)

Representation is an important concept in postcolonial theory. There are two distinct expressions of representation: "to stand in for" as in political representation, and "to portray" (Childs & Williams, 1997, p. 160). The divergences and convergences between the two are frequently shifting. The dynamics involved in representation are important, which may explain why Spivak is more concerned about who is representing whom and how.

Criticisms have been levelled at Spivak's (1993) over-concentration on discourse analysis and her tendency to understand all discourse as colonial. Her approach to blur useful distinctions between different theoretical paradigms may lead to intolerance of other local kinds of resistance, and threatens to elevate Western theory to a hegemonic position reminiscent of imperialism (Gates, 1991, pp. 457-470).

4.2.7 Hegemony

Hegemony is a concept emanating from critical theory (Gramsci, 1971). The concept illustrates the force by which subordinate classes are convinced of their natural or right position and that of the ruling class (Childs & Williams, 1997). Hegemony is the power of the ruling class to convince lower classes that the ruling class's interest is the interest of all. In a postcolonial perspective, hegemony is defined as "domination by consent" so that lower classes are kept in their place (Childs & Williams, 1997, p. 231). This is different from imposed power because the political leadership of the hegemonic group is through the consent and acceptance of the ruling class (Childs & Williams, 1997). Thus, the interests of the dominant group are espoused by the subordinate classes and the dominant group will also appropriate practices or figures from them. Culture is the site on which the struggle for hegemonic power is conducted.

In postcolonial contexts, hegemonic practices are linked to internal colonial practices. According to the elite theory, ideas about the most fortunate in society discussing and making decisions for the working lower class are based on the presumption that they are the best informed of the interests of the poor. Such a practice breeds a new form of colonialism called

neo-colonialism. Neo-colonialism has been described as the "continued hegemonic influence of colonial powers after independence through the application of economic, cultural and political pressures" (Childs & Williams, 1997, p. 232). The term has been employed in more than one sense and context. However, within postcolonial societies, the term has been widely used to denote the replication of colonial authorities and institutions in the rule and administration of independent, self-governing nations (Childs & Williams, 1997).

4.2.8 PNG education: A colonial construct

Colonization is a process which involves one nation or territory taking control of another either by the use of force or by acquisition. A by-product of colonization is the establishment of schools whereby the form of education within the colony is that of the colonizing nation. This process is an attempt to "assist in the consolidation of foreign rule" (G. Kelly & Altbach, 1984, p. 1). Just as PNG is a colonial construct so is formal education in PNG (Kulwaum, 1995; Pagelio, 2002; Premdas, 1989). Other legacies include the use of the English language for formal and business communications, the systems of government and bureaucracy, as well as the legal system.

The concept of assimilation is important when dealing with colonial education. Assimilation involves those who are colonized being forced to conform to the cultures and traditions of the colonizers. "Cultural assimilation (is)... the most effective form of political action... The cultural domination works by consent and often precedes conquest by force" (Viswanathan, 1989, p. 85). Colonizing governments seek to gain strength not necessarily through physical control, but through psychological control. This psychological control is implemented through a central intellectual location, the school system. "Colonial schools ...sought to extend foreign domination and economic exploitation of the colony" (G. Kelly & Altbach, 1984, p. 2). In addition, "education in ...colonies seems directed at absorption into the metropole and not separate and dependent development of the colonized in their own society and culture" (G. Kelly & Altbach, 1984, p. 4). The colonial education process often isolates the colonized people from their indigenous learning structures and draws them toward the structures of the colonizers (Southard, 1997).

The ultimate goal of colonial education might be implied from the following speech of Lord Macauley concerning Indian Education: "We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect" (Childs & Williams, 1997, p. 130). While all colonizers may not have shared Macauley's lack of respect for the existing systems of the colonized, they do share the idea that education is important in

facilitating assimilation processes (Southard, 1997). The colonial system of education had the structure of a pyramid: a narrow primary base, a narrowing secondary middle, and an even narrower university peak (Ngugi, 1986, p. 12).

The impact of colonial education includes the implementation of a new education system which leaves those who are colonized with a lack of identity and a limited sense of their past. The result is that the indigenous history and customs once practised and observed gradually evaporate. As a result, the colonized become hybrids of two different cultural systems. Colonial education creates a blurring which makes it difficult to differentiate between the new, enforced ideas of the colonizers and the formerly accepted indigenous practices. PNG's experience of colonization was not as repressive as that suffered by African countries where colonization led to a process of annihilation of a people's belief in their names, languages, environment, heritage of struggle in their unity, capacities and ultimately in themselves (Ngugi, 1986). Such a process has adverse effects because it suffocates colonised people's confidence in their ability and capacities to be self-sufficient (Ngugi, 1986, p. 56).

As a strategy to eliminate the harmful long-term effects of colonial education, processes of decolonization are important. The process of decolonization of the mind challenges one to connect personal experiences with other processes (Ngugi, 1986). Post-colonial education must reverse the former reality of "education as a means of mystifying knowledge and hence reality" (Ngugi, 1986, p. 56). Colonial education has resulted too often in the alienation of people from themselves, their natural and social environments. The challenge in the process of decolonization is a new education structure to advance the identity of a liberated people and unite previously isolated groups (Ngugi, 1986). The constructs of colonial education are useful to critique the current education reform in its effort to produce a liberated and united people as articulated in the PNG philosophy of education (Matane, 1986).

Summary: Postcolonial theory offers explanations for issues concerning opposition, privilege, domination, struggle, resistance and subversion as well as contradictions and ambiguities. These issues are fundamentally related to a critique of the relationship between knowledge/power and an understanding of how representations of the world in words, ideas, images and texts both create and reflect beliefs and produce actions (Bhabha, 1994; Said, 1978; Spivak, 1996). The theory invites a way of thinking about the legacies of colonization and provides a framework to understand these legacies in postcolonial societies. Postcolonial theory challenges "Western knowledge construction, truth and representation and calls into question claims of academic knowledge and intellectual authority" (Hickling-Hudson, Matthews, & Woods, 2004, p. 4). In addition, postcolonial theory acknowledges that each context is different and that its context

specificities are important in the understanding and successful deconstruction process of Western paradigms.

4.3 Dependency theory

Dependency theory is an important theoretical perspective employed in this study to explore the role of foreign aid and its impact on less developed nations. "Dependency theory attempts to explain the present underdeveloped state of many nations in the world by examining the patterns of interactions among nations and by arguing that inequality among nations is an intrinsic part of those interactions" (Ferraro, 1996, p. 2). The theory posits that the low levels of development in less economically developed countries (LEDCs) are caused by their reliance and dependence on more economically developed countries (MEDCs). PNG has continued to rely on foreign aid to help develop its vision and goals for education (Department of Education, 2000b, p. 15). Thus, in this study dependency theory has potential for analysing the impact of foreign aid in developing the educational capacity of PNG as a strategy to improve its prospects within a globalizing world.

The emergence of dependency theory in the 1970s aimed to challenge orthodox modernization approaches to development and global inequalities (Dos Santos & Randall, 1998). Dependency theory was developed at a time when the ending of World War II had brought the expansion of power of both the USA and the Soviet Union. The Cold War of the conflicting ideologies of capitalism and communism was felt around the world, with many countries becoming a potential battleground for communist or capitalist control. Following the success of the Marshall Plan in Europe, the USA and other industrialized nations focused attention on the 'development' of the poorer nations (Passe-Smith, 1998, p. 27). The establishment of the financial institutions such as the World Bank and International Monetary Fund (IMF) was to facilitate the "development". Thus, "development" was of central importance in the discourse of Cold War international relations. While the development of the poorer nations may have seemed to be the major goal for the establishment of the financial institutions such as the World Bank and IMF, the reality was that each side was keen to establish and maintain influence in the former colonies in order to prevent the expansion of the other, and this was achieved through the offering of financial assistance for development. The political attention on development issues led to growing academic discourses from which two contrasting analyses emerged, namely the theories of modernization and dependency (Wilson, 2001). There were other motives in the offering of financial assistance for development. One concerned the expansion and domination of the communist and capitalist sectors of the colonizing powers in world affairs. The end of the Cold War and the surge in private capital flows to the developing world affected the

landscape for development assistance in a way that left many questioning the very nature of aid (World Bank Group, 1998).

The historical dimension of the dependency relationships also shapes certain structures of the world economy such that it favours some countries to the detriment of others and limits the development possibilities of the subordinate economics (Dos Santos, 1971, p. 226). The relationship of interdependence between countries is becoming increasingly unequal as MEDCs progress at the expense of others. Consequently, the industrial and technological structures of LEDCs are designed to facilitate the needs of the multi-national corporations rather than to facilitate internal development, in both export and manufacturing sectors (Ferraro, 1996). Furthermore, the alleged lack of development of LEDCs is due more often to the role that they have been assigned within the system and not to their failure to integrate into a capitalist system. Dependency appears to be an inescapable outcome of capitalism (Dos Santos & Randall, 1998).

4.3.1 Foreign aid relationships

Foreign aid is an important issue in the discussion on dependency relationships. The discussion on foreign aid is important because PNG has continued to rely on foreign aid to help sustain its administrative and structural programs in providing basic services like education and health to its citizens (Department of Education, 2000b). As a former colony of Australia, PNG depends on Australia (Downer, 2005), as well as other aid donors and the World Bank, for support to be able to sustain itself. Thus parallels can be drawn between dependency theory and postcolonial theory. During the colonial era, colonies were dependent on their colonizers. The relationship was unequal because the economy, administrative structures and services were those of the colonial administration. Currently, the trend is still observable even though LEDCs like PNG are politically independent. Australia is the major contributor of foreign aid to PNG (Downer, 2005; Wendt, 2004).

Stimulating growth in LEDCs is one identified objective of foreign aid with the other commonly cited objective being poverty reduction (Downer, 2005; Gani & Clemes, 2003). Generally these two objectives are interrelated. In LEDCs with unsophisticated economic management, evidenced by poor property rights, there is evidence of high levels of corruption, closed trade regimes, and macroeconomic instability. There is no correlation between aid and the decline in infant mortality (Burnside & Dollar, 2000). Furthermore, in dysfunctional environments, development projects promoted by donors agencies tend to fail because there are no effective development policies in place to oversee the effective use of foreign aid (Burnside & Dollar, 2000).

The quality of a nation's governance has a decisive influence on its development. Aid agencies have stressed the importance of good governance, sound policies and political will to implement reform (Downer, 2005; World Bank Group, 1998).

The record of governance in the Pacific is mixed, stemming from a lack of institutional capacity, including issues of smallness and affordability. It also results from the legacy of inappropriate colonial structures that have seriously impeded internal political integration and nation building (Australian Government, 2003, p. 6).

After three decades of political independence, the capacity and accountability of core national institutions in PNG seem to have deteriorated. This deterioration reveals that if the institutions responsible for quality governance are allowed to wither, social and economic prospects become seriously impaired (Australian Government, 2003). PNG has ample appropriate legislation and policies; however the problems lie in an inability to implement these policies (Australian Government, 2003, p. 7). Furthermore, there is also the issue of corruption that has affected good governance in PNG. "Corruption can infiltrate every aspect of government; it can undermine the capability of government to manage economic affairs, to provide basic services, to allocate and account for public resources and to provide for effective justice and security" (Wendt, 2004, p. 5). Consequently, weak management capacity hampers the supply and distribution of essential medicines and education materials as well as the maintenance of key infrastructure such as roads.

Aid is as much a matter of knowledge as it is about money (World Bank Group, 1998). In the postcolonial era, the dependence of developing countries continues to be reflected in the economic and administrative structures, multi-nationalism, globalization and world trade. Politically and economically, LEDCs cannot support their administrative and structural programs for basically two reasons. First, the economies of most LEDCs are often not robust enough to support and sustain their internal development programs. There are three issues related to the poor economy. (1) The internal markets of the poorer countries are not large enough to support the economies of scale used by the richer countries to keep their prices low; (2) the political will of the poorer countries in regards to whether a transformation from being primary producers is possible or desirable is not strong enough; and (3) the extent to which the poorer countries actually have control of their primary products, particularly in the area of selling these products abroad (Ferraro, 1996). As a result, LEDCs are forced to borrow money from the financial institutions like the World Bank and IMF, and depend on other aid agencies around the world to provide the financial assistance needed. These obstacles to the import substitution policy have led LEDCs to think a little more creativity and historically of the relationship between rich and poor countries.

Second, the structural programs may not be relevant because these have been constructed with considerable external input which means the developing countries may not have the necessary qualified personnel to drive the programs. They need external consultants from MEDCs to provide the technical assistance needed to conduct their structural programs (Australian Government, 2003). Lack of good leadership and governance, as well as provision of sound policies have contributed to the ineffectiveness in the disbursement of aid and basic services to their citizens (Downer, 2005; World Bank Group, 1998). As a result, the cycle of dependency relationships continues to be maintained.

With so much foreign aid provided to these LEDCs, it is expected that they would be empowered to rise above the poverty level and become self-reliant. The impact of foreign aid is mixed. This has led the donor agencies and the World Bank to critique whether or not aid is effective (World Bank Group, 1998). This is a contradiction that will be explored briefly in this study.

4.3.2 Dependency theory and development

Dependency theory has focused heavily on aspects of economic growth and development with particular reference to the inequalities and inequities of the dependent countries. Dependency theory argues that the relations of dependency have continued to be sustained during the post-colonial period through the activities of global financial institutions such as the World Bank, IMF and GATT to help facilitate development (Wilson, 2001). Powerful capitalist nations continue to dominate the dependent nations via the capitalist system that continues to perpetuate power and resources inequalities (Viotti & Kauppi, 1993, p. 458).

It is increasingly clear that the history of the postcolonial countries has been important in shaping their present underdevelopment. Underdevelopment is not basically a consequence of traditionalism but, rather, underdevelopment in Latin America and, by extension parts of Africa and Asia, has been systematically created by colonist exploitation (Frank, 1972).

Another contributing factor to dependency relationships has been the power of elites in dependent states. Dependent relationships have persisted since the European expansion in the fifteenth century. However, over time, the diversion of resources has been maintained not only by the power of dominant states, but also through the power of elites in the dependent states. These elites maintain a dependent relationship because some of their own private interests coincide with the interests of the dominant states. These elites are trained in the dominant states and share similar values and culture with the elites in dominant states (Viotti & Kauppi, 1993, p. 458). Thus in a very real sense, a dependency relationship is a "voluntary" relationship. One

need not argue that the elites in a dependent state are consciously betraying the interests of their poor; the elites sincerely believe that the key to economic development lies in following the prescriptions of liberal economic doctrine (Ferraro, 1996).

This is a critical issue in this study. The majority of elites in the national education department, universities and teacher education institutions have completed their education and training in more developed countries. Upon returning to PNG, they have assumed prominent positions of leadership in universities, educational institutions and in the national education department tasked with the development of education policies and reform. In such positions, they find themselves involved in negotiations with external global organizations, in particular aid donor agencies for education. In negotiating with aid agencies, the elites have had to make decisions affecting the lives of their own citizens. It remains to be seen whether these decisions are the best and appropriate for PNG in combating the dependency syndrome and improving quality of life.

4.3.3 Critics of dependency theory

Dependency theory is based on materialist and structuralist theories. As such it has been criticized for over emphasizing material and economic factors. Critics agree that the "top-down" approach which many agencies take to development is partly to blame. Furthermore, the assumption that experts, notably economists from more developed nations, can identify problems and develop plans for Third World governments to implement to improve people's lives is questioned. This arrogance, along with the ignorance of the needs and aspirations of the people in LEDCs, does considerable damage. Such arrogance and ignorance of external experts are contained in colonial discourses which undermine the power of the recipients. The top-down, technocratic approach to project design and service delivery has not been successful in areas critical for development (World Bank Group, 1998).

The "participatory" approach seems more appropriate in combating the dependency relationships. Many aid projects have supported a participatory approach to service delivery because there is considerable improvement (World Bank Group, 1998). The "participatory" approach can include a variety of processes depending on the nature of the project and the context (Kayrooz, Chambers, & Spriggs, 2006, p. 98). Among others, a consultative process between the agencies and the "target beneficiaries" seems appropriate where the agencies involve the people themselves in problem identification and decision-making processes rather than attempting to impose externally-developed interventions on them (Kayrooz et al., 2006, p. 101).

Another important element to include in the consultative process is the inclusion of "indigenous knowledge". There appears to be a growing consciousness among agencies operating in LEDCs regarding the importance of utilizing local/indigenous knowledge in solving problems at the local level (Nakata, 2004, p. 20). "Indigenous knowledge" refers to what "ordinary" folk know. This knowledge is locally situated, unique and embedded within a cultural context (von Liebenstein, 2000; Warren, 1991, 1993). Though "indigenous knowledge" may be more fragmented and limited than specialized scientific knowledge, no one person, institution, or authority can encompass everything. In the development literature there is an acceptance of the value of integrating the two systems of knowledge - traditional and scientific - in order to produce new knowledge and practices that provide solutions for sustainable development in developing countries and communities (Nakata, 2004, p. 24). There appears to be inadequate processes of critical interrogation and analysis of the two knowledge systems. Such processes can lead to better appreciation and understanding of the two knowledge systems. The primary concern of developmentalists rests with what works in practice, and the discussion of binary systems of thought is the realm of the theoretical (Nakata, 2004, p. 24). For the aid recipients, they have the local knowledge to share with developmentalists about how, why and what works in the local context. This is vital in promoting sustainable development (Kayrooz et al., 2006).

For sustainable development, it is important to establish collaborative work in utilizing indigenous and scientific knowledge to enrich each other to promote better participation for the local communities. Knowledge about what works and what does not, in aid development projects, and in service provision, is one of the most important outputs of development assistance. In many cases innovative approaches to service delivery need to involve greater participation by local communities and decentralization of decision-making (World Bank Group, 1998). This partnership should not be limited to indigenous and scientific knowledge but it could form the basis of more collaborative work to be established between the underdeveloped and developed world in combating the dependency relationships. Thus far, the trend has been that the powers of the wealthy elites who occupy positions interfacing with the international community continue to be bolstered while the poor are excluded and lose further control of their own destinies. Therefore the "participatory" approach is useful for encouraging sustainable development in education.

Summary: Dependency theory offers useful insights to more orthodox perspectives, such as modernization theory. Modernization theory employs ideas of cultural evolution to lay the blame for global poverty on the inability of the world's poor to embrace modern, industrial values. However, Wilson (2001) argues for a shift in focus from evolution to cultural values in favour of historical analysis and an emphasis on economic inequality. Dependency theory

allows trends in global poverty to be understood in terms of the development of global capitalism. In contrast to modernization theory, the economic situation of poor nations is explained in terms of their dependency upon rich and developed nations (Dos Santos, 1971; Wilson, 2001). This dependency is based on binary oppositions and unequal relationships (J. McLaughlin & Hickling-Hudson, 2005; J. M. McLaughlin, 2002). The essence of development is self reliance and development without dependency (Hindson, 1992). Therefore dependency theory is appropriate to critique foreign aid.

4.4 Globalization

In the last two decades, globalization has become one of the most fashionable "buzzwords" of contemporary political and academic debate. There are so many definitions of the term that cover a wide range of distinct political, economical and cultural trends. Globalization can be

...a process (or set of processes) which embodies a transformation in the spatial organization of social relations and transactions – assessed in terms of their extensity, intensity, velocity and impact – generating transcontinental or interregional flows and networks of activity, interaction, and the exercise of power. (Held, McGrew, Goldblatt, & Perraton, 1999, p. 16)

The processes of globalization are fragmented and involve complex networks within the political, economic, military and cultural domains (Held et al., 1999). There are similarities with a postcolonial perspective. Power is a fundamental aspect of globalization. On a global scale, power rests with the political and economic elites of the world's metropolitan areas given that they have greater control over the global networks; this ultimately results in the consequences of globalization being unevenly experienced (Tikly, 2004, p. 112).

Theorists of globalization conceive that globalization is linked to the social interconnectedness across existing geographical and political boundaries. Generally, they agree that differences in humanity's experiences of space and time are working to undermine the importance of local and even national boundaries in many arenas of human endeavour (Sahlberg, 2004, p. 65). Nonetheless, there is disagreement about the precise sources of recent shifts in the spatial and temporal contours of human life.

Critics of globalization (Prime Minister Mahathir of Malaysia, President Mugabe of Zimbabwe and President Musaveni of Uganda) maintain that local, regional and national forms of self-government are being rapidly replaced by insufficiently democratic forms of global governance remote from the needs of ordinary citizens, whereas its defenders describe new forms of multinational legal and political decisions as indispensable forerunners to more inclusive and

advanced forms of self-government (Fischer, 2000, p. 2). Furthermore, other critics of globalization (Helleiner and George) argue that the rising inequality is the inevitable result of market forces which give the rich the power to add further to their wealth and that the expansions of trade and/or market access for exports are not in themselves rational policy for any government promoting the social system.

While the theory of globalization may have its advantages, the critics of globalization agree that small newly independent countries who have experienced the forces of colonization need to claim their territory and political independence before being coerced by foreign powers who think they can determine the future of another country, culture and political sovereignty on the grounds that they know what is best for them. An appropriate illustration of this is contained in an article published on September 23, 2003 in the Sydney Morning Herald by White in which he says, among other things: "Last week's announcement that Australia will send about 200 police to PNG marks the sharpest change in Australia's approach to our closest neighbour since 1975. Australia is edging back into taking direct responsibility for law and order in PNG. That is the right thing to do..." The comments relate to the Enhanced Cooperation Program (ECP) between Australia and PNG. In response, Manning (2003) rejects the comments, arguing that there has never been any suggestion that Australia will take over control of the PNG Police Force. Manning (2003) also argues that, if that happens, there would be considerable resistance from Papua New Guineans. Even if developing countries are poor and struggling, there is little justification for powerful nations and organizations to impose change on them (Hawksley, 2006).

4.4.1 Globalization and its relevance to the study

One of the challenges of the emergent nation-state of PNG has been political instability. This challenge has been exacerbated by a linguistically diverse population, increased unemployment, and rising crime rates (Hawksley, 2006, p. 161). As such, it has continued to struggle to be economically independent and has not been able to support and provide basic services for its citizens. Australia has continued to fear a 'state collapse' in PNG. This has led subsequently to the promotion of neo-liberal economic policies, by Australian policy makers and international lending agencies to force the government and economy to be more efficient. One of the strategies forced on PNG was to accept the ECP to support the state and reverse its predicted demise. However, the ECP has raised questions about the degree of actual sovereignty enjoyed by PNG when the nation was requested to amend its constitution to allow sovereign immunity, a rather unpalatable suggestion for an independent nation (Hawksley, 2006, p. 170). This request was rejected by PNG, resulting in the withdrawal of the Australian police personnel.

Australia, as PNG's chief donor, has exerted considerable influence on its national development. Despite the assistance that Australia and other aid donors have continued to provide, PNG has failed to achieve self-reliance. Instead, it has remained "highly dependent on foreign aid as well as on foreign advisers in the courts and on technical matters within the public service" (Hawksley, 2006, p. 167). Globalization has its merits but how does globalization get PNG out of its dependency on aid and make it more self-sufficient? This is a critical issue to explore in the educational development of its citizens.

A particular feature of globalization is the momentum and power of the change involved. "It is the interaction of extraordinary technological innovation combined with world-wide reach that gives today's change its particular complexion" (Hutton & Giddens, 2001, p. vii). Developments in the life sciences and in digital technology have opened up new possibilities for production and exchange. Innovations like the internet have made it possible to efficiently access information and resources across the world (M. K. Smith & Smith, 2002).

PNG is clearly influenced by the effects of globalization. Changes are so rapid that PNG is unable to cope and consequently seem to be lagging behind. Education seems to be the key to implementing positive change.

4.4.2 Globalization and the knowledge economy

Productivity and competitiveness are functions of knowledge generation and information processing (Castells, 2001). This involves a major shift in the way people think about economies.

For countries in the vanguard of the world economy, the balance between knowledge and resources has shifted so far towards the former that knowledge has become perhaps the most important factor determining the standard of living – more than land, than tools, than labour. Today's most technologically advanced economies are truly knowledge-based. (World Bank Group, 1999)

The rise of the 'knowledge economy' has challenged economists to look beyond labour and capital as the central factors of production. Technology is the third factor in leading economies (Romer, 1986, 1990). Global finance is just one driving force in the economies. Knowledge capitalism, "the drive to generate new ideas and turn them into commercial products and services which consumers want", is now just as pervasive and powerful (Leadbeater, 2002, p. 8). Inevitably, this leads to questions around the generation and exploitation of knowledge.

There is already a large cultural and economic divide between rich and poor nations and this appears to be accelerating under 'knowledge capitalism'. There is also a growing gap within societies. There is a need to "innovate and include" and for recognition that successful knowledge economies have to take a democratic approach to the spread of knowledge: "We must breed an open, inquisitive, challenging and ambitious society" (Leadbeater, 2002, pp. 235, 237). However, there are powerful counter-forces against this ideal. In recent years, many large corporations claim intellectual rights over new discoveries, for example, in relation to genetic research they reap large profits for licensing use of this "knowledge" to others (Wolf, 2002, pp. 13-55). Such claims illustrate the influence large multinational corporations possess in the knowledge economy.

4.4.3 Globalization and multinational corporations

A crucial aspect of globalization is the nature and power of multinational corporations. Such companies account for over 33% of world output, and 66% of world trade (Gray, 1999, p. 62). It is estimated that about a quarter of world trade occurs within multinational corporations. Gray argues against the effort to create a global free market since these multinational corporations have considerable economic and cultural power (Gray, 1999).

In exploring globalization and the impact of multinational corporations on local communities, two key features have been highlighted: First, multinational corporations look to establish operations in countries or regions where they can exploit cheaper labour and resources. While this establishment can mean additional wealth coming into the communities, this form of globalization entails significant inequalities. Examples are provided of China where manufacturers for companies like *Adidas* and *Nike* pay as little as 13 cents per hour while in the United States, workers doing similar jobs receive US\$10 per hour (Klein, 2000, p. 212).

Second, multinational corporations persistently identify new or under-exploited markets. It appears that the major targets for these markets are the young people. This is the consumer-media culture.

This culture is underpinned in the sweated work of the 'othered' children of the so-called 'Third World'. [W]ith the aid of various media, the commodity form has increasingly become central to the life of the young of the West, constructing their identities and relationships, their emotional and social worlds...[A]dults and schools have been negatively positioned in this matrix to the extent that youthful power and pleasure are constructed as that which happens elsewhere – away from adults and schools and mainly with the aid of commodities. (Kenway and Bullen cited by M. K. Smith & Smith, 2002)

The rise of the brand has created acceleration and a bigger focus on seeking to condition children and young people to construct their identities around brands. The exposure of the rise of the brand and consumer capitalism has entailed violations of human rights (Klein, 2000).

PNG is rich in natural resources. These natural resources are exported overseas and then imported back into the country as processed goods. Most of these natural resources are mined and controlled by multinational companies from more developed nations. Some multinational companies have established partnerships with the local communities through development projects since their operations. One such company is Ok Tedi Mining Limited in the Western province of PNG (Higgins, 2001). The investment in the local communities commenced in 1981 prior to the operation of the company in 1984. This was conducted through education and training of its employees. While some of these multinational companies have started to invest in the local communities through education and the provision of basic services, there were others who have done little to improve the quality of life in the local communities.

Papua New Guineans employed in some of these multinational companies are paid lower wages compared to their expatriate counterparts. Lower wages in developing countries reflect lower levels of education and productivity. For instance, in the two fish/tuna companies operating in Madang and Wewak, the Papua New Guineans are paid 65 toea per hour (Personal communication with PA304, 2005). These Papua New Guineans provide inexpensive labour for these companies. Most of the Papua New Guineans working in these two companies are uneducated. An educated local work force buttressed by appropriate legislation would be able to challenge such exploitative practices.

4.4.4 Globalization and educational change

Globalization has many aspects that impinge on education including economic, political, and cultural factors. All these factors are important for understanding the impact of globalization in postcolonial contexts. An important global network established during the colonial period was colonial education which was the major site for the spread of global networks in the modern and contemporary periods. Colonial education was a key strategy for the imposition and diffusion of global philosophies, ideologies and religions in postcolonial societies like PNG, especially Christianity.

Educational systems are highly influenced by both the local and international forces and pressures. While globalization offers opportunities and challenges to transform education, it also contains and reinforces contradictions and ambiguities between local and global contexts. Globalization simultaneously integrates and segregates. It integrates world cultures through

global communication networks and at the same time creates tension between those who are benefiting more and those who may be marginalized by the market values and consumer cultures that are typical of many societies, especially the developing nations (Sahlberg, 2004, p. 66).

PNG is undergoing an extensive reform of its education system. The education reform seems to be the government's response to two important global declarations about children. These are: EFA which is the right of every child to be educated (1990) and *The Convention on the Rights of the Child* (1989). As a signatory to these two documents, PNG has had to redesign its policies to align its education system to what it believes to be international practice (Department of Education, 2000b, p. 4). Consequently, a number of projects undertaken by donor funding agencies like AusAID, EU, ADB and World Bank have assisted in the implementation of the education reform (Department of Education, 2000a).

Educational change is multi-causal and therefore cannot be interpreted by identifying one factor alone (Tikly, 2004, p. 112). Globalization involves diffusion of uniform educational goals and systems. Key global players such as the UN, Aid agencies and developed nations influence contemporary education priorities and practices. While the outcomes of these education priorities and practices may be positive, the reality is that developing countries continue to struggle to cope with global changes. Therefore education reform designers need to pay closer attention to the issues facing each particular context when implementing educational change. The globalization theory is an appropriate approach to critique the educational change and its impact on the quality of education in PNG.

Summary: Globalization is the increasing interconnection of the world's societies in fluid networks. People are increasingly aware of these interconnections and are responding to them (Hickling-Hudson, 1999). The process has evolved predominantly through the development of information and communication technologies utilizing the power of computers, software, satellites, and multimedia communication. While globalization has advantages, there is also a manifestation of transfer of international capital in pursuit of world-wide profit which benefits the richer countries more than the poorer nations (M. K. Smith & Smith, 2002).

CHAPTER FIVE

DESIGN OF THE RESEARCH

The purpose of this research is to explore how educational change is being led in primary teacher education in PNG. This chapter outlines and justifies the research design adopted in this study. The following research questions focus the conduct of the study:

- 1. What is the quality of the education being experienced in the Catholic PTCs?
- 2. What are the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges?
- 3. How is the curriculum in the teachers' colleges perceived by the lecturers, students and recent graduates?
- 4. How is leadership demonstrated in the Catholic PTCs?

Having established the direction of this study, it is important to justify and explain the research design adopted in the exploration of how educational change is led in the Catholic PTCs. Recognising the study's emphasis on leadership, educational change and quality education, this design is situated within an epistemology of constructionism. This study adopted a theoretical perspective of interpretivism as well as a methodology of case study as contributing to the research design. Finally, interpretive research gathering strategies were employed to collect the data. Table 5.1 offers a framework for the four elements underpinning the research design and the subsequent text addresses each one consecutively.

Table 5.1 Theoretical framework underpinning the research design

Epistemology	Constructionism		
Theoretical Perspective	Interpretivism Symbolic Interactionism		
Research Methodology	Case Study		
Data Collection Strategies	Interviews: In-depth interviews Focus groups Documentary analysis Observation – Participant Journal writing		

5.1 Epistemology

Epistemology is the branch of philosophy that studies the nature of knowledge, its presuppositions and foundations, and its extent and validity (American Heritage Dictionary,

2000). Given that the search for meaning, reality and knowledge is central to this study, it is appropriately embedded in a constructionist epistemological paradigm. Constructionism is the "view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (Crotty, 1998a, p. 43). Constructionism is adopted because it offers a voice to the experiences and stories of the participants of this study. Furthermore, constructionism asserts that knowledge and truths are constructed and sustained through language, linguistic resources and social processes (Neuman, 2000; Papert, 1980, p. 1). Construction and the maintenance of knowledge are undertaken through negotiation with humans rather than by an examination of the world. Such a process implies that knowledge and multiple truths are constructed and reconstructed locally and historically, time after time, while building in stages (Bruffee, 1995, pp. 9, 222).

5.2 Theoretical perspective

A theoretical perspective is a heuristic to examine the world and make sense of it. This involves knowledge and embodies a certain understanding of what is entailed in knowing, that is, how we know what we know (Crotty, 1998b). The adoption of the interpretivist approach is appropriate since the emphasis is on the meanings in the actions of the actors involved; the daily life experience of individuals, and how they use such meanings to interpret and make sense of their world (Candy, 1989, p. 3; Neuman, 2000, p. 71).

The specific interpretivist approach that this study employs is symbolic interactionism. This epistemological "lens" places emphasis on the importance of meaning and interpretation as essential human processes in reaction against behaviourism and mechanical stimulus-response psychology (Merriam & Associates, 2002). "People create shared meanings through their interactions and those meanings become their reality" (Patton, 1990, p. 75). Symbolic interactionism offers a pragmatic understanding of people's perceptions, how they interpret their experiences, construct their world and attribute meaning to their experiences (Merriam & Associates, 2002, p. 38). Symbolic interaction is the process of reciprocal actions of others and the self within a given context (Charon, 2001, p. 204). Central to understanding symbolic interactionism are three principles. First, human beings do not simply respond to stimuli or act out cultural scripts. Rather, they act towards things on the basis of the meanings that the things have for them. Second, everyday activities usually consist of interactions with other people. Human beings give meaning to the activities of others as well as their own actions. Third, meanings are massaged and modified through an interpretive process adopted by the person in reaction to their experiences (H. Blumer, 1962, p. 2; Merriam & Associates, 2002, p. 38). The conclusion drawn is that interaction is an ongoing process that resides in a context and also

creates the context; therefore, context is crucial in any study (B. Blumer, 1969; H. Blumer, 1962; Charon, 2001).

5.3 Research methodology

A research methodology is an orchestrating dynamic for using data gathering strategies. For this research, a case study approach is adopted as the methodology because of the interpretive nature of the research purpose. A case study is an intensive, holistic description and analysis of a phenomenon or social unit such as an individual, group, institution, or community (Merriam, 1998, p. 34). The case study approach is useful because it can appropriately address interpretive type research questions, explore contemporary phenomenon within real-life context while acknowledging that the researcher has limited control over issues the research questions attempt to explore (Yin, 1994, p. 1). Case study has been differentiated from other research by what Cronbach calls "interpretation in context" (Cronbach cited by Merriam, 1998, p. 29).

Three particular features of interpretive case studies are particularly relevant to this study: particularistic, descriptive and heuristic (Merriam, 1998). *Particularistic* means that case studies focus on a particular phenomenon. The case itself is important for what it reveals about the phenomenon and for what it might represent. Case studies "concentrate attention on the way particular groups of people confront specific problems, taking a holistic view of the situation. They are problem centred, small scale entrepreneurial endeavours" (Shaw cited by Merriam, 1998, p. 29).

Case study is descriptive. *Descriptive* means that the end product of a case study is a rich "thick" description of the phenomenon under study. From an anthropological perspective, the term means the complete, literal description of the entity being investigated. Furthermore, case studies include as many variables as appropriate and portray their interaction over a specific period of time. The description is interpretive which means, instead of reporting findings statistically, "case studies use prose and literary techniques to describe, elicit images, and analyse situations...They present documentation of events, quotes, samples and artefacts" (Wilson cited by Merriam, 1998, p. 30).

Finally case study is heuristic. *Heuristic* means case studies illuminate the readers' understanding of the phenomenon under study. Case studies explain the background and reasons for the phenomenon under study. Furthermore, case studies discuss and evaluate alternatives not chosen. The summary and conclusion increase potential applicability (Merriam, 1998). Case study is appropriate because it is a useful strategy to explore how educational change is being led in three Catholic PTCs since "the interest is in the process rather than the outcomes, in

context rather than a specific variable, in discovery rather than confirmation" (Merriam, 1998, p. 19).

A case is a bounded, integrated system (Merriam, 1998; Stake, 1995) because it comprises the living reality, perceptions and interpretations of the participants in their contextual setting. Stake (1995, p. 237) differentiates between three different types of case study: the intrinsic, instrumental and collective. An intrinsic case study is normally conducted for its own sake to learn about this case only, with no expectation that the results will be generalized to explain similar cases. An instrumental case study is used to investigate a social issue or refine a theory with the results having a wider application beyond the study. A collective case study includes a number of single studies investigated jointly for the purpose of inquiring into an issue, phenomenon, group or condition. It normally includes several instrumental studies (Sarantakos, 2005, p. 211). Based on the descriptions provided above, this study is a collective case study involving three cases: Our Lady of the Sacred Heart (OLSHTC) Kabaleo, Holy Trinity (HTTC) Mt Hagen and St Benedict's Campus (SBC) Kaindi. These are the only three Catholic PTCs in PNG. The contemporary phenomenon under study is *Leading educational change in primary teacher education*. The researcher had no prior connection with any of these colleges.

Case 1: OLSHTC Kabaleo is situated in Kokopo in the East New Britain province. Regionally, the College is in the NGI. It was established as a ladies-only teachers' college in 1966 and remained as such until 1994. In 1995, OLSHTC became a co-educational institution.

Case 2: HTTC Mt Hagen is situated in the Highlands region. The College developed from an institution originally situated at Fatima near Banz in the Western Highlands province. In 1967 the first two-year course was offered with a total enrolment of 57 students from the dioceses of Wewak, Madang and Goroka, as well as from Mt Hagen. Since then the College has expanded its boundaries beyond these four dioceses to accept students from anywhere in PNG.

Case 3: SBC is situated in Wewak in the East Sepik province. Regionally, the College is in the Momase region of the New Guinea mainland. The College was established on the Kaindi Campus in 1969. In 2003, SBC became an amalgamated Campus of DWU.

There are limitations involved in adopting a case study approach. First, there is a danger that case studies can oversimplify or exaggerate a situation, which can lead to inaccurate conclusions (Guba & Lincoln, 1981, p. 377). In order to minimize this occurring, the researcher explores the perceptions of more than one participant in more than one setting. Second, case study at times is criticized for the inability of its findings to be generalized widely across the educational sector

(Sturnam, 1997). Consequently, the researcher addresses this issue by ensuring that adequate description is provided to contextualize the study so that readers are able to determine the extent to which the situations match the research context and hence whether findings can be transferred.

By design, this study is deliberately limited to exploring how educational change is being led in the PNG Catholic PTCs. This case study is the "bounded system"; therefore, it makes no claims to draw conclusions beyond the scope of this study (Stake, 1995).

5.4 Participants

There are 166 participants from the six major categories involved in this study. All the participants are identified purposefully because of their roles and relationships with both the formal and informal activities of these colleges.

Category 1 The participants in this category are members of the three PTCs which form the three case studies for this research. Within this category, there are four sub-groups: the College executive, Heads of Strands (HOS), academics, and students.

College executive: These participants are the Principals and Deputy Principals to be interviewed individually because of their leadership roles in the daily conduct of each of the colleges. Their visions and experiences as leaders provide valuable contributions to this study. There is total membership of seven in the College executives and all seven participated in the research.

HOS: The HOS are appointed by the College executive. HOS are selected in this study because they provide the academic leadership in the academic programs and support staff in the implementation process. Their experiences will offer valuable insights regarding the curriculum. While there is total membership of 14 in the HOS, seven participated in the research.

Other Academics: Other academic staff members are invited to participate in the focus groups. Their contributions are also important as implementers of the curriculum. While there is total membership of 15 in the five Strands, 12 focus groups participated in the research.

Students: The students and recent graduates are selected because they are the primary recipients of change processes occurring in the teachers' colleges. Their perceptions are valuable in this study. Contributions from recent graduates offer insights into the effectiveness of the current curriculum of these colleges. They provide the link between the colleges' programs and the

reality of the classroom, which is an important dimension in this study. While there is total members of 18 in the student groups, 11 focus groups participated in the research.

The participants in the four sub-groups in Category 1 are the naturally occurring groups. In the identification of the participants, the researcher is aware of Yin's description of case study methodology when he asserted that "a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries of the phenomenon and the context are not clearly evident" (Yin, 1994, p. 13). In addition, Merriam opines that "case study is one such research design that can be used to study a phenomenon systematically" (Merriam, 1988, p. 6). Consequently, the researcher chose to conduct this study in the natural environment of each of the colleges, with the College executives, staff, students and recent graduates as the naturally occurring group.

Category 2 These participants are the representatives from NDOE. These include the Deputy Secretary of NDOE, Chairperson of CHE, Director for OHE and Secretary for Teacher Education and Staff Development Division. All four participants are key stakeholders in the implementation of educational change in primary teacher education because of the positions they occupy in NDOE. They represent the National Government in their capacity as policy makers. Their perceptions are important to ascertain the process for the implementation of education policies and the monitoring system to evaluate the progress of the education reform. Their inclusion is important because they have vital connections with the colleges in terms of finance, staff development and student enrolments. Therefore, their perceptions of the leadership and educational change in primary teacher education offer unique insights.

Category 3 These participants are the representatives of PASTEP, the donor funding agency. PASTEP was an AusAID project which was the main body supporting the teacher education reforms in the national education system. Through PASTEP, the Australian Government allocated considerable aid designed to improve the quality of education in PNG. Their inclusion in the study is important to ascertain their role and influence as funding agencies in the implementation of the education reform in these colleges.

Category 4 These participants are a selected representation of the Catholic Church as the Governing Agency of the three colleges. They are chosen because the Agency has considerable influence in the appointments of the principals and staff of the colleges. The Church is in partnership with NDOE in the governance of the three colleges. The Agency has certain functions in these three colleges. In these different capacities, the bishop of the diocese is directly involved and responsible for the college in his diocese. Hence, four bishops are key

participants of this study. Their perceptions on the current educational reform are valuable to provide the spiritual formation and pastoral care for the staff and students of these PTCs.

Category 5 These participants are the three chairpersons of the Governing Council (GC) of the three colleges and the National Catholic Education Secretary (NCES) who is also a member of their GC. The GC is an important body in the decision-making and setting up of policies for the colleges. It is also the link between each college and OHE (Department of Education, 2002b). Therefore, the three chairpersons of the GC are key participants in the study because of the roles and functions they perform in the GC. The perceptions of the NCES are vital because he is the representative of the Catholic Church at the national level in bodies such as the TSC, NEB, NEC and the Churches Education Council. Furthermore, he represents the Church in negotiations with overseas donor funding agencies. His participation is important in this research.

Category 6 These are other stakeholders who are participants in the study. As illustrated in Table 5.2, they come from varied roles. What is significant about all of them is that they have some connections to the issues of educational change and leadership in teacher education. Their perceptions of the PTCs are important, because these perceptions concern employment, organisational culture building, ethics and societal attitudes towards the graduates of the colleges. These perceptions add to the scope of this study.

The participants received a letter of invitation to voluntarily participate in the study which they had to sign before the interviews commenced. The invitation explained the purpose of the research, background information, and the flexibility of the researcher to accommodate other needs. Each participant was coded with a pseudonym in order to ensure complete anonymity. Mindful of time constraints, focus group interviews were of one and a half hours maximum duration with nine as the maximum group number and with participants self-selecting. Table 5.2 provides an overview of the research participants.

Table 5.2 Research participants

Categories of participants	Individual Interviews	Focus Groups No. of groups	No. of persons	Total
Principals	3	0	0	3
Deputy principals	4	0	0	4
Heads of Strands	7	0	0	7
Academics	11	12	44	55
Students	0	11	66	66
Recent Graduates	5	1	4	9
PASTEP	1	0	0	1
NDOE Personnel	4	0	0	4
Catholic Agency Personnel	8	0	0	8
Other stakeholders Senior primary school teachers / inspector CRIP team leader / DEPI coordinator - NDOE Academics from a state teachers' college Ex- principals	2 1 1 1 2 2	0	0	9
Total	52	24	114	166

5.5 Data collection strategies

Consistent with the theoretical framework of this research, a variety of data gathering strategies is employed: in-depth interviews, documentary analysis, focus groups, and observations are the primary strategies to gather data (Bassey, 1999; Marshall & Rossman, 1995). In order to address the research questions, these techniques depend on three conditions: first, to elicit data needed to gain understanding of the phenomenon in question; second, to contribute different perspectives on the issues; and third, to make effective use of the time available for data-collection (Glesne, 1999, p. 31).

5.5.1 In-depth interviewing

In-depth interviewing is described as "a conversation with a purpose" (Kahn & Cannell, cited by Marshall & Rossman, 1995, p. 80). Interviewing is necessary when behaviour, feelings, or how people interpret their world is not able to be observed adequately. Moreover, interviewing is necessary when the researcher is interested in events that are impossible to replicate (Merriam, 1998). Patton (1990) explains:

We interview people to find out from them those things we cannot directly observe... We cannot observe feelings, thoughts, and intentions. We cannot observe behaviors that took place at some previous point in time. We cannot observe situations that preclude the presence of an observer. We cannot observe how people have organized the world and the meanings they attach to what goes on in the world. We have to ask people questions about those things. The purpose of interviewing then is to allow us to enter into the other person's perspective. (p. 196)

In-depth interviews are conducted with selected key participants (Table 5.2). Through the use of the interviews, the researcher explores the participants' perceptions, understandings and experiences of their world (Marshall & Rossman, 1995). Some of the same open-ended questions are asked of all participants, and some time is spent in an unstructured mode so that fresh insights and new information can emerge (Merriam, 1998). The following interview schedule offers the researcher an opportunity to "explore, probe and ask questions that elucidated and illuminated that particular subject" (Patton, 1990, p. 283).

Table 5.3 Interview schedule

- Professional details
- Perceptions and personal experience of the quality of education in PNG and specifically in the college
- Support required for teacher educators and students
- Strategies used to foster positive teaching and learning environments
- The nature and effects of change in the curriculum
- The nature and impact of PASTEP innovations
- The demonstration of leadership and its impact in the college
- Support provided by the leadership for staff and students during the process of change

The interviews are tape-recorded (Yin, 1994, p. 86), transcribed and then analysed. All the interviews are conducted in English; however, allowances are made for participants who feel more comfortable in expressing themselves in *Tok Pisin*. As the researcher is a fluent speaker of *Tok Pisin* and English, the *Tok Pisin* interviews are later translated into English. Figure 5.1 documents an extract of an interview transcript.

In-depth interview with PP301

- Q: There are a number of shifts that you have made within the last five months. Would you like to talk a bit about the experiences?
- R: It's challenging work, in the sense that I am being forced to work in the premise where it is not my comfort zone . I am being challenged to re-look at where my own background is and look at education in its entirety (Q). Not just look at a secondary component of a program but look at the inclusiveness of a whole program that is what it is compelled me to look into it (Q) & (C).
- Q: How are you doing that when this place does not even look at the secondary?
- R: I am still conscious of the education reform. The secondary in those years when I was raised and when I continued teaching and preparing students for, has always included grades 7 and 8 (C). And that has become a segment of the primary program and I am conscious of aspects at that level. But I still have that in mind. My background and experience remain with me (E). So when I work here, I work in primary but I am trying to force myself into thinking not in isolated bits but to look at education as a whole (E) & (Q). I am now focused on the primary component but a preparation in anticipation of what's going to come up at the secondary level. So, academic yes, I am looking specifically at an academic program belonging to a segment primary, but I don't think it's actually viable to only look just the primary education program in isolation (Q) & (C). You've got to look at the entire program (L).

Figure 5.1 In-depth interview illustrating coding in Table 5.4

5.5.2 Documentary analysis

The analysis of documents is another technique of data collection adopted for this study. There are three major types of documents available for analysis: "public records, personal documents and physical material" (Merriam, 1998, p. 113). In this study, the researcher uses public records. Public records are "the ongoing, continuing records of a society" (Webb et al, cited by Merriam, 1998).

The documents involve records of the important events, policies, innovations, successes and failures and decisions made in the life of the institution. Such documentations include meeting minutes of the GC, staff meetings and student discipline meetings, students' files and any other documents relevant to the research purposes. Since this study focuses on how educational change is being led in primary teacher education in PNG, it is particularly important to seek out the "paper trail" for what it reveals about the teachers' college programs – events that cannot be observed and those that have taken place before the research began. They are able to reveal goals or decisions that are initially unknown to the researcher (Marshall & Rossman, 1995, p. 85). The paper trail includes "all routine records on clients, all correspondence from and to program staff, financial and budget records, organizational rules, regulations, memoranda, charts, and any other official or unofficial documents generated by or for the program" (Patton, 1990, p. 233). Such documents are a "ready-made source of data easily accessible to the imaginative and resourceful researcher" (Merriam, 1998, p. 112).

The analysis of such documents not only provides valuable information about the program itself, but it also stimulates thinking, "about important questions to pursue through more direct observations and interviewing" (Patton, 1990, p. 233). To ensure confidentiality, authorization is sought from the administration of each college before access is made to any official college documents. However, the researcher is also aware of some of the limitations of documentary analyses. Patton (1990) warns that:

Documentary analyses are subject to a variety of measurement errors. They may be incomplete and inaccurate. They may be selective in that only certain aspects of a program (that is, positive aspects) are documented. Files and records are often highly variable in quality, with great detail in some cases and virtually nothing for other programmatic components. (p. 245)

This is why the researcher needs more than one source of data collection for the process of data triangulation. In this study, the researcher collects as much data as possible through interviews, observations and analyses of organizational documents and records that are available.

5.5.3 Focus groups

A focus group is defined as a "group comprising individuals with certain characteristics who focus discussions on a given topic or issue" (Anderson, 1990, p. 241). The objective of focus group interviews is to collect quality data in a natural setting (Patton, 1990). Focus groups are comprised of staff members in their respective strands, while students are grouped in their year levels. The choice of the focus groups is consistent with "their expertise and social attributes" (Sarantakos, 2005, p. 196). Furthermore, focus groups not only disclose what is important to individual respondents but also provide a situation where the synergy of the group adds to the depth and insight of the themes (Anderson, 1990). Focus groups are appropriate in isolating and refining issues identified from other data gathering strategies and discovering new insights which invite unpacking in other stages of the data collection. Focus group interviews are best arranged with between three and twelve participants (Creswell, 1998; Marshall & Rossman, 1995, p. 84).

However, there are strengths and weaknesses in this data gathering strategy. The strengths are:

- Minimum disruption to the work of participants;
- Supporting the flow of varied opinion;
- Highly efficient data collection strategy (Anderson, 1990);
- Typically enjoyed by participants (Marshall & Rossman, 1995, p. 84);

• Typically tempering the extreme views within the group (Marshall & Rossman, 1995; Patton, 1990).

The weaknesses include:

- Insufficient time to ask many questions;
- Requirement for a skilled interviewer to control and direct the group (Anderson, 1990; Creswell, 1998, p. 124; Marshall & Rossman, 1995);
- Difficulties with keeping discussion on track;
- Recording of data can be problematic (Sarantakos, 2005, p. 198).

Conscious of these benefits and limitations, the researcher adopts the use of focus group interviews to clarify issues and elicit new insights, which are explored further through other data gathering strategies. The data gathered from the focus groups provides a balanced view of the research problem that this study is pursuing. The focus groups provide a good cross-section of the college population which contributes in triangulation of data. Figure 5.2 documents a partial transcript of a focus group interview.

Focus group PS102 N=8, 2 male expatriates, 6 PNG - 3 females and 3 males

- Q: What are your perceptions of the three year diploma program?
- R: The program was organized in semesters and each semester was 20 weeks long. The content was spread out and there was adequate time to prepare the students for teaching in the methodology units.
- Q: What are some of the challenges you have had to face in the current two year diploma program? R: Timing the trimester is 12 weeks and so staff are under pressure to complete work within the trimester. New courses are introduced that are 3 credit point courses 3 hours and no electives. The "symbolic value of trimester is pushed through and the atmosphere of care is not there". Overcrowding is a problem and the lecture rooms are too crowded. The hall has been partitioned into four lecture rooms but this is not conducive to quality teaching and learning. There is no Curriculum Review Committee in this college.
- Q: What are your perceptions of the current curriculum?
- R: The trimester is short. There are 5 courses with 3 credit points. With so many students we just teach. It is really "quantity not quality" that we seem to be promoting. The assessments are given but the validity of the types of assessment tasks is also questionable. This is because lecturers give assessable tasks that they can mark quickly to meet deadlines. Some students are left behind but we keep going. There are too many fails and then instructions are given by the deputy principal academic for supplementary work to be given to students. Even if we want to conduct diagnostic tests, there is simply not enough time for this.
- Q: Are you implementing the reform curriculum here at the college?
- R: There have been workshops conducted on the Reform Curriculum known as the Outcomes based curriculum. Our HOS was involved in some of the workshops but nothing much is happening here at the college.

Figure 5.2 A Focus group interview

5.5.4 Participant observation

Participant observation is a "special mode of observation in which you are not merely a passive observer" (Yin, 1994, p. 87). Observation necessitates the "systematic noting and recording of events, behaviours, and artefacts in the social setting chosen for the study" (Marshall & Rossman, 1995, p. 79). In case study research, the value of being a participant observer is that one is more likely to enter the informal reality, by being a temporary member of the setting (Marshall & Rossman, 1995). Consequently, an appropriate approach is to walk into a setting with eyes and ears open (Gillham, 2000). This calls for a sense of respect on the part of the researcher for the participants and the setting (Bassey, 1999). Furthermore, it implies that:

You can only find out by spending time with people in their setting. In a sense, each location has its own culture: the conventions by which it works. It also has its own values and 'language' – ways of judging and thinking and talking about the living experience. It takes time to penetrate that. (Gillham, 2000, p. 28)

Consistent with Gillham's (2000) assertions, the researcher spent the first week of the data collection period in each site taking time to familiarize herself with the routine of the college, the environment and the participants, observe the movements of the staff and students and becoming acquainted with people.

Observation plays a key role also during the in-depth interviews, as the researcher notes body language and its effect in addition to the person's words (Marshall & Rossman, 1995, p. 80). The observation method is helpful in this study because Papua New Guineans are highly communicative by using gesticulations and other bodily signs. As a Papua New Guinean, the researcher is conscious of this and therefore utilizes this method to elicit the unspoken messages being communicated via the gestures.

However, there are limitations to participant observation of which the researcher is conscious. These include the possibility that she may "affect the situation being observed in unknown ways;...participants may behave in some atypical manner when they know they are being observed" (Patton, 1990, p. 244). Hence, the data may be distorted. In order to minimize these limitations, the researcher spends an average of four weeks in each college, gradually developing a relationship of trust with participants in order to minimise being a "disturbing element" in the natural setting (Malinowski, 1961, p. 8). This behaviour is consistent with the verification procedure of "adequate engagement in data collection" (Merriam & Associates, 2002, p. 31). Observations are also limited in focusing only on external behaviours. Furthermore, observational data are often constrained by the limited sample of program activities actually observed (Patton, 1990).

Field notes are taken, during participation observations, to record descriptions of participants' interactions. They are also taken at informal conversational interviews. These field notes serve to support the observations to understand the quality of information gained in the interactions. Whenever possible, the field notes are developed into full descriptions during or soon after the observations. Field notes assist in the beginning analysis of each situation (Merriam, 1998). Some issues identified in the observations are further explored in the interviews. This is consistent with symbolic interactionism, where meaning is subject to negotiation that may lead to new interpretations of meaning, perhaps resulting in change (Bodgan & Biklen, 1992). Figure 5.3 provides an example of observation notes made by the researcher during one period of observation.

The Student discipline meeting is scheduled for 9.00am, but we commence at 9.45am. My purpose of attending this meeting is to see the process used by this committee to make decisions regarding the students' discipline. When the meeting commences I observe that there is no female representative in this meeting. When apologies for the meeting are recorded, there is no apology from any female representative. If there are reasons, this is not stated clearly in the apologies. The room is neatly laid out for the meeting; a nice clean room except it is not sound proof. There is just far too much disturbance from the workers outside as well as the staff wanting to see the principal.

Prior to the commencement of the meeting, members are furnished with all the cases to be presented in the order that they are to be presented. With the statements of the students facing the Committee, we are also given the Code of Conduct handbook of the college. This is good because we have time to familiarize ourselves with each of the disciplinary cases to be discussed in the meeting before its commencement. Such a process is adopted for each case. Each case is discussed individually by the committee.

- 1. Prior to the students coming in for interrogation, there are discussions on the case by the members of the committee.
- 2. Then the students concerned are called in to deny or admit to the statements presented to the Committee. After having either denied or admitted to the wrong doing, they are again sent out.
- 3. The committee continues their deliberations taking into account the student's previous records, the witnesses and their previous school records etc. Then the committee consults the regulations in the Code of Conduct handbook (2000) to hand down its decisions. Then the committee votes on the decision regarding the penalty to be given to the student.
- 4. After the committee has voted on the decision, the students are called in and served their sentence. The chairman explains the ramifications of the charge handed down and explains the procedure for appeals if the students want to appeal against the decision. The students are given a chance to speak and then they leave the room.

There are five cases heard. The majority of the discipline cases are committed by female students. The students appear troubled, emotional and silent throughout the entire proceedings. However, there is no female representative present in this important committee for these students. The meeting concludes at 4.30pm.

Figure 5.3 Participant observation notes on a SDC meeting

5.5.5 Reflective journal

Throughout the duration of the study, a personal journal is maintained daily and chronologically. Its purpose is to provide for personal reflection on the progress of the study and the processes used during the study which supplies the "audit trail" (Merriam & Associates, 2002) as the complicated data are collected. The importance of a journal is further emphasized by Strauss and Corbin (1998): "Keeping a journal of the research experience is a useful way in which to keep track of what one is thinking during data gathering and analysis" (1998, p. 99). Figure 5.4 provides an example of the journal entries.

I found the SDC meeting to be very long and boring. However, the process reflected the seriousness of the college in trying to deal with discipline cases. At the same time I questioned how an all male-dominated committee could objectively rule on all discipline cases. I was sad that in such a meeting where the majority of the students who went before the SDC meeting were female, there was not a single female representative in the meeting except myself as an observer. Why wasn't there a female representative on this committee? This was an inconsistency that I felt disadvantaged the female students. I wondered how they felt being questioned by men. These students needed to be adequately represented when facing the SDC. Even though the committee appears to be just in its delivery of the cases, it lacks equity in terms of gender participation. This is an area that I will need to follow up with the college administration in my next interview. I will also follow up this issue with the female staff and the students.

Figure 5.4 Reflective journaling

5.6 Analysis of data

To achieve the purpose of developing ways to interpret the subjective meaning behind the substantive data, an approach to data analysis has been developed. The reason being that "analysing case study evidence is especially difficult because the strategies and techniques have not been well defined" (Sarantakos, 2005; Yin, 2003, p. 109). "Data analysis is a complex process that involves moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and interpretation" (Merriam, 1998, p. 178). Analysis begins with the first interview and observation, which leads to the next interview or observation, followed by more analysis, more interviews or fieldwork (Merriam, 1998; Strauss & Corbin, 1998). Data analysis done simultaneously with data collection enables the researcher to focus and shape the study as it proceeds (Glesne & Peshkin, 1992, p. 127). Additionally, analysis of data encourages order, structure and meaning to the data collected (Marshall & Rossman, 1989, pp. 112-114). Hence, there is a constant interplay between the researcher and the research act, since the analysis begins to drive the data collection. Data collection, analysis and interpretation occur simultaneously and interactively in order to make sense of the information gathered as illustrated in Figure 5.5 (Creswell, 2002, pp. 257-258; Tesch, 1990, p. 138). This process is an example of the constant comparative method of data analysis (Glaser & Strauss, 1967). Eliciting meaning and forming conclusion from the data collected require an appropriate method of analysis. Such an interactive process is employed in the analysis of the data to bring order and meaning into the volume of data collected.

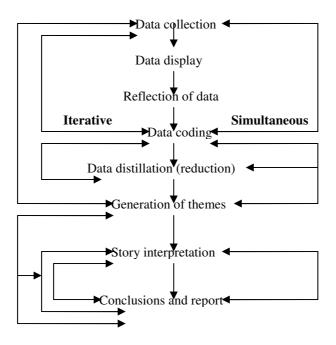


Figure 5.5 Interactive process of data analysis

Process of analysis: The researcher adopts a three-step iterative approach to interpretation (Neuman, 2006, p. 160). The first step, a "first order" interpretation, involves learning about the research problem from the meaning ascribed by the participants of the research study. This leads to the categorisation of the initial data found in the responses of the participants. The "second-order" interpretation involves the researcher looking for "underlying coherence or sense of meaning" in the individual interviews and the focus group interview data. This is expressed in codification of the data. The third step, the "third-order" interpretation, involves the researcher in assigning the "general theoretical significance" of the research findings and in expressing this is a series of assertions. Figure 5.6 diagrammatically represents the stages of analysis.

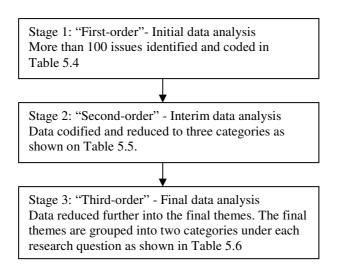


Figure 5.6 Stages of analysis

Stage 1: "First-order" interpretation: In order to bring order into the data overload, the initial stage of the analysis process begins with the data being coded (Glesne & Peshkin, 1992, p. 127). Codes are labels/tags for assigning units of meaning to the descriptive or inferential information during the study. Codes are usually attached to "chunks" of varying sizes – words, phrases, sentences, or whole paragraphs, related or independent to a specific setting (Miles & Huberman, 1994, p. 56). In the initial stage the following codes are used. These codes emerge from the initial analysis. These codes assist in providing order to the on-going process of data collection (Marshall & Rossman, 1989, pp. 112-114).

Table 5.4 "First-order" interpretation

Codes: AG = Agency, C = Curriculum, E = Educational change, L = Leadership, Q = Quality

AG - Agency	AG - Agency - CRE teaching	AG - Agency - expectations
AG - Agency - philosophy	AG - Agency - responsibilities	AG - CHE functions
AG - Expectations - community	AG - Expectations - culture	AG - Expectations - parents
AG - Expectations -	AG - Expectations - students	AG - N - Disagreements -
staff/teachers		church and state
AG - N - Discrepancies	AG - NDOE - decisions	AG - NDOE - policy
AG - Partnership - Church &	AG - State - responsibilities	C - CRIP
State		
C - CRIP - PTC	C - CRIP - workshops	C - Curriculum - general
C - Curriculum - Old	C - Curriculum - Reform	C - Curriculum - Resources
C - Innovations - CRIP	C - Student - fear	C - Student - Practicum
C - College ethos/culture	E - 3 year dip program	E - Affiliations with
		universities
E - Affiliation - reservation	E - Education Reform	E - Funding - Donor agencies
E - Innovations - Affiliation with	E - Innovations - DEPI	E - Innovations - General
DWU		
E - Innovations - Pastep	E - Innovations - Pres diploma	E - Innovations - Special
		Education
E - N - Lack of planning and	E - N - Refusal to share	E - N - Resistance to change

monitoring	knowledge	
E - N - Student - frustrations	E - Pastep - contractors	E - Pastep - Curriculum
	1	materials
E - Pastep - funding	E - Pastep - infrastructure	E - Pastep - leadership
E - Pastep - Learning centres	E - Pastep - personnel	E - Pastep - quality
E - Pastep - resources	E - Pastep - workshops/in-	E - Special education -
	services	achievements
E - Special education -	E - Special education - cultural	E - Special education -
challenges	habits	disabilities
E - Special education - history	E - Special education – in-	E - Special education -
	service	leadership
E - Special education - NDOE	E - Special education - PTC	E - Special education -
		resource centres
E - Special education - staff	Finance	L - Governance - Governing
		Council
L - Leadership - academic	L - Leadership -	L - Leadership - challenges
	administration	
L - Leadership - communication	L - Leadership - culture	L - Leadership - curriculum
L - Leadership - decision making	L - Leadership - experiences	L - Leadership - Frustrations
L - Leadership - gender equity	L - Leadership - knowledge	L - Leadership - Liability
	and qualifications	
L - Leadership - qualities	L - Leadership - relationship	L - Leadership - student
L - Leadership - teacher	L - Leadership - vision &	L - N - Lack of consultation
	aspirations	
L - N - Lack of leadership	L - Students' perceptions of	Ownership
	leadership	
Policy - CHE	Policy - OHE	Politics
Q - Critical thinkers	Q - Educational background	Q - Facilities
Q - Mismatch - college & school	Q - N - Lack of commitment	Q - N - Lack of funding
Q - N - Lack of gender equity	Q - N - Lack of proper	Q - N - Lack of resources
	inventory	
Q - N - Poor quality of education	Q - N - Teacher wastage	Q - Poor workmanship
Q - Quality - assessments	Q - Quality - Consultation	Q - Quality - decision-making
		processes
Q - Quality - delivery	Q - Quality - leadership	Q - Quality - maintenance
Q - Quality - ongoing support	Q - Quality - overcrowding	Q - Quality - partnerships
Q - Quality - programs	Q - Quality - recent graduates	Q - Quality - Relationships
Q - Quality - resources	Q - Quality - schooling in the	Q - Quality - staff
O Quality stoff amointment	community ctudents	O Quality Symanyisian
Q - Quality - staff appointments	Q - Quality - students	Q - Quality - Supervision
Q - Quality - teacher education	Q - Quality - teachers	Q - Quality - teaching &
Q - Quality - training &	O Quality advection	learning O Specialization subjects
professional development	Q - Quality education	Q - Specialization - subjects
Q - Strength of	Q - Students' perceptions of	Q - Students - DEPI
Strand/department	staff/lecturers	Q - Students - DEFI
Q - Students - literacy &	Q - Teachers' conditions	Q - UOG - Masters Degree
numeracy skills	Q - Teachers conditions	_ `
Research findings	Security	program Self-reliance
Signing contracts	Staff - frustrations	Statistics
Signing contracts	Statt - It usu autilis	Statistics

Stage 2: "Second-order" interpretation: After the initial coding, over a hundred themes are identified. These themes need increased analysis to be reduced and consequently useful. When this happens, Strauss & Corbin (1998) suggest that the researcher follows a process called "microanalysis". This "form of analysis uses the procedures of comparative analysis, the asking

of questions, and makes use of the analytical tools to break the data apart and dig beneath the surface" (1998, p. 109). The data are reduced and made useful by the generation of three thematic questions. They are:

- 1. What is consistent with all three colleges?
- 2. What is consistent with only two colleges?
- 3. What is unique to one college?

Using these questions as data silos, the findings for the research become clearer. Table 5.5 illustrates the product of this process.

Table 5.5 "Second-order" interpretation

P 10	G 1 1 1 1 1 1	G 11 11 1	**
Research Questions	Consistent with all three	Consistent with only	Unique to one
	colleges	two colleges	college
DOI WILL I	TT 1: C 1 :	D 1 1 1:	
RQ1: What is the	Upgrading of academic	Poor leadership	Amalgamation to
quality of education	staff qualifications,	(OLSHTC & HTTC),	DWU (SBC), high
being experienced in	student entry	Poor literacy level of	staff turnover
the Catholic PTCs?	requirements into the	students (OLSHTC &	(SBC) poor record
	colleges, access to	SBC)	keeping of files
	information technology,		from previous
	inadequate funding, lack		administration
	of resources, poor record		(SBC), Over-
	keeping of college files,		enrolment of
	poor academic leadership		students
			(OLSHTC);
			Infrastructure
			development
			funded by EU
			(OLSHTC), Lack
			of strategic
			planning of college
			expansion program
			(OLSHTC),
			affiliation with
			DWU stalled
			(HTTC).
RQ2: What are the	Educational resource	Catholic Agency's poor	EU infrastructure
lecturers', students'	development, construction	perception of PASTEP	development
and recent graduates'	and refurbishment of	(SBC & HTTC), Poor	(OLSHTC),
perceptions of the	college facilities, Staff	workmanship, lack of	Information and
recent PASTEP	mentoring and	consultation with	communication
innovations occurring	professional development,	agency and college	centre (HTTC),
in the teachers'	Care for the infrastructure	administration.	Denial of
colleges?	and resources provided by	aummistration.	Information and
coneges:	PASTEP; students' and		communication
			* * * * * * * * * * * * * * * * * * * *
	recent graduates' lack of		centre (SBC),
	knowledge about		Gender equity and
	PASTEP, College		special education
	layout/landscape.		(SBC), lack of
			appreciation for
			PASTEP's
			refurbishment

			program (SBC).
			program (SBC).
RQ3: How is the curriculum in the teachers' colleges perceived by the lecturers, students and recent graduates?	The two-year trimester program – course duration is short, content shallow, no time for reflective practice in teaching and learning, lack of resources, College practicum is suffering under the trimester system, quality of college assessments are affected by time constraints and resources.	Special education program (SBC & HTTC), Lack support from education authorities – provincial and national, DEPI conducted (HTTC & OLSHTC), course duration too short, infrastructure and resources especially in the library are dated, Staffing problems to teach DEPI.	No special education program (OLSHTC), over-enrolment affect the teaching of the curriculum and the infrastructure and resources for teaching and in the library (OLSHTC).
RQ4: How is the leadership demonstrated by the leadership in the Catholic PTCs?	Leadership structure is uniform according to NDOE, Lack of competent academic leadership, Leadership roles of GC are in place.	Leadership at the administrative level is inadequate and poor, (SBC & HTTC), college administrations do not always follow instructions. Impact of leadership on the staff and students - not always positive (OLSHTC & HTTC).	Leadership at the administrative level is competent (SBC), Leadership of GC works closely with college leadership (SBC), care for staff and students is positive (SBC).

Using the three codes generates reduction and order to the extensive data and helps the researcher identify the final themes which are listed in Table 5.6.

Stage 3: "Third-order" Interpretation: In the final analysis stage, the codes are simplified further into basically two categories for each research question.

Table 5.6 "Third-order" interpretation

Research questions	Themes/issues/ideas		
1. What is the quality	1. Issues that promoted quality education		
of education being experienced in the Catholic PTCs?	Staff qualifications and student entry requirements; access to information and communication technology; quality assurance policies, quality of recent graduates.		
	2. Issues that mitigated quality education		
	Lack of resources; inadequate funding; lack of strategic planning; high staff turnover; poor literacy level of students; over-enrolments of students, uncritical transfer of knowledge and skills.		
2. What are the	1. Positive contributions		
lecturers', students'	Construction and refurbishment of college facilities; information, technology		
and recent graduates'	and communication centre; staff professional development programs;		
perceptions of the	curriculum resource development.		
recent PASTEP			
innovations occurring			

in the teachers'	2. Negative Aspects		
colleges?	Lack of consultation with the Agency; poor workmanship; lack of ownership		
coneges:	and sustainability.		
2.11	,		
3. How is the	1. Advantages/Enabling factors		
curriculum in the	Changes implemented: trimester program; DEPI program; special education;		
teachers' colleges	college practicum and assessments need attention; outcomes-base education;		
perceived by the	three-year diploma program preferred.		
lecturers, students	2. Disadvantages/Disabling factors		
and recent graduates?	Lack of subject content knowledge, poor strategies, lack of resources; short		
	course duration; lack in-depth content.		
4. How is the	1. Competent leadership		
leadership	Leadership structure maintained according to NDOE; integration of		
demonstrated in the	Melanesian values within decision-making processes, collaborative		
Catholic PTCs?	partnerships, transformational leadership, role of GC in college; emerging		
	positive signs of competent leadership.		
	2. Incompetent leadership		
	Criticism of leadership: quality of leadership is poor and irrelevant; lack of		
	vision; authoritarian, indecisive, inadequate leadership training.		

5.7 Verification

The concepts of validity and reliability are fundamental concepts in surveys and experiments but problematic in case study research (Bassey, 1999; Creswell, 2002). As an alternative to reliability and validity, the concept of trustworthiness is more appropriate in naturalistic inquiry (Lincoln & Guba, 1985). There are eight verification procedures often used in interpretive research (Creswell, 1994; Glesne, 1999; Lincoln & Guba, 1985). These include: researcher's position or reflexivity, triangulation, adequate engagement in data collection, audit trail, member checks, rich, thick descriptions, peer review/examination, and maximum variation (Merriam & Associates, 2002, p. 31). Six out of the eight verification procedures are adopted as processes of verification. They are:

Researcher's position/reflexivity: The researcher is conscious of her position as a researcher and teacher educator which can affect the research findings. In contrast, the context and the research participants are from a primary teacher education background and so the use of multiple data collection techniques is one way to minimize this issue in the interpretation of the data (Merriam, 1998). Keeping a journal is another way of dealing with such a dilemma. The journal contains the researcher's personal reflections of the process used during the data collection.

Triangulation is a form of cross validation by collecting different data types utilizing different methods. Consistent with this principle for validity purposes, the researcher collects different types of data from a wide range of participants employing a variety of methods for data collection as outlined in Section 5.5. This is to ensure that the results make sense – consistent and dependable (Merriam & Associates, 2002, p. 27).

Adequate engagement in data collection: This study is conducted over a six-month period on three different sites in PNG. It is important that the researcher spends adequate time in each site to develop a relationship of trust between the participants and herself during the data collection process. Such a relationship assists her in collecting data which results in the data becoming "saturated". At that stage she sifts through the data identifying the *negative cases* of the phenomenon under study.

Audit trail: As a strategy to ensure that the data collection process does not deviate from its original research question, a detailed account of the methods, procedures, and decision points in carrying out the study is maintained and regularly checked by the researcher. She maintains this by keeping a research journal throughout the conduct of the research study.

Member check: Themes and conclusions may be checked by other data sources. It is the researcher's intention to utilize this technique in the design of the research to ensure consistency and dependability in the data collected. Member checks are used to ask participants to comment on the themes that the researcher has identified from the interviews and other data sources and where concepts are not clear to the researcher. There are different ways that she employs to check this. In the first and second cases, the researcher asks a selected number of staff to comment on the themes that she has identified in their colleges and the response is affirming. In the third, she has three different meetings with the participants – the College executive, staff, and students to share the themes that she has identified. The responses from all the groups confirm the themes.

Rich, thick descriptions: In adopting a case study approach, the researcher is conscious that there are three cases to explore and therefore she needs to spend adequate time on each site. This is to ensure that sufficient description is provided to contextualize the study, so that readers are able to determine the extent to which their situation matches the research context or whether findings can be transferred. The data collected from all the sites are rich thick descriptions from all the participants of the study.

For the purpose of this study, symbolic interactionism derived from the epistemology of constructionism is adopted. Within constructionism, multiple perspectives are entertained. The interpretations of the researcher may exist only in her reality. Conscious of this limitation, the analysis of the data, with inbuilt checks for trustworthiness, ensures that the perspective so constructed is indeed supported by the rich and thick descriptions to lead the researcher and the reader to the same conclusion.

While there is no simple answer about what makes a "good" interpretive study, there is a general agreement among researchers and consumers alike that, for a study to be trustworthy, a "study needs to be valid and reliable and conducted in an ethical manner" (Merriam & Associates, 2002, p. 30). The question of trustworthiness has to do with concepts of validity and reliability; therefore the strategies adopted for this study safeguard the quality of the study.

5.8 Ethical issues

This research is conducted in accordance with the policies of the Australian Catholic University (ACU) Research Project Ethics Committee (Appendix A). Prior to the data gathering process, the relevant offices in PNG are informed in writing about the study, its purpose and significance. Since the study is conducted in the Catholic PTCs, permission is sought in writing, not only from the principals of the colleges, but also from the Dean of the Education Faculty of DWU (Appendix B). This is because of the current developments of the colleges' affiliation and amalgamation processes with DWU.

There are three ethical principles that underpin this research (Bassey, 1999, p. 74). The first is respect for democracy, whereby researchers in any democratic society can expect a certain freedom to investigate, give and receive information, and express their ideas. The second is respect for truth – truth in data collection as well as in the reporting of the findings. The third is respect for persons, which means recognizing the participants' initial ownership of the data. Throughout the data gathering process, the participants' dignity and privacy are respected. Hence each participant is coded with a pseudonym for anonymity. Ethical issues are adhered to at all stages of the research process, and measures are taken to guarantee that the participants are not affected in any way by the publication of the findings (Sarantakos, 1998; 2005, p. 18).

5.9 Limitations and delimitations

In any study, limitations and delimitations must be considered throughout the study. Limitations are research issues that are beyond the researcher's control, while delimitations are those within the researcher's control.

The study is limited to the three Catholic PTCs out of a total of seven colleges in PNG. This limitation is based on religion. However, this study provides a thick, rich description of an exploration of leadership and educational change in primary teacher education which can be useful for other teachers' colleges. Any insights need to be filtered through the readers' own constructed realities of their colleges.

The researcher is conscious of her possible bias as a researcher and teacher educator which may affect the research findings. While she brings with her the background and experiences of secondary teacher education, the context and the research participants are from a primary teacher education background, and so the use of the verification procedures (Merriam & Associates, 2002) and multiple data collection techniques are adopted to minimize any risk of the researcher's bias in misinterpreting the data (Merriam, 1998).

Delimitations considered are the time factor and financial constraints. PNG has some of the highest costs in air travel in the world and so these factors are essential and crucial in how this study is conducted. Hence, the researcher gathers as much data as she is able to within her time frame and, furthermore, gives serious consideration to the budget allocation. This is to ensure efficient planning prior to the data gathering process.

The location of each site needs to be taken into account. While the number is manageable, the fact that each of the three colleges is situated in a different region of PNG poses the problem of free accessibility for re-visitation for the purpose of revalidating the data or "member checks" (Merriam, 1998, p. 204) or "member checking" (Stake, 1995). While this is important for case study research, distance is a major limitation for the researcher to consider. Therefore it is important that the researcher considers all the possible limitations and delimitations in the planning stage prior to undertaking fieldwork, to try to minimize the obstacles she may encounter in carrying out her field work.

While forward planning is in place, the researcher encounters a variety of problems in each of the three sites. There are problems encountered in the organization of the programs of each college; the unavailability of staff; and cancellation of scheduled events. These problems are beyond her control but she is able to adapt to each situation and still gather sufficient data to fulfil the requirements of the study.

5.10 Overview of research design

The research design is developed from an interpretivist position incorporating the research orientation to symbolic interactionism. Symbolic interactionism is adopted to facilitate the exploration of how educational change is being led in primary teacher education in PNG. A case study approach is adopted to allow the study to focus on the three Catholic PTCs. The gathering and analysis of data proceed simultaneously, both iterative and interactive. Table 5.7 provides an overview of the research design.

Table 5.7 Overview of the research design

Research Question	Data Gathering	Participants	Timeline
	Strategy		
	-		T. 1. 2004
1 3371	Interviews	Researcher	July 2004 to
1. What is the quality of education being	Focus groups	Leadership teams	March 2005
experienced in the Catholic primary	Documentary	Lecturers Students	
teachers' colleges?	analysis Observation	Recent graduates	
	Observation	NDOE reps	
		PASTEP reps	
		Church reps	
	Interviews	Researcher	July 2004 to
2. What are the lecturers', students' and	Focus groups	Leadership teams	March 2005
recent graduates' perceptions of the	Participant	Lecturers	
recent PASTEP innovations occurring in	observation	Students	
the teachers' colleges?	Documentary	Recent graduates	
	analysis	NDOE reps	
		PASTEP	
		Church reps	
	Interviews	Researcher	July 2004 to
3. How is the curriculum in the teachers'	Focus groups	Students	March 2005
colleges perceived by the lecturers,	Participant	Recent graduates	
students and recent graduates?	observation	Lecturers	
	Documentary	Leadership teams	
	analysis	PASTEP	
4. How is leadership demonstrated in the	Interviews	Researcher	July 2004 to
Catholic primary teachers' colleges?	Focus groups	Leadership teams	March 2005
Cathone primary teachers coneges:	Participant	Lecturers	14141011 2003
	observation	Students	
	Documentary	Recent graduates	
	analysis	PASTEP	
		Church reps	

CHAPTER SIX

CASE STUDY 1: OLSHTC KABALEO

Our Lady of the Sacred Heart Teachers' College (OLSHTC) Kabaleo is situated in Kokopo in the East New Britain province. Kabaleo was established in 1966 as a female teachers' college. The founder of the teachers' college was Mother Athanasius Duffy a member of the Congregation of the Sisters of Our Lady of the Sacred Heart (OLSH). The first principal was Sr Rose Gladman from the same religious congregation. The initial purpose of this teacher training college at Vunapope was to provide teachers for the under-staffed Catholic schools on the outstations of the Archdiocese of Rabaul. From 1966, OLSHTC Kabaleo continued to provide women with teacher education until 1994. In 1995, OLSHTC became a co-educational institution. To appreciate the successive innovative adjustments in Kabaleo, it is necessary to provide a brief background of the events that occurred since 1994.

6.1 Context Data

September 1994 witnessed the eruptions of Tavurvur and Vulcan volcanoes which destroyed much of Rabaul Township. St Mary's High School (SMHS) Vuvu, an all-boys' school, administered by the Christian Brothers suffered massive damage because of its proximity to the volcanoes. Not far from SMHS Vuvu was St Paul's Teachers' College (SPTC) Vunakanau, a men-only college. The College was administered also by the Christian Brothers. Given the situation, Archbishop Karl Hesse MSC, authorised the closure of SPTC Vunakanau. SMHS Vuvu was relocated to Vunakanau, and OLSHTC Kabaleo was directed to take in the male students of SPTC Vunakanau. This was a crucial decision: the amalgamation of SPTC Vunakanau and OLSHTC Kabaleo. Ironically, amidst all these decisions, no consultations occurred with other educational stakeholders such as the College administration (Pau, 2002).

Thus OLSHTC Kabaleo accepted its first male students in 1995. However, because of the lack of accommodation, male students were accommodated in Vunakanau which was some forty minutes duration drive away. Students were compelled to travel each day over difficult roads for lectures. In the meantime, a "temporary" building was constructed on campus to accommodate male students; their living conditions continued to be inferior. This "temporary" building was the only addition to the physical plant of the campus since the establishment of OLSHTC (Pau, 2002).

Since OLSHTC Kabaleo was originally established by the OLSH Sisters, leadership of the College was invested in them. However, as the numbers of capable expatriate Sisters declined, there was need for PNG leadership. So from expatriate leadership there was a shift to national leadership in Sr Margaret Maladede, a Sister of a PNG Religious Order of Sisters known as the Daughters of Mary Immaculate. On completion of her term of principalship, leadership was then conferred on a national, male non-religious, the predecessor of the current principal. This man's leadership was terminated at the end of 2002 for financial mismanagement. His departure coincided with the withdrawal of the last religious personnel (both OLSH Sisters and Christian Brothers) from the College. Consequently, in 2003 the leadership void was filled by a non-Catholic Agency staff member who was one of two deputy principals, the other having resigned to return to his village at the end of the same year. The current Principal's appointment was made without consultation with the staff, and without applications having been advertised for the position (PA101).

Given the lack of acceptance for established protocols and consultation, problems could be anticipated. Firstly, the amalgamation decision was made by the Archbishop who failed to consult any of the educational stakeholders. Secondly, use of the limited physical resources had been exacerbated since the amalgamation. Thirdly, leadership transitions were not planned but necessitated by falling numbers of religious personnel, unplanned terminations and limited choice among personnel available.

An understanding of the peculiarities of the context of the OLSHTC offers an insightful appreciation concerning the context of this study. This next section reports the findings related to Research Question One which explored the quality of education being experienced in the Catholic PTCs.

6.2a Issues that promote the quality of education

From the outset, the issue of quality education permeated everything that was observed about the formal and informal programs of the College. It was the 'lens' that was adopted to view what transpired throughout the data collection process. In exploring the quality of teaching and learning, there were many influences that shaped developments that affected the quality of delivery of education. This issue of quality formed part of the academics' view of their graduates.

Quality, what do we mean by quality? When you put somebody out and you measure him (sic) straight after graduation, you cannot make the conclusion that this person has not learned much. Learning takes years and the person may start this year and in four or five years' time, he may be a different person altogether... So, a graduate who goes out after

two years has all that is needed, it will take time for him to release them, and put them into practice. (PP101)

These comments reflected a general feeling among teacher educators about the views of the community towards teachers concerning the quality of education in the schools. Thus, it was important to focus on the training of the teachers and how this was conducted. The data were clustered into themes indicative of the patterns indicating improvement in the quality of teaching and learning and those issues that mitigated the quality of education. In this first category three key themes were identified: quality of staff, quality of students, and affiliation with DWU.

6.2.1a Quality of staff

The total number of staff members at Kabaleo for the 2004 academic year was thirty. Twenty-eight of these had their salaries paid by TSC and the other two were volunteers, paid by the College. Among the staff there was a wide range of qualifications and experiences:

We have one lecturer who is 57 years old, another lady probably much older than him, and then down to a young female lecturer who is 26 years old. There is a wide field of experiences of people here including myself and a couple more who have been serving the Division [Teacher Education] for most of our lives. The experiences and academic qualifications of these young people are recognized in a way that many of them are high school teachers. Our old philosophy of getting primary trained teachers to join us is now being reduced. We are still thinking of getting primary school trained teachers to go through the BEd program and we are working around that. (PP101)

The principal spoke highly of his staff. The majority had their Bachelor of Education (BEd) degree. One staff member had a Master of Education (MEd) degree while there were seven who were currently completing their MEd – three through DWU and four through UOG. Upon completion, it was anticipated that these staff members would contribute towards improving the quality of teaching and learning in the College. Students commented that: "Some of the staff are well qualified and easily approachable while there are others who are difficult to approach. We can understand that some staff are pressured for time while there are others, who come to lectures and go home after that and we do not see them again until the next lecture" (SS102).

However, one issue of concern was in the area of subject specialization for staff in primary teacher education. The MEd program conducted by Charles Sturt University (CSU) through UOG was a general education degree. This led one of the lecturers enrolled in that program to elaborate:

The real concern is about getting a Masters degree in a particular area that we are more interested in. But this Masters degree that we are doing is more general, so I don't know whether it's going to help us in the long run. The agreement has been signed and we are the first lot, so we have to make it work for the people up at Goroka. We are not doing this for us; we are doing it for them! (DP102)

In contrast, DWU offered a MEd program in Educational Leadership. While staff members were encouraged to upgrade their qualifications to Masters degree level, there were no programs in PNG universities to offer courses in the areas of subject specialization. Relevancy of qualifications and subject specialization for teacher educators were issues that continued to invite closer scrutiny if the quality of teaching and learning in teacher education was to improve.

Apart from the postgraduate programs offered by UOG and DWU, there was a college-based program for all the academic staff. This program was scheduled to be conducted every second week. During the data collection period there was a session on curriculum development that was conducted by the Head of the Professional Development Strand. The session was a lecture presentation type with two handouts distributed. One of the handouts distributed to the staff was a document that was part of the course materials received from UOG. There was little explanation from the presenter about that handout on how it was relevant to the presentation. After the session, one of the academic staff remarked: "This is their style. Whatever they are given during their residential program in UOG, they force that on the staff here and this is not fair" (PA103). The second handout had a nice cover but had errors throughout the document. The session commenced late at 4.30pm and concluded at 5.30pm. This was also true of two other meetings that the researcher attended - late starts and prolonged sessions. Some of the staff members commented that those prolonged sessions did little to enhance the quality of staff performance and morale: "In terms of the workshops here, we are looking at different issues relating to our curriculum but often it is dominated by one particular strand. This defeats the whole purpose of workshops because we want equal participation and have all strands sharing something" (HS101).

The assertion highlighted the need for equal participation of all academics including the leadership team to make the sessions more innovative and relevant to the needs of the staff in their areas of expertise. Some of the participants believed that some sessions were becoming "talking fests", being a waste of time. While it was cited in the documents that the College-based staff development program was to be on-going, this did not always eventuate.

6.2.2a Quality of Students

The student enrolment at the commencement of 2004 was 554 pre-service students and 51 DEPI students bringing the total to 605 students. This enrolment was at its highest and was within a few students of being the largest PTC in PNG. However, during the year a total of eleven students withdrew from the College - eight pre-service students and three DEPI students. The population of pre-service students was as follows:

Table 6.1: The pre-service student population in 2004

	Males	Females	Total
Year 1	140	192	332
Year 2	97	117	214
Total	237	309	546

There was an unequal number of males and females which seemed to be a deliberate choice of the current principal. The student population was largely from the NGI region. Representation from the other regions, which was once a priority of the national government to discourage regionalism, had by force of economic realities been drastically reduced. The entry requirement into tertiary institutions including PTCs was grade 12. Objectively, this policy was a positive initiative towards improving the quality of education in the PTCs. However, this policy had not always been adhered to as amplified by the College Principal:

In the past couple of years, we took grade 10s because the Secretary asked the provinces to take grade 10 students... so the large number we have was nine in 2003. This year we don't have grade 10 students. We have grade 12 students who went through the secondary schools and completed their studies. Also we have taken the adult matriculation students and a good number of our students are from Open Campuses, university centres and Port Moresby Institute of Matriculation studies (PIMS). That's almost two thirds from Open Campuses because we only get grade 12, who go through normal national high schools and secondary schools who put Kabaleo as their first choice, but the rest is made up of the Open Campus students. (PP101)

In general, there were three main groups of students enrolled in 2004. The first group comprised students coming directly from grade 12. The second group included students who had completed grade 12 through university centres, matriculation centres or Open Campus also referred to as non-school leavers, and the third group was the mature age students. This mature age group comprised the experienced teachers enrolled in the DEPI program. The DEPI students were certificate holders and the majority would have been grade 10 graduates.

While the national policy stipulated that the entry requirement into PTCs was grade 12, each college had its own selection criteria to use. There were marked differences in the grade 12 graduates who were enrolled. The following quotation is representative of the views shared by

the academic staff members: "The students are grade 12 graduates and yet they cannot understand the content especially in Maths and Science. While the entry requirements into the College are grade 12, students speak Pidgin not English in lectures and do their presentations in Pidgin" (PS102).

These comments highlighted another area which was beyond the scope of this research to explore and that was the quality of the general education of grade 12 teachers' college students. The academic staff believed that there was a lack of comparability between graduands from different grade 12 schools, the non-school leavers and the DEPI students. Academic staff members continued to question the selection criteria adopted by the College leadership because of the large range of abilities of students. Enrolling two thirds of the students from Open Campuses and University centres may not necessarily be deleterious but according to the staff, the selection process was problematic for two reasons:

Firstly, the criteria provided by the Selection Committee were not adhered to by the administration. Secondly, the majority of the students in the College are self-sponsored and come from the Open Campuses and University Centres. Most of these students are not coping well academically. (PS103)

Because of the discrepancies evident in the selection process of students, lecturers (PS101) believed that they needed to conduct diagnostic tests to check the quality of the students enrolled. While the idea was good, the staff realized that the time was limited to conduct these tests so they abandoned the idea (PS101).

Given all the complaints and frustrations experienced by staff regarding the selection criteria, the leadership team of the College and the Catholic Agency had different perspectives on the selection criteria. According to the head of the Agency, the appropriate provision of goods and services was a justice issue as well as a professional one. He stated:

From my observation, the Selection Committee at the College had not been up to the task. They enrolled students and set the school fees and they accepted far too many. They were not sure about the subsidies they'd get from the government and their promises. The promises didn't come through and it was not secure funding. I had discussions with the Principal about this and explained to him that things were not going right. As Principal, he should have said, 'we accept so many students and stop there'. (CA101)

The College leadership team did not adhere to the Agency's concern about the over-enrolment issue. By February 2005, the total enrolment for 2005 was higher than 2004. The College leadership team held contrary views to the Catholic Agency and its own staff. One of the participants elaborated: "It seems there is a hidden agenda for this over-enrolment of students.

The administration wants to enrol more students because they will benefit personally from this policy. The Principal wants to get this College to level 11 so he can be paid at that level" (PS103). According to the staff, the issue of student enrolments was no longer about quality but quantity. When confronted with the issue, the Principal responded by revealing his vision for the College:

This is coming from the idea that, as I attend my Masters program at UOG, I see primary teachers going there. Why are they in there? They are confused. I know they want to upgrade their professionalism, but UOG is meant for secondary teachers and once they are there they are confused whether they should go to teach at secondary schools, teachers' colleges or universities. I think if Kabaleo goes this way, it will have lots of clients. If my vision works, Kabaleo will be in a better position because it will have campuses like Madang teachers' college which will become one of its campuses automatically. (PP101)

It seems that the leadership team did little to address the student over-enrolment issue because they had ulterior motives. The leadership team believed that they were doing the students a favour by enrolling them in the College. The following quotation is representative of the views shared by the leadership team:

The students are happy to be here so they don't care what the situation is like, as long as they are given a place to study and keep up with the pressure. In Melanesian societies, we don't care about nice cushion beds as long as there is a roof over our heads; that's the way we are thinking. (DP101)

Such views seemed to divert the attention from the real issue about enrolling quality students in an effort to improve the quality of teaching and learning in the College. Once more, quality did not appear to be an important issue for the leadership team in the delivery of programs. Instead, quantity seemed to be the issue that the current leadership team was seen to be promoting.

6.2.3a Affiliation with DWU

The affiliation of OLSHTC Kabaleo with DWU is a new development. The issue is discussed under Research Question One because of its potential to improve the quality of education in the College programs. Historically, Kabaleo commenced discussions on the affiliation process in 1993 and so DWU was committed to ensuring that quality was delivered through its academic programs. At the time of the data collection, Kabaleo completed an audit of its academic programs by the DWU audit team in preparation for the affiliation process that year. The outcome of the visit was that the College needed to work on its documents and get these completed and submitted as requested prior to the signing of the affiliation documents in November 2004 (Journal entry: 02/07/04).

The issue of affiliation with DWU brought to light factions among staff members. One reason for this occurrence was the lack of communication by the College leadership team to the staff and students about the process. Staff felt left out in the process and there was evidence of resentment:

We do not know anything about the affiliation process. We would have liked to be part of it because we were all working on the various committees but in the end, we were not informed about the process and its outcome. Furthermore, we would have liked a meeting with the audit team, but if the meeting transpired we were not well informed about the situation. (PS101)

In general, lack of communication and consultation by the leadership team with the staff continued to be a sensitive issue in Kabaleo. It seems that staff and students did not understand the affiliation process (Journal entry: 04/07/04). The lack of information seemed to create an unfounded sense of fear for personal job security among some staff members. This fear was expressed by one academic staff: "If we affiliate with DWU, will I have a job? Because if we affiliate, the university will want me to upgrade and have a Masters degree and I may not have the money to do that" (PA104). When the affiliation process was clarified, he remained unconvinced. One staff member understood the affiliation process with DWU:

What we understand from the affiliation is the upgrading of our courses and programs. Kabaleo is growing rapidly in numbers of staff, students and infrastructure development. I have confidence that our courses will go through and we are looking forward to a good outcome with the affiliation process. There are also lecturers on staff development programs for upgrading their current qualifications to Masters degrees. (HS102)

The College leadership team did not view the affiliation with DWU as a priority and long-term process. Instead, the Principal's vision was "to see Kabaleo become the first Primary Teachers' University" (PP101). In contrast, the Archbishop gave his unreserved approval to the affiliation process taking place between the College and DWU. He believed DWU would assist Kabaleo in becoming a quality teaching institution:

I think the Agency is whole heartedly in favour of the affiliation with DWU. Whatever is requested or required to prepare for and to look into by the Agency, we are more than willing to co-operate and communicate... I would be happy if it could be established because we need assistance and help and I think it can be given through DWU. I do believe not only the students but the teachers and the whole environment will benefit from this affiliation. (CA101)

Affiliation to a recognized university was government policy (1995) to ensure quality within the higher education sector. Affiliation to DWU could be one positive way of assisting the College to address problems that it was facing in terms of quality teaching and learning, and its

leadership. The problems of communication and accountability with the leadership team would need to be brought out into the open if Kabaleo was to improve and progress as a quality teaching institution. Despite these problems, Kabaleo was affiliated officially with DWU on 24th November 2004 with all the documents signed in Vunapope.

6.2b Issues that mitigate the quality of education

The study identified three key issues: over-enrolment of students, inadequate infrastructure and resources, and incompetent leadership.

6.2.1b Over-enrolment of students

One of the major causes of the cramped conditions was the over-enrolment of students. This resulted because of inadequate strategic planning for expansion while the new infrastructure developments were being constructed. The current facilities built in the 1960s were inadequate to cater for the increasing student numbers. The number of staff houses increased but the rest of the facilities such as the students' dormitories, library, lecture rooms, and dining hall remained constant. Consequently, the excess was affecting the quality of programs because the environment and the facilities used for teaching and learning were not conducive to producing quality results. In a focus group session with first year students, the following observations were made:

Overcrowding is a problem and so there is need for control. Overcrowding affects student learning. For us year one students, it is bad for a number of reasons: First, the seats that we sit on are uncomfortable. Second, the hall is divided into four lecture rooms separated by thin curtains which are not conducive to quality teaching and learning because of the noise. Third, the lecturers are not effective in the lectures because they are overheard by the other students. We hear bits and pieces from everyone else's teaching. Fourth, the dormitories are also crowded and there is no privacy. We all pay the same school fees and even higher fees than other colleges but our accommodation is poor and this is an injustice to the students. (SS104)

Students expected better facilities than what was provided because they had paid full fees to enrol at the College. They were disappointed. With the overcrowding, the facilities were stretched and both staff and students were frustrated in the process because they realized that what they were producing was not their best. One participant commented: "Overcrowding of facilities contradicts the purpose of quality education. Here at this college, it is quantity over quality. The effect of overcrowding results in a decline in standards" (PS101). In general, the staff expected that the leadership team to adopt strategies to alleviate the problem of overcrowding so that quality education could be ensured:

That is something for the administration to deal with. Although they provide the necessary resources, we seem to be working like machines. It is a problem because now we are just pushing stuff down the students' throats and we don't care whether they understand it or not. Because of the numbers we cannot really spend time with them as before. The classrooms are too small for the big groups and we are trying to cope with the situation as best as we can. (HS102)

The inaction by the College leadership team generated feelings of resignation which contributed the detrimental staff morale. With the overcrowding problem, "there is need to increase staffing, and improve facilities. However, these concerns are not attended to by the administration and this in turn affects the morale of the staff" (PS101). The Catholic Agency expressed similar views indicating that the students should get value for their money and that overcrowding proved contradictory to quality output (CA101). Furthermore, the Agency was also concerned that the personal contact with students was neglected by the overcrowding. The Agency advocated a Christian approach adopted in the care for the students. The Archbishop reflected:

I would like to mention another matter in connection with the overcrowding. It's the institutionalizing of the tertiary institutions. That means the personal contact can't be established any longer. The colleges are getting too big, too impersonal and it's my big fear that the Christian education doesn't have any rules, doesn't build any foundation in its people...I do see the need for those institutions to be more personalized and become communities that work together, share together, live together, and that the principal is available as are those in charge at any cost and any time. (CA101)

The personal contact with students was obviously lacking. Many students did not know each other's names. Staff confirmed that they were in the same predicament. They were still trying to learn the names of the students in their classes in the second trimester of the academic year. All the participants unanimously concurred that overcrowding of students was an obstacle to the quality of education.

6.2.2b Inadequate infrastructure and resources

It was ironic that there had been little strategic planning established to cater for the increasing student population since the amalgamation of SPTC Vunakanau and OLSHTC Kabaleo. While European Union (EU) was in the process of completing the new infrastructure developments, the leadership team continued to increase the student enrolments resulting in facilities being stretched and resources limited. Such lack of planning had forced the short term measures to be put in place which brought into question the quality of education, given the current conditions of the College.

Lecture rooms were too small to cater for the current student numbers. In some lecture rooms, all desks and tables were removed to accommodate the large numbers. Instead, students used

folding chairs with some students sitting on the floor during lectures. Lecturers commented that because the students were so crowded in these lecture rooms, they could not adequately supervise individual and group work (SS103).

As a temporary measure to address the overcrowding issue, the hall was partitioned into four lecture rooms for the first year students by putting up thin curtains. This was to be a temporary arrangement, but these rooms became their lecture rooms for the entire year in 2004. Despite complaints from both staff and students, the leadership team failed to alleviate the problems experienced by the teaching staff. The following quote is representative of the views of many staff teaching the first year students:

We are really frustrated with the overcrowding because the facilities are not conducive to quality teaching and learning... the hall is subdivided into four lecture rooms using thin curtains. Whenever lecturers are teaching, there is the echo of their voices in the four subdivisions. Students are listening to all four lecturers and there are a lot of distractions... So when they come to another section to give the same lecture, the students having overheard everything already know what they are presenting so there is no motivation. Lecturers are frustrated about these conditions but it seems to fall on deaf ears. (PS104)

Students sensed the frustrations and some remarked that "the staff members feel for the students but they cannot do much. Everyone just follows the Principal because he controls everything" (SS104). In such an environment, the quality of teaching and learning remained questionable.

Student dormitory spaces were inadequate for the large number of residential students on campus. The female dormitory was built for 90 students. At the time of the data collection, there were more than 100 female students occupying the dormitories. The Dean of Women explained:

Female boarding student numbers were about 100 and it went as far as 200, according to my records. There are really 60 bed spaces but we had over 200. Now the number has reduced to about 119 boarding students. Over the last couple of months, students have been withdrawing for numerous reasons: a death of a student from Bougainville, family problems, and other related issues like students not being able to cope with the fees because Kabaleo seems to be the most expensive institution of all the PTCs. (Dean of Women)

The female students agreed: "There are 9 girls to a cubicle which we feel is really crowded because there is no privacy for us" (SS102). The male dormitories were poorly constructed and were inadequate for the students. With such a situation, it was understandable that the quality of students' performance was greatly affected.

The facilities in the student dining room and kitchen were also inadequate: "The mess facilities need a lot of improvement. The cooks need proper dress for cooking. Proper disposal areas need to be in place. The meals are tinned fish and rice, same style, menu/recipe so we need variety" (SS103).

Library resources were a concern to the staff and students. The current library space was congested and inadequate to cater for the large increase in the student population. The four computers set up in the library for student use were inadequate. The books were outdated and copies limited. Academics emphasized that: "More resources are needed and these resources must be upgraded" (PS104). The limited resources in the library pointed to evidence of theft by students. This was exacerbated by a dysfunctional monitoring system. Lack of resources and poor infrastructure were consequences of inadequate funding which adversely affected the quality of teaching and learning.

Students needed adequate quality resources to use for study and for the presentation of their work. Without appropriate resources, the quality of teaching and learning as well as other aspects of the programs were affected negatively. Resources such as curriculum materials, text books, audio visual equipments, handouts, and everything that contributed towards the effective delivery of lectures and the learning process were important but inadequate. Quality education cannot be provided without the provision of appropriate resources in educational institutions. Academics need quality resources to do their work effectively.

6.2.3b Incompetent academic leadership

The leadership of an institution determines change and subsequently its success or lack of it. Leadership is an important issue in this study and explored in greater detail in research question four under Section 6.5. However, leadership is explored briefly under research question one because of the important role it plays in the implementation of the academic programs.

Building sound relationships in educational institutions is crucial in educational institutions. It seems that the relationships between the leadership team and staff did not foster teamwork. Staff felt isolated and did not participate in any decision-making processes. There were also feelings of fear among staff of losing their jobs because they were vocal about malpractice in the College (PS102). The evidence suggested that there were problems with the leadership of Kabaleo, not merely in the administration but also in the academic programs. In a strand focus group interview a participant asserted:

The relationship is not good. There is no academic leadership in terms of the curriculum and assessments. The administration listens to staff's concerns and nothing is done... When concerns are raised, these are often taken as personal attacks and they feel insecure. (PS102)

The evidence indicated that there was lack of communication between the leadership team and staff. This had subsequently created ill-feelings and passivity among staff. A member of another focus group elaborated:

We are not part of the decision-making processes. We just sit back and watch what is happening because we are told all the developments have been pre-planned and they are just carrying out those plans. Whether we agree or disagree, it is a lost cause because no one listens to us. (PS104)

This culture of passivity led to staff producing the bare minimum in the tasks that they undertook. Observations concluded that the leadership team made minimal effort to improve their relationships with staff members and students. The staff stated that they were not appreciated:

It is important to have a leader who has time to listen to subordinates and have open communication with them. We need to value not just the students but we must value our staff as well. There should be this focus in place, valuing everybody who is part and parcel of being an institution. (HS101)

The lack of appropriate leadership was a critical issue which demonstrated incompetence in a number of areas. First, there were the bad decisions made about the over-enrolment of students. Second, there was an insensitivity of the cramped conditions that staff and students regularly encountered. Third, there was a lack of appreciation of the staff and their work load. These problems were factors that had a negative impact on the quality of education at the College.

6.3 PASTEP innovations

The second specific research question explored the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges.

One of the major goals of PASTEP was to improve the quality of teacher education and make it relevant to meet the requirements of the education reform agenda. To achieve this goal, PASTEP concentrated on different aspects including national staff development workshops, staff mentoring and professional development, curriculum resource development, and infrastructure upgrading. These programs were designed to generate beneficial and measurable outcomes for the administration, academic staff and students alike.

6.3.1 National staff development workshops

The staff development program was an important component of PASTEP. This component was conducted in the form of workshops around the country for lecturers from the eight PTCs. This program was rated favourably by staff:

It helps us to gain confidence ... It also helps us to do lots of research. It's not a matter of going out there and presenting what you think you've done but you've got to carry out research. PASTEP is involved with AV equipment. It has helped us to strengthen our teaching methods with the use of overhead projectors, use of computers which enable us to write curriculum, do our assessment and many other things that we decide on with the use of computers. (DP102)

There was confidence in the staff about what they did in their strands because of their involvement in PASTEP workshops. Attendance and participation in these workshops assisted them with their own College-based staff development program. This view was representative of these academics:

The involvement of staff in PASTEP enhanced many things. One, there has been a committee in curriculum development, meaning what we are offering here is also offered in other PTCs. That's one advantage of being involved in a PASTEP project. The other point is that PASTEP has also trained us to write curriculum to meet the needs of our students. Nearly all lecturers were involved in the writing of these curriculum materials under their own specialty. So that's one good thing about PASTEP. (PA102)

PASTEP workshops were perceived to be successful because of what lecturers achieved in terms of the presentations, research and curriculum development. Consequently, it would be expected that there would be considerable improvements in the presentation of lectures. This was not obvious during the observations of lectures. What was observed, was the conventional method, lecture and chalk, with minimal activity from students. The impact of the staff development workshops was limited because there was minimal change observed in the passive style of delivery of lectures. The style of delivery of lectures was also influenced by the overcrowded lecture rooms and inadequate teaching resources.

6.3.2 Staff mentoring and professional development

Staff mentoring was an integral component of professional development because some of resources/equipment provided by PASTEP were new. PASTEP devised a system whereby long term advisors (LTAs) were assigned to work with HOS and other nominated staff in the development of curriculum resources (HS101). At the data collection period, there was no LTA available in the College.

One critical area that invited specialist training and mentoring was in the area of information technology (IT). Kabaleo was provided with a staff computer laboratory. Not surprisingly, staff had to be trained to use the computers. In addition, the College needed to have a trained IT person to ensure the computer laboratory was functioning and monitored. To address this need, PASTEP provided LTAs who assisted with IT. The participant who was mentored in IT elaborated:

I was the so-called counter-part to the LTA of PASTEP. I was playing a major role because we were fully engaged in curriculum writing and also co-coordinating the national PASTEP workshops, becoming a facilitator, attending national PASTEP workshops, coming back and then disseminating information to staff members. I was also from time to time in the administration doing the deputy principal's duties. (DP102)

The staff member trained in IT by PASTEP expressed confidence in the job: "I think I'm ready to tackle the problems. I'm prepared to take on the challenges" (DP102). In contrast, staff members expressed reservations about the people who received the specialist training. In this case, the IT person, a member of the College executive, acknowledged his dilemma:

You know it's not good to provide something without technical support. My responsibility as an IT person is time consuming especially when a network system breaks down. You have to spend a lot of time to get the system back on. And with the position that I am holding as a Deputy Principal, I've got to try to balance my time. But then I have to think of my staff members. If I want them to continue with their work, to prepare lecture notes, I have to get this done. Though I have my administrative routines, I have to try to make sure that I balance this. (DP102)

Staff mentoring and professional development was essential in institutional capacity building and needed qualified people to work together with experts. There were reservations expressed if people in executive positions in the College should have been involved as they were already in key positions of leadership. When PASTEP officers were resident in the College, this did not seem to be a problem but it became problematic when resources provided by PASTEP ceased (HS101).

Another issue identified in staff professional development was gender equity. Female academics believed that they were denied the same opportunity as their male counterparts. The comments below are representative of the views of female academics:

I don't know the perception of other people in relation to having staff development programs and people come up with their own views regarding this area. I feel that staff development is essential. We need it not just professionally, but also as an individual. I would like to see a lot more participation from everybody across strands and not just from one area. In that way it will get people to value the purpose of having staff development so we should involve everyone who is a staff member. (PA101)

It appeared that even with the PASTEP staff development program, gender equity was not encouraged. A senior female academic asserted: "A lot of women folk complain about not having fair representation in the administration. Apart from myself as HOS, there could be a lot more representation by women" (HS101). This implied that female academics were not equally represented in staff development programs because they were not in positions of authority. Observations of the female academics in Kabaleo illustrated that they were committed and possessed leadership qualities but seemed not to be appreciated and recognized.

6.3.3 Curriculum resource development

PASTEP provided a common core curriculum supported by resources produced in modules for the subject departments in the five strands. This was an encouraging development for PTCs. A member of the senior executive elaborated:

Previously, we had all kinds of courses and lecturers were writing their own courses. With PASTEP, the PTCs around the country have one core curriculum. Lecturers from each of the colleges worked together on their subject areas. PASTEP people were seen as facilitators for the five strands which was very good because these things are now provided for anyone new entering teacher education institutions. The other good thing is that this is helpful for people transferring from one college to another. So what PASTEP has done is very good, provided resources and all the ideas are there, there is quality, and better standards. It is handy for lecturers doing cross-lecturing to find materials provided. (DP101)

The involvement of national lecturers in the process of producing the curriculum resources made them feel they contributed actively to their curriculum through the production of curriculum resources. One of the College executives reflected on the experience:

The curriculum materials are the same in all the PTCs however, when the units are offered, differ in each institution. PASTEP materials have been contributed and put together by ourselves. We have helped to develop the content and the strategies for teaching. It has given a new look to our way of teaching. We encourage staff to use a variety of teaching strategies and avoid lecturing. (PP101)

While staff members applauded the contributions of PASTEP to the curriculum and the teaching strategies, the transfer of those skills to the classrooms was not observed. A considerable number of the staff continued to lecture with minimal student-centred activities. Such practices seemed contradictory to all that the participants had said about the work of PASTEP in improving teaching strategies. Consequently, the over-reliance of teacher talk was likely to have a negative impact on the quality of education offered to the students.

The curriculum resources provided by PASTEP were intended as a framework for staff to use in developing their own resources. Sets of books distributed to staff were limited as explained by a senior staff member:

We've got the twenty-five books of each unit that have been printed out and we'd like them reproduced with the consent of PASTEP. The administration has agreed to our request for more student copies before the next trimester but with certain limitations. What we're doing now is just maintaining copies of important modules and passing them on to students. Staff members are also making summary notes for the students, but then to have a complete module wouldn't be enough because usually when we are extracting information, we may omit certain valuable information which students need. That's how we are currently coping. (HS101)

Similarly, students expressed appreciation for what PASTEP had done: "PASTEP has done a great job but more needs to be done in terms of the infrastructure to cater for the current overcrowding of students in the College. More and more resources are needed to cater for the big numbers" (SS102). While the majority of staff indicated that the materials were helpful, one of the HOS asserted: "We appreciate the curriculum. They have produced a lot but some of what they have produced is beginning to be phased out because it is no longer relevant because of the reform. Much of it is what they want us to take into account during the reform" (HS102). Such comments illustrated that some academics were evaluating the materials that they were using. This process was important because it was likely to lead to ownership and sustainability of educational materials.

6.3.4 Infrastructure upgrading

The infrastructure upgrading was another important component in the innovations. However, Kabaleo did not fully benefit from the infrastructure upgrading component of PASTEP because EU was already in the process of negotiating a multi-million dollar infrastructure development project. A member of the College executive explained:

PASTEP has provided a computer lab just for the staff in Kabaleo. We were supposed to get a Learning Centre from PASTEP but we were left out because of EU funding for the infrastructure work. So our Learning Centre was given to Gaulim Teachers' College. (DP101)

The staff computer laboratory was fitted with about "twenty-five computers, computer tables and chairs" (PA102). Furthermore, "PASTEP provided tables and chairs for the lecture rooms. However, because of the large class sizes, the College got folding chairs instead. They gave us beds and mattresses" (PP101). The chairs donated by PASTEP were so many that the administration decided to get a container specifically to store the chairs in it. PASTEP also provided funding for "curriculum materials and books which was worth about K40,000.00"

(PP101). Staff and students were beneficiaries of the PASTEP innovations. All these services helped in improving the quality of teaching and learning in the College.

6.3.5 Care for PASTEP's infrastructure and resources

Prior to PASTEP's closure in 2004, their officers expressed deep concern in one of the meetings about the need to care for what had been established in the PTCs (Minutes of 24/10/03). Principals and Deputy Principals of all the colleges were encouraged to take care of the facilities installed so they last longer and serve a wider audience. Kabaleo had established a monitoring system:

We have our inventory of all the resources/materials received. Like this morning I was collecting some broken chairs to send them back to Brian Bell because these chairs were given to us by PASTEP and it is our responsibility to make sure that they are maintained and kept. Yes, we are very much concerned about our materials and the infrastructure building. Without this program, we would not have come as far as this...We are privileged enough to have all these so it is our concern that these things are properly maintained and looked after. (DP102)

The monitoring system was established to ensure accountability in the use of the facilities and resources provided by PASTEP. OLSHTC was a recipient of valuable resources from PASTEP and maintaining an inventory of these resources was an appropriate strategy to care for them.

6.3.6 EU infrastructure development

In conjunction with PASTEP, European Union (EU) provided a multi-million infrastructure development for Kabaleo. The infrastructure development package included six dormitories, mess and kitchen, library, auditorium, and some lecture rooms. This was a fundamental infrastructure development project which was completed in 2005. The huge infrastructure development in excess of K13 million (A\$5.1 million) was jointly funded by the EU and the Gazelle Restoration Authority. The new infrastructure developments were anticipated to improve the facilities and conditions and subsequently the quality of teaching and learning. This view was summarised by one student in a focus group: "Resources are not adequate for the large numbers so we have to share all the time. With the current EU funding, we hope better and more adequate facilities will be built to cater for the overcrowding" (SS102). The new EU infrastructure development package would provide a better future for all stakeholders.

Summary: Participants acknowledged that PASTEP had made valuable contributions to the College and the College benefited greatly from the project. Furthermore, in order to get the best use out of the infrastructure and resources, a monitoring system was established to check the use of resources. However, two main weaknesses of the PASTEP innovations were identified. First,

the transfer or translation of the knowledge and skills achieved through training workshops into the reality of the lecture rooms was disappointing. Second, there was an absence of ownership by staff of the PASTEP innovations. PASTEP came into Kabaleo in 1999 and left at the end of 2004. However, there seemed to be few strategies in place for the College to continue to sustain the innovations, and make them relevant to the PNG context.

6.4 Curriculum

The third specific research question explored how the curriculum in the teachers' colleges was perceived by the lecturers, students and recent graduates. Curriculum is defined as all the subjects included in a course of study. Since the implementation of the education reform, changes had been introduced in the curriculum of the teachers' colleges. As discussed in Section 6.3.3, PASTEP made valuable contributions to the core curriculum and the development of curriculum resources.

6.4.1 The trimester program

Prior to the implementation of the two-year trimester program, the colleges were conducting a three-year semester diploma program. The three year diploma program ended with the graduation of 114 students on the 23rd May 2003 (Sarere, 2003; Sikil, 2003). Kabaleo implemented the trimester program in 2001. This was a critical change for staff and students. While some staff members welcomed the change others had reservations. Following are some of the quotations reflecting the general views of the academic staff. These views have been grouped into two categories: enabling and disabling factors. Enabling factors were those that promoted the trimester and disabling factors were the barriers to the program.

Enabling factors: There were three issues that staff and students identified as contributing to the trimester program. These were: cost-saving measures, mass production of teachers, and the enrolment of mature students into the program.

- (1) Cost-saving measures: The two year program was cost-saving for parents and students. A senior executive member asserted that: "There is more motivation in the parents paying their children's fees for the two years than they did for the three years. Parents are prepared to pay the school fees. For the students, there is more motivation in the two years. They are happy" (DP101).
- (2) Mass production of teachers: Consonant with the education reform agenda, the College produced more teachers within a short period of time. Students concurred: "The trimester was

quicker and cheaper to produce teachers" (SS101). Another group added: "The program was good because it was short, the learning ability was effective, and the content provided by the lecturers contained the main gist of the content rather than repetition" (SRC). Still students in another student focus group pointed out that: "There is effective teaching and learning within the trimester. It is an effective way of producing more teachers in a short time. It is also cheaper to produce teachers in two years than three" (SS102).

(3) Enrolment of mature aged students: Academics were confident that with grade 12 graduates, there was no need to prolong their training and two years was adequate to equip the students with the teaching skills required. This quotation was representative of such a view: "Mature students are currently enrolling at grade 12. They already have the content so the concentration is on the skills and attitudes towards teaching" (PS103). These were the enabling factors identified by staff and students.

Disabling factors: There were three issues identified by staff and students. These included: the symbolic value of the trimester, short course duration, and its impact on the practicum.

(1) The symbolic value of the trimester: Academics believed that the trimester pushed students through without an atmosphere of care:

The trimester is twelve weeks long and so staff are under pressure to complete work within the trimester. New courses are introduced that are three credit point courses – three hours and no electives. The symbolic value of trimester is pushed through and the atmosphere of care is not there. (PS102)

The administration did not seem to care about the teaching and learning facilities or what resources were available to staff and students as long as the trimester was running. Staff and students were under so much pressure to perform and there was little support offered to assist them to cope with the situation:

The time is too short to cover the courses in depth. The lecturers try to squeeze everything including exams within that period of time and there is a lot of pressure on them. The students are also pressured to complete all their assigned work and prepare for exams within that time frame. The students complain about this but nothing can be done about it because that is the system. (PS104)

Students in a focus group concurred with staff members: "There is a lot of pressure in the workload. There is no time to reflect on the work in order to grasp the content. Because the trimesters are shorter compared to semesters, the weak and slow learners are left behind" (SS101).

(2) Short course duration: Because of the time factor, staff members were challenged to make decisions about the selection of relevant course content and assessment for each trimester. This process seemed stressful: "Because of the time factor, we cannot cover everything so we have to select certain courses that we feel are important and leave out the rest" (PS101).

In contrast, the three year diploma program had been organized in semesters and each semester was 20 weeks long. This meant staff and students had flexibility to negotiate their work loads resulting in low stress levels. A HOS justified the program:

With the three-year diploma, the students had more time and the assessment tasks were more than three. The students were more relaxed compared to now. But now we have limited the assessment tasks to three. The current students are going crazy trying to manoeuvre around to get through the tasks that all lecturers give - a minimum of three tasks that they are required to complete. (HS102)

The staff members continued to work under cramped conditions to complete all the assessment tasks and at the same time plan for the next trimester. Assessment was a critical component of the curriculum. However, because the trimester was comparatively short, students were not assisted to understand the concepts and reflect on their learning. So the authentic meaning of assessment seemed lost in the process:

Assessment wise, because of the trimester program, you need to probably have a minimum of three, or maximum of four tasks. The concept of student assessment is to measure how much they can be able to acquire within twelve weeks which can be a little contradictory to our purpose of being here. Also as I mentioned in relation to the ability, the student intake is also a problem because there is a good portion of the students that is not at the expected standard. Therefore trying to cover so much in twelve weeks, you can't compress vast or large amount of content to students who are not at this level. (HS101)

In such situations, students were disadvantaged because of the issue of "subject overload". Subject overload refers to the cramping of too many subjects into a short time span. Students were required to do six or seven subjects, complete assignments and exams within the twelve-week trimester. This pressure was articulated well by a student: "There is a lot of pressure on the students because there are six or seven units to be completed. Therefore when each subject area is giving assignments, there is pressure on students to complete all the work. This pressure results in very little time provided for reflective learning" (SRC).

This issue was exacerbated by the fact that Kabaleo alone enrolled three quarters of the students from the Matriculation centres and Open Campuses. Under the circumstances, most of these

students were weak and needed a lot of assistance in their academic work and the lack of resources did not help. This was what students had to endure:

Students who have come through Matriculation and University Centres find great difficulties in catching up with the work. There are inadequate resources for students. Lecturers provide handouts to students; however, there are not enough of other resources for students to use. Students who are on HECAS are provided with resources while the rest are not. (SS102)

Under such conditions, there was little time for reflective learning and weak students continued to fall behind with their work.

(3) Impact on College Practicum: The practicum was important because it involved the formation and training of teachers – theory, observation and practice. The participants believed that the practicum was affected by the trimester program because of its short duration. One of the members of the College executive compared the three diploma program to the trimester program:

In the three year program, there was plenty of time to train our students. But with this current reform of the trimester program, there are some programs that we've done away with, and we are only concentrating on those ones that we think are more relevant to the needs of our students. The time allocated is not sufficient for proper training. In the three year program, our students were given enough time to work at practice teaching. By the time they finished from the teachers' college they were more confident and qualified for teaching in primary schools. (DP102)

While a majority of the academic staff spoke favourably of the three year program, a senior executive staff registered his view which was contrary to the rest: "Three years to me is a long period of time. People say the three year program was good for a diploma. Personally, I think three years, six semesters; one semester for twenty weeks is a very long time. With the two-year diploma, it's a challenge for everyone to make the best of what they can do within the 12 or 14 weeks" (PP101). The two year trimester program had generated new challenges for the staff and students for which they did not seem to be coping well.

6.4.2 Diploma in education primary in-service (DEPI)

The DEPI program is a government mandated change as a consequence of the education reform. This program is to service the teachers who are certificate holders to upgrade to a diploma. The program was first introduced at the Papua New Guinea Education Institute (PNGEI) in Port Moresby. However, PNGEI had not been able to cater for the numbers since there were so many certificate holders around the country. So other PTCs were invited to participate and offer the program in conjunction with their pre-service program. In 2004, OLSHTC Kabaleo introduced

the program. The program was twenty-four weeks long in duration. There were eight core units and seven electives offered in 2004. A total of 51 students were enrolled with three withdrawals during the year. In the exploration of this new program a number of advantages and disadvantages were identified.

Advantages: For the College administration, there were two main advantages in conducting the program. Firstly, conducting the program was important to the College because it raised the status of the College. Secondly, in offering the program, the College provided local access to the program for teachers and their families. These students did not need to travel to PNGEI in Port Moresby to do the program which was a cost-saving measure for them. They remained with their families while undergoing the program. The students were predominantly from the East and West New Britain provinces. Most of these students were sponsored by their own provincial governments which meant that while they were doing studies they were on full pay. At the end of the program they were graduating with a Diploma in Primary Teaching.

Disadvantages: However, there were four disadvantages identified by the staff and students. These were: Lack of facilities, unavailability of staff to teach the program, preferential treatment for DEPI students, and quality of students enrolled.

- (1) Lack of facilities: The College accepted the program with the knowledge that it did not have the facilities to conduct the program. Therefore, the College rented two classrooms from the Kabaleo Vocational School to conduct the DEPI program.
- (2) Unavailability of staff: There were difficulties attracting staff to participate in the program. Staff did not cooperate because they were already stretched in trying to address problems of overcrowding in the pre-service program. So they were not keen to be involved in teaching another program. To encourage staff to teach incentives were offered:

The Principal has approved funds for that. I think it's K10 per lecture which comes down to K720.00 per unit. This is not regarded as salary but some form of incentive for being involved in teaching the DEPI program. This is because staff were under pressure and complained because of the heavy load with Pre-service students and no one wanted to do the teaching of the DEPI program. (PA102)

Providing incentives for staff to teach was one way of getting the staff to be involved. The other way was by using one's position of authority as illustrated in the following quotation: "In the end, the Deputy Principal Academic said: 'We just tell them, do it!'" (PA102).

(3) Preferential treatment: Besides the evidence of coercion in getting academics to teach in the DEPI program, there were feelings of animosity among students. Pre-service students resented the fact that DEPI students were given preferential treatment by the leadership team. One example was the special lunches prepared for the DEPI students. The other example was: "DEPI students will graduate with special gowns and hoods made for them while the Pre-service students will graduate just with gowns" (PA102). This information provoked angry reactions from pre-service students as confirmed by one member of staff:

The Principal is obsessed with getting these special gowns made for these DEPI students. DEPI students will pay K160 for their gowns. The Pre-service students are saying: 'It's the same diploma that they are all graduating with from the same institution – OLSH Kabaleo with the diploma from DWU. So, why the difference?' (PA102)

The DEPI program had not gained momentum while the administration presented it as a fait-accompli. Staff felt the program was an extra burden for them. Pre-service students resented the special treatment given to DEPI students by the administration.

(4) Quality of students: The DEPI students were mature-aged who had been teaching for more than ten years. The experience of being a student had been problematic:

The students are keen and are always grateful for my units. However, some of the staff find difficulty to get work from them. The discipline is poor and they have bad habits with absenteeism, coming late not in before 8.30am and chewing betel nut. The leadership has no credibility among the students both Pre-service and In-service students. They [leadership] are not worried about students and their studies. The day students come late everyday arriving after 8.30am but nothing is done about this. (PA102)

Another critical area that was becoming a concern among the academic staff was the students' academic writing. This was not an issue just for DEPI students but also for pre-service students. An academic staff highlighted the issue of plagiarism: "Another issue that is ripe in the College is plagiarism. Students are copying work everywhere but nothing is done about it" (PA102). Plagiarism was a serious issue that needed to be addressed by the administration, staff and students. In the pursuit of quality education, these issues identified by the staff and students needed to be addressed in the College.

6.4.3 Special education program

Special education has not been offered at the College since 2002. In investigating why the program has not been operating, the Special Education lecturer explained that she was not able to focus on Special Education because she had been involved in cross-lecturing and teaching

courses in other subject areas. She claimed that there was a lack of support also for the program by the College leadership team.

The evidence indicated that the program was well resourced. Special Education was a well supported program in the PTCs. First, there was a lecturer position funded by TSC in every college; second, there was a Special Education vehicle within each college, and third, a Callan Resource Centre⁵ fully staffed was established nearby to support the program. Kabaleo was provided with the same facilities and equipment as the other PTCs to conduct the Special Education program.

Although the Special Education program was well supported, the reality was that the program was not being conducted for the following reasons: Firstly, there were personality clashes between the lecturer and coordinator of the Callan Resource Centre. These personality clashes became barriers to the professional partnerships and, as a result, the students were denied the 'home contact' program to qualify them for a certificate in Special Education. Secondly, there was misuse of Special Education resources. There was evidence to suggest that the vehicle was used for other College needs not necessarily related to the Special Education program. This was exemplified when a vehicle was used for transporting people who had nothing to do with Special Education to the airport as well as other College trips. One of the academic staff explained why the program was not being offered:

There is no link between the College and the Callan Resource Centre in Vunapope. The professional development is poor and the leadership of the College especially the Principal is very poor on relationships connecting persons. Currently, the Special Education lecturer does not have good relationships with the Coordinator of the Callan Resource Centre. (PA101)

If the program is to be revived, barriers such as bad relationships and lack of support from the leadership team of the College need to be addressed.

6.4.4 Assessments

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Assessment is an essential component of quality teaching and learning of the curriculum. Assessment is adopted to monitor the progress of the students and to assist staff to evaluate their own teaching strategies. Participants identified a number of contributing factors that affected the quality of the assessments in Kabaleo. One of the major factors identified in Section 6.2.1b was overcrowding. One of the HOS agreed: "This is because when we give tests, the rooms are so

⁵ Callan Resource Centres were established by the Callan National Office based in Wewak to support the PTCs in teaching the Special Education program.

crowded. The students sit next to each other and there are problems with the validity of the tests, because of the issues of cheating and copying from each other" (HS102).

Another participant added: "The current lecture rooms are built for 25 students and currently there are 55-60 students in those rooms so the students are really squeezed up. This becomes a problem for exams or tests because the students are so close together there is very little one can do to minimize the cheating practices in class" (PS104).

The majority of participants agreed that the validity of assessments was questionable because of the lecture facilities when conducting tests and exams in an overcrowded room. The impact of the overcrowding was also experienced when grading students' work. This prompted one participant to acknowledge that "because there are so many students, staff members have difficulties getting the marked work back to the students before the next task is given to the students" (PS101). These comments confirmed concerns raised by students that they were not provided with feedback regarding their work. The students continued to submit work to lecturers but they did not have their work returned until the end of the trimester. This practice defeated the purpose of formative assessment.

Supplementary assessment was another issue that was debated by staff. In the assessment policy of the College, provisions were made for students who had genuine causes for not taking exams, or completing assignments and any other assessment tasks. However, according to the staff, this policy seemed to have been abused: "The assessment policy dictates the penalty for late submission of work. There is also provision provided for the discretion of the lecturer concerned. However, there are discrepancies in applying the policy" (PS101).

The discrepancies were confirmed by a member of staff who was involved in an incident with a student and the Deputy Principal academic regarding supplementary work. The lecturer concerned was not in favour of giving supplementary work to the student because she was convinced he did not deserve a second chance. Inadequate follow up was conducted by the Deputy academic to establish the facts about the case before any decision was made. Instead, the Deputy academic directed the staff member to offer supplementary work to the student. According to one staff member: "the truth should have been established with all the parties involved before action" (PA103). However, this process did not occur and the member of staff felt betrayed by the Deputy Principal academic. The lack of support for staff by the Deputy Principal academic was further substantiated by another academic staff:

The Deputy academic has no credibility concerning fails. He has used the supplementary work system to pass students with 'Ds' so there are no fails. Even though lecturers are opposed to supplementary work, they are just told to give students work. Everyone knows that the Deputy academic supports the students over lecturers. Academic work is compromised all over the place. (PA101)

The Deputy Principal academic was the person responsible for the academic programs. The incident with the staff member concerned seemed to project a different interpretation of the policy on supplementary work. It appeared that his interpretation of the policy was to get every student through the system. The following remarks confirmed this trend of thought:

I am also taking on the students who are not attending classes, failing subjects, and giving them supplementary work so they are really improving. Last year we had only one student who failed. Staff are supposed to put up the marks for students to see their progress. We have so many students, about 600 students now. (DP101)

The Deputy Principal academic was perceived to be encouraging poor quality work in students by getting every student to pass. The fact that only one out of 500 plus students failed in 2003 considering all the challenges faced by the staff and students was highly questionable. Such practices could bring into disrepute the validity of the assessments. However, the Deputy academic defended his position:

Students are so lazy, they are so relaxed. Lecturers are so relaxed. I want to see Kabaleo a better place. As a Union person we want to see more teachers. I have seen other places with the whole place deteriorating and going down. But we are taking risks and are not afraid to change. (DP101)

There was no argument about offering students supplementary work as stipulated in the assessment policy. The problem however, was in the interpretation of the policy by the leadership team:

It [supplementary assessment policy] is good but the way it is currently conducted is not proper. It almost means that we want to push every student through even if some are weak. This affects quality and so the quality of our students can be questionable. The administration — especially the Deputy academic is the one who is instructing us to implement the policy for every student who fails our courses. (PS101)

The quality of the assessment tasks given to students was affected by the large increase in class sizes. Moreover, the concerns identified about the interpretation and application of the supplementary assessment policy by the Deputy Principal academic brought into question the credibility of staff and the quality of the assessment process which could seriously affect the quality of teaching and learning.

6.4.5 College practicum

The College Practicum is a key component of the training of teachers. The College Practicum is four weeks long when students are placed in the schools to experience the reality of teaching a class. During the practicum, College staff and teachers from the schools conduct the supervision of students. Because of its importance, there is a Practicum coordinator in the College whose responsibility it is to organize the logistics of the enterprise. Prior to the practicum, weekly lesson observations, peer teaching and micro-teaching sessions and school visits are conducted as part of the practical skills that trainees need to acquire before they are sent out for their practicum.

On a weekly basis, the organized school experience for the students at the Kabaleo Demonstration School included classroom familiarizations and observations, peer teaching, micro-teaching and macro-teaching. Students were supervised by the College lecturers (PC101). During the data collection period, the researcher could not do any observations of these school experiences in the Demonstration School because the Practicum coordinator was unavailable and so the school experiences were cancelled!

The students' responses to whether they were confident and ready for the College practicum were mixed. Half of the participants in a focus group said that they were ready, while the other half said they were not confident (SS103). However, they all agreed that the classroom experiences helped them in the practicum. Still another group of students insisted that "the experience is limited because of the time factor which makes the application difficult" (SS101). They admitted: "Students did not take them seriously. The peer teaching and micro-teaching were done using the old curriculum" (SS102). Students also acknowledged that they were taught to write lesson plans. For the practicum, the students stated that they would have to "prepare and provide for their own materials" (SS102). The Deputy Principal concurred: "All the self-sponsored students will have to provide their own materials" (DP101).

In the first week of data collection, the practicum coordinator was busy organizing all the logistics in preparation for the College practicum which was conducted in the latter part of the academic year. The Practicum coordinator outlined the schedule:

The College practicum starts on 25th October and concludes on the 19th November 2004. The second year students will go to New Ireland and around the Gazelle schools. However, the first year students will be going back to the villages/home provinces and doing their practicum there. (PC101)

The first year students went home for their practicum and returned to the College at the beginning of the 2005 academic year. The Principal reiterated that this was a practice that they had in the 1990s and they were re-adopting it. He explained: "Because there were so many first year students, they will be sent back to their home provinces to do their block-teaching which is home-based teaching" (PP101). Regarding the supervision of the home-based teaching, the Principal elaborated:

The Practicum coordinator and his team will develop an assessment package which the head teacher, the student and the senior teachers will use to assess the student. That assessment package will be brought back at the beginning of next year. We will use that package to measure their performance. That's what we call home-base teaching. The students are left under the care of the head teachers, the senior teachers and the classroom teachers. None of the College supervisors will be part of that, but they will be part of the second year students. We trust that all our head teachers and senior teachers have gone through supervision, and that they will do the job. (PP101)

However, the supervision booklet was not sighted by the researcher because it was not ready. The majority of staff expressed their disapproval of this practice:

The students will not get any proper supervision from teachers in the schools in the home provinces which means these students will only do one proper teaching practice session instead of two. It is better if all the students are supervised by the College staff so they know the students and can help them in their weaknesses. With two teaching practice sessions, the students are able to improve their confidence and build on that. However, with the current year one students, it seems unfair that they get only one supervised practicum session compared to other students who have had two practicum sessions over the two year period. (PS101-104)

The staff members were concerned about the quality of the supervision for these first year students. They agreed that leaving the entire supervision of these students to the teachers in the schools with a booklet as a guide was not the best option. They feared that this situation was likely to raise questions about the quality of the program and also the quality of these future teachers.

Summary: The programs that were discussed in this section illustrated major changes that had been implemented in the curriculum of Kabaleo. The trimester program presented challenges for staff and students. DEPI was a new program introduced in the College that needed improvement. Special education had not been offered since 2002 so the program needed to be revived. Assessment was an area that needed strong academic leadership. Finally the homebased practicum for the first year students may need to be revisited for better quality supervision.

6.5 Leadership

The fourth specific research question explored how leadership was demonstrated in the Catholic PTCs. Leadership and administration were used interchangeably when referring to the Principal and the two Deputy Principals. In response to the research question, five issues were identified: College administration, academic leadership, care for staff and students, impact of the leadership on staff and students, and the role of the Governing Council (GC).

6.5.1 College administration

The leadership structure of the College consisted of the Principal, two Deputy Principals – one academic and one administration, and five Heads of Strands (HOS). The five strands were: Professional Development – education courses and special education, Language – English and library skills, Community Development – agriculture, health/cooking, sewing, physical education and computer development technology, Mathematics and Science – mathematics and science, and Social and Spiritual – social science, spiritual and moral education, and expressive arts. At the time of the data collection, there were only four HOS since there was no appointment made for the Social and Spiritual strand. The twenty-one remaining staff comprised nine senior staff who were the subject coordinators and twelve junior staff. The hierarchy of authority is as follows:

The structure itself at the moment is that I look after my two deputies. The deputy academic looks after the heads of strands while the deputy administration looks after the ancillary staff. Heads of strands look after the subject coordinators in the strands who are levels six and seven. The subject coordinators look after the lecturers. That is the delegation of responsibilities and we monitor it. (PP101)

The current leadership team assumed their leadership role by default rather than through the normal procedures of applying for advertised positions. This was confirmed by another executive member:

There was no handover/takeover. We just moved in at the same time, all three of us. That is exciting. We knew what the Principal and Deputies should do. We have been here in the College for a long time so we knew what to do. Our Principal is very active, putting in ceiling fans in the female dorms and doors for all rooms. Now there is change in the staffroom. The principal is taking risks; he is not afraid. (DP101)

There was a sense of confidence in the leadership team about the way they themselves were administering the College. However, the majority of staff and students did not share those views:

There are no consultations with staff about decisions. The leadership is authoritative in its decisions. The administration makes decisions among the three of them. For example, staff are not consulted about re-admitted students or any students who are transferring into the College. There are no observations of staff working. They don't identify with lecturers and lecturers are seen as problems. The administration is isolated from the staff, and everything is left to lecturers. There is lack of communication to staff and students. Delay tactics have become a habit for the administration. They don't listen and often the staff are shut off before they even start. (PS102)

The evidence indicated a lack of collaborative partnerships between the administration and the staff. Academics emphasized that the current leadership practices were contradictory to the development of the College as a quality institution. Staff were concerned that they were working in isolation because there was no vision in terms of infrastructure development and little transparency so that all would know what was happening in Kabaleo. In this place, "Do what you think you should be doing" (PS101). Academics wanted to be involved with the leadership in decision-making processes so that they could all work together to promote authentic educational change. However, this could only occur if genuine attempts were made by the administration to put into effect some of the suggestions of staff. What was needed was that relationships of suspicion changed into relationships of trust.

6.5.2 Academic leadership

Academic leadership was responsible for quality of the academic programs. The task required collaboration with HOS to devise appropriate strategies to implement changes in the academic programs and coordinate them. This partnership was absent:

We had a change of leadership. Before the change we had someone who was able to drive the academic programs but currently the academic programs are lagging behind. When we talk about academic programs we need people who understand the academic programs and the necessary funding needed to run programs in the different strands. We have money to get the resources but without the academic leadership nothing is happening. (HS102)

Staff argued that there was need for change in the current leadership. They believed that their academic programs suffered because there was little strong academic leadership driving the programs. One participant asserted: "There is no Curriculum Review Committee (CRC) to evaluate the programs" (PS101). Having a CRC would have greatly assisted the staff but because there was no such committee, staff felt the programs suffered. Staff members wanted:

A leader who is concerned about the academic programs, understands what the College needs otherwise the lead is not there and people down the line cannot really go further. It's a bottle neck... We have no input about what happens around here because much of it is done by the administration. We have an administration right now that seem to use a 'top down' style of leadership and there is little consultation – 'they know it all'. (HS102)

Collaboration was an important quality for leaders to have because of the various groups within the College that contributed towards making the academic programs function. At the strand level, the HOS were pivotal in providing direction for their particular strands. One of the HOS emphasized that:

As implementers of the curriculum, we are there and we know what problems students are going through. When we make recommendations at least, there should be an ear to lend, to take in the problems that students are encountering. It is a problem. We need the necessary facilities if we want effective learning and we need to be able to provide an environment that is conducive for the students' learning. (HS101)

These comments highlighted the important role that HOS played in their strands. However, it appeared that the role of the HOS was inadequately recognized by the administration. This was exemplified in the non-appointment of a HOS for the Social and Spiritual strand for the entire academic year. The strand members argued that there were applicants for the position; however, "no appointment was made and no formal notification was provided by the administration to the staff about the position" (PS103). As a result, the Deputy Principal academic became the acting HOS for the Social and Spiritual strand for 2004.

Lack of communication was another weakness in the current leadership team. Senior academics emphasized the need for better communication with the Deputy Principal academic because of the responsibilities they all had in conducting the academic programs:

Some responsibility is given out and it's shared and we are expected to play our part which is good. But then again, there are different individuals who have their own way of leadership which is something else. Some people are easy to approach and you can air your views, while others have a fence around them. So with different individuals, the approaches will be different and so there needs to be in place better lines of communication. (HS101)

These comments indicated a willingness among senior academics to work collaboratively with the Deputy Principal academic in ensuring the quality of the academic programs. However, there seemed to be some reluctance on the part of the Deputy Principal academic to accept alternative views on academic matters.

6.5.3 Care for staff and students

The value of care for the weakest should be an important value for leadership in a Catholic institution like Kabaleo. However, the participants highlighted a lack of care for students. Staff members stated that they were not valued: "This is a difficult issue and we have no choice. We

are instructed 'to take on the challenge' by the administration. We are not consulted in anything. We feel we are not valued' (PS101).

Extra-curricula activities were important and staff signed up to do these extra duties after hours and at weekends. This was time outside the official hours in the classrooms. While staff were paid, they were sacrificing their family time to meet these duties for the College. It was appropriate that they expected some form of support from the College administration:

There is need for the administration to do more to support the staff on duty. The female staff members feel they endanger their lives because when they report any bad behaviour of students, the response from the administration is slow or at times no response is provided at all. (PS101)

Furthermore, students felt that the administration did not really care about them and their welfare. They said: "In discipline, the leadership takes short cuts and don't follow procedures" (SS104). This was confirmed by the researcher during the observation of the College Student Discipline Committee (SDC) meeting dealing with the students' disciplinary cases. In that SDC meeting, most of the cases discussed involved female students and not one member of that committee was a female representative. Students commented that:

The leadership is orally driven in the sense that academic programs do not take priority. Instead, the College is money-driven because the leadership seems to forget that this College is a teaching institution not a business. For example, our need for appropriate accommodation facilities is not addressed; the vehicles do not benefit the students especially day students who find it difficult to get to lectures on time... It seems all our concerns continue to fall on deaf ears because nothing seems to be done about them. (SS104)

Concerns raised by students regarding their living conditions did not appear to be a high priority of the administration. Such an attitude left students with the impression that the administration inadequately cared for them. It seemed the focus of the leadership team especially the Principal was on the external developments:

It does not seem there is any leadership at all in this place. The Principal is so obsessed with numbers and buildings which he sees as evidence of growth and quality. If we have more students and more buildings being constructed, it means this place is growing and improving. (PA102)

These comments implied that there was a mismatch in the definition of quality education between the leadership team, academic staff, and students. The atmosphere of care was lacking and so staff and students felt alienated by being treated as resources used by the administration for their own ends.

6.5.4 Impact of the leadership on staff and students

Participation expresses a relationship of trust between those in authority and the subordinates. Staff and students found the administration to be domineering. This attitude was illustrated in a number of ways. First, when issues were raised, they were either "ignored or just not attended to sufficiently" (SS101). Staff meetings demonstrated this issue: "In staff meetings, no agenda items are prepared or circulated for staff meetings. Most of the agenda items discussed are the Principal's. All staff members are not recognized. They are overlooked and not attended to by the administration" (PS103).

Second, the Principal believed in the rights of ownership over duties of office: "He uses expressions like 'my dear staff, my students, my college'. The inspector picked this up during his visit to the College and commented on the use of 'my staff, my students and my college' saying that it should not be used" (PS103). References to "my dear staff" and "my students" gave the impression that the principal believed in his rights of ownership of individuals. In spite of reactions from staff and students regarding his patronizing attitude towards them, the Principal continued using the terms.

Third, the Principal placed more emphasis on the College as a business/company which drew considerable negative reactions from both staff and students:

The Principal treats this College as his business. The College has a balsa and vanilla plantation. Initially, the students worked on this plantation every week. They did not like this practice so they were taken off working on the plantation and left to study. Consequently the Principal currently employs workers to work on the plantation which according to the students is an expense for the College. (SRC)

There were strong feelings of resentment among staff and students because of the concentration by the Principal on the cultivation of resources in a plantation which was used to make money instead of utilizing the resources to improve the students' conditions and the academic programs. The participants questioned the priorities of the leadership team:

The Principal has embarked on generating money for the College and making it self-reliant by planting a plantation of balsa trees and vanilla. Initially he had the students working in the plantation three afternoons a week. The students complained and so he took them out and then put his son in charge of contract workers to work on the plantation making it look like a family business. (PS103)

Encouraging the College to be self-reliant was a positive aspiration; however, the issue seemed to be that in the process the value of education was compromised. There was a perception that educational goals were of less importance than the creation of a business-like institution. This

was an additional reason why staff wanted a change in the current leadership. Staff wanted to see the following qualities in the leadership team: "More consultation with staff in what happens at the College; leadership needs to value the staff and listen to them; involvement of staff in decision-making processes in the College; and future enrolments need to be controlled for quality" (PS104). Staff wanted to be appreciated for their contributions to the College. They wanted better communication between the leadership team and staff, and an atmosphere of care for staff and students welfare to be established.

The Student Representative Council (SRC) is a recognized body that is responsible for students' affairs. The SRC was elected by the students and represented them in various committees such as the GC and Student Discipline Committee (SDC) meetings. The SRC believed that their main role was to relay the Principal's message to the students. However, the SRC was frustrated because the students did not respect them. The students said: "The SRC is ineffective" (SS103). The SRC encountered problems communicating student concerns to the administration. There were strong restrictions concerning student forums: "Students are not allowed to hold any forums in the College" (SRC). When staff members took up students' concerns, even the staff seemed to have minimal impact on the administration because this was: "One man's decision because it is his company" (SRC). Students wanted more accountability from the leadership team: "We want to know about the school fees and the break down of how the money is spent because we pay the high school fees. We raise our concerns to the administration about improving the facilities but nothing is done" (SS102).

It appears that Kabaleo's fees were the highest of any PTC in PNG and had to be paid before enrolment. However, students were convinced that they did not get value for their money, since their facilities were inadequate. This was the reason why students wanted the administration to be more accountable. Consequently, the students had little respect for the leadership team: "Most of the students do not like the Principal of the College" (SS102 & PS103). This was because:

He does not assist the day students and this affects our morning presentations because we always have to wait for them. If he does something to help the day students then we will commence lecture on time and do our presentations on time. Other issues are lack of communication with students and banning student forums on campus. (SS101)

During the focus group discussions with the SRC, some of the students were hesitant to convey what they honestly thought of the College. They said: "Power rests with the Principal" (SRC). Besides, the students wanted the leaders to be fair in their decision-making and emphasized: "The leaders must put themselves into the students' shoes" (SS101).

6.5.5 Role of the Governing Council

The Governing Council (GC) is an important body for every PTC since it is a legal requirement of TSC. The GC has four annual meetings. Apart from the four meetings, the GC has other subcommittees referred to as Standing Committees such as the Finance or Student Discipline Committee (SDC). These sub-committees comprised five to six members and could be called to meetings at any time depending on the needs of the situation. Communication was a vital link between the Catholic Agency, GC and the College administration. Even with the Standing committees of GC, there were procedures to follow. The Chairman explained:

The channel of communication is that the Agency can direct the GC and the Principal/College administration to explain everything ... The other thing is that the subcommittees are limited in their powers so everything is recommended to the GC to be endorsed or overruled. (GC101)

The problems of overcrowding and the inadequacy of the College facilities were a concern to the GC. To address these problems, the GC asked the Principal, "to try and control the student enrolments, and look at the different categories of students and identify their status and those who have paid their fees" (GC101). However, there was another dilemma that they wanted to address: "There is also the demand for teachers from NDOE, so we have to balance that as well" (GC102). Clearly then, the evidence indicated that the GC instructions were ignored by the College administration as revealed in Section 6.2.1b.

The procedures adopted to appoint staff was another issue that the GC had to consider. This issue was critical because the College was accountable not just to TSC but also to the Catholic Agency. The staff indicated that there were problems with some staff appointments. Aware of the problem, the Chairperson of the GC asserted:

The general understanding is that the Agency has a very good policy. However, at times these policies can be overlooked by the Appointment Committees due to the domination of staff appointments by those HOS concerned. Also during the Appointment meetings, the staff applicants are not made known to the GC so it can be in a better position to recommend the staff we can have. The Agency is very concerned about this at the moment and is moving to make sure this policy is fully implemented when we come to make appointments. (GC102)

Another area of concern related to the fact that there was a larger proportion of non-Catholics on the staff than Catholics. The Catholic staff members felt that in a Catholic institution, the majority of staff and students should be Catholic. Thus staff alluded to the fact that even in the leadership team, there were two non-Catholics and only one Catholic and suggested something needed to be done about it. In response, the Deputy Chairperson said: "The GC has seen the

problem of having the domination of staff from other church agencies in the College and is concerned about this. We have now come to a 50/50 agreement in the Agency policy for appointment and the Agency officers will be there to make decisions" (GC102). The GC acknowledged that there was weakness in the Teaching Service Commission (TSC) Act on the power of the Agency in the appointments of key positions in the college and they were trying to strengthen the Agency's interests (GC102). In support, the head of the Catholic Agency said:

We expect the government also to be generous in a way that they allow us to look into appointments which we consider very crucial especially leadership positions... I trust the Principal in the way he appears to be a good Christian even though he is not Catholic. We accept a good Christian as a leader even though he's not Catholic. If he goes along with the Catholic Church's philosophy and if he's had experience for eight or nine years or even more so if he has been a deputy or teacher at Kabaleo. So if he's been trained on the job at Kabaleo and knows the Agency quite well, it has not been a problem. Among the deputy principals, it may not be the case. One is a Catholic, the other one not. I think there could be some problems but if so, we are prepared to tackle them. (CA101)

Staff appointments were a critical issue for the staff and the Agency. Concerns were raised about the impartiality of the appointments process because of the composition of the Appointment's Committee. In addition, GC meetings were expected to be conducted four times a year. Participation was further minimized by meetings such as the GC being postponed to days when key members including staff members were unable to attend because they were committed to other duties. Then there was the situation where people who had the right to attend were not invited. These may have been administrative oversights, but it was understandable when the staff perceived these oversights as similar to their experiences of "staff alienation from the decision-making process" (PA102).

Summary: There are several findings that could be generated from OLSHTC Kabaleo. First, the leadership team did not seem to display the right priorities in leading the academic programs. Second, the welfare of the staff and students was not adequately addressed by the College administration. Third, personal relationships and communication channels between the staff and students, and the Agency were inadequate. Finally, the leadership qualities needed to influence and lead the educational changes implemented in the College were disappointing.

6.5.5 Conclusion

This chapter has presented the qualitative data obtained through the interviews, focus groups, documentary analysis and participant observations from Case Study 1. The data were utilised to address in turn the four research questions. Data obtained through one-to-one interviews with personnel from the Catholic Agency were recorded and reflected the relationship the College has with the Agency. These data will be discussed and interpreted in Chapters Ten and Eleven.

CHAPTER SEVEN

CASE STUDY 2: HTTC MT HAGEN

Holy Trinity Teachers' College (HTTC) Mt Hagen is in the Highlands region of PNG. The Divine Word Missionaries, an Order of Catholic Priests and Brothers, established the College in 1957. The initial leadership of the College was invested in Dr Peter Meere a lay man and volunteer from Australia. Since then, the College has had religious personnel as well as PNG lay men as principals. At the data collection period, the Principal was a national lay man and the Deputy Principal was an expatriate De La Salle Brother (Anecdotal evidence provided by a key participant, 2004).

The College developed from an institution situated at Fatima near Banz in the Western Highlands province (WHP). The College was registered as Fatima Teachers' College. Due to the expansions of the primary and the secondary schools, the decision was made to move the Fatima Teachers' College to Mt Hagen in mid 1961. When the transfer was made for the College to be moved to Mt Hagen, the construction work at the College was financed by "Misereor", a funding agency of the German Catholics (CA201).

From 1963 to 1967, HTTC offered a one year training course and short Refresher Courses for trained teachers. In 1967 the first two-year course was offered with a total enrolment of 57 students from the dioceses of Wewak, Madang and Goroka, as well as from Mt Hagen (Anecdotal evidence provided by a key participant, 2004). Since then the College has expanded its boundaries beyond these four dioceses to accept students from all areas of PNG.

7.1 Context Data

While the Divine Word Missionaries established the College, other religious congregations have been involved in staffing the College. Some of these religious personnel have included the De La Salle Brothers, Sisters of the Holy Spirit, Franciscan Sisters, Christian Brothers, Notre Dame Sisters, and the Sisters of Mercy. The De La Salle Brothers have been at the College longer than most and have provided personnel for the College leadership team. During the data collection period, there was still a substantial religious presence in the College. These distinctive characteristics have been offered to provide an understanding of the context upon which this study was conducted. This next section reports the findings related to Research Question One which explored the quality of education being experienced in the Catholic PTCs.

7.2a Issues that promoted quality education

In response to the first research question, the themes were divided into two categories. The first comprised the themes that promoted the quality of education while the second contained the themes that mitigated the quality of education. Three themes promoted the quality of education: quality of staff, quality of students, and affiliation with DWU.

7.2.1a Quality of staff

HTTC had a total of twenty-four academic staff. Twenty had their salaries provided by TSC and four were paid by the Catholic Agency. The four paid by the Agency were the Religious Education (RE) staff members who were expatriate members of Religious Orders. Of the twenty-four academic staff, there were four staff members with MEd degrees. There were six academics completing their MEd degree programs through UOG and DWU. The postgraduate programs were important because when completed the staff with such qualifications could be highly effective in enhancing the quality of the programs. The Deputy Principal elaborated that:

The Bishop of Mt Hagen is sponsoring one of the staff members to do the Masters Degree in educational leadership in DWU. There are three lecturers doing their Masters Degree in UOG while there are two doing theirs through DWU. There are about 60% male and 40% female on the staff. That is the situation we have. (DP201)

The MEd degree offered by UOG was in general education while DWU offered two MEd degrees - one in Educational leadership and the other in Curriculum studies. While these programs were important there was a perception among the participants that not everyone who was undertaking the MEd programs would take up leadership positions and that subject specialization was lacking.

The College had its own staff development program provided for all academic staff. This program was conducted by senior members of staff. However, this college-based staff development program was not an on-going program. In-services or workshops were organized intermittently and conducted to address particular issues based on the needs of staff. The Deputy Principal explained:

We've had several workshops, participated in by strand members, the Principal and I as Deputy for professional development. We also had the syllabus presented to us and explained what it's all about, that is, the structure and how it is to be taught so that the leading strand for the reform is the Professional Studies strand. (DP201)

There were no documents sighted to illustrate that there was such a program in existence. In the strand focus group discussions, one participant reported: "All the strands are doing their own

thing" (PS201). In support, the students added: "Strands don't work together and we are affected negatively" (SS201).

The lack of academic leadership appeared to have caused divisions among staff members. One such example was a staff interest group called the "professional interest group" (PIG). PIG had only six members including the Principal and was formed by a particular group of staff because they were concerned that the College was slow in implementing the reforms. The focus was on understanding the reform especially the outcomes based education (OBE) and its underpinnings. The group leader emphasized that:

It is just out of interest that this group has been formed and no one is obliged to come. But so far, so good, we have done a lot of things. We understand that these lecturers who come to that group understand little about the reforms because outcomes based education is a new concept in PNG. It's an approach – it's a teaching approach. (PA201)

While the goal of PIG was educational, other members of staff viewed the group as exclusive and divisive. Without any regular formal college-based staff development program, the fact that in-service sessions, workshops or interest group meetings were conducted intermittently could be viewed as a positive move towards improving the quality of education.

7.2.2a Quality of students

The total enrolment of pre-service students was 256 and a total of 16 students for the DEPI program. There were 121 first year and 135 second year students as illustrated on Table 7.1.

Table 7.1 Student population by year and program groupings in 2004

First year students	121
Second year students	135
DEPI students	16
Total	272

The Deputy Principal offered the statistics: "More than 50% of the student population are from the highlands region, about 30% are Western Highlanders, a good number from the NGI region and Momase, and the smallest group come from the Southern or Papuan region" (DP201). The education policy stipulated that the entry requirement into PTC was grade 12 with a minimum of 'C' grades. However, according to the Principal of the College, this policy was not always adhered to: "Our ceiling is that from Open/University Centres or we might call non-school

leavers, we take 10 out of every 100. Now the fact is that, 100 will be school leavers and 10 will be non-school leavers" (PP201).

There were three groups of students enrolled in HTTC. The first group was the grade 12 graduates enrolling directly into the program from the secondary schools. The second group comprised non-school leavers from the university centres and matriculation centres, while the third group was the mature-age students returning to undertake the DEPI program. Most of these latter students were grade 10 school leavers.

The Principal noted some exception to the grade 12 entry requirement when he explained: "This year because of the need for teachers in the rural schools, the Provincial Government made an initiative to contact the National Education Department to see if grade 10 students from the Jimmy Valley could be accepted and so that was taken into account" (PP201). In 2004, HTTC enrolled ten grade 10 students from the Jimmy Valley. Jimmy Valley is one of the remote areas of WHP. The evidence suggested that there was minimal consultation with the Agency through the GC: "I don't know what the GC did but it looks like they just accepted the decision or they were not even consulted about it. I will have to look at the minutes of the GC" (CA201). These grade 10 students were accepted on the principle that they would return after graduation and teach in schools in the Jimmy Valley. However, what was problematic for the Agency was the idea that these grade 10 students would have to compete with grade 12 graduates in the same class. The Agency representative suggested that there should be a separate stream of grade 10 students only or have a different system: "I think that would make more sense. I don't believe it is good for them or for their class mates that they have to come in and be on the same playing field as the Grade 12 leavers" (CA201). These grade 10 students were placed in the same classes as the grade 12 students and had the same expectations demanded of them.

While acknowledging the differences between grade 10 and 12 students and trying to make a case for two separate streams, it was another issue when it came to the quality of grade 12 students. The evidence suggested that there were considerable differences in the quality of grade 12 students enrolled. Moreover, a senior academic staff (PA201) argued that since these students were coming from secondary schools, they have had sufficient content knowledge so all they needed in the teachers' colleges were more methodologies on how to teach. This idea was strongly contested by the Agency representative:

I think the blunt answer is, they don't. The knowledge that the Grade 12 leaver has is not sufficient knowledge. A teachers' college is not just adding teaching skills. I think it also has to build on foundation of knowledge so as to make sure that they really do know what they should have known at the end of Grade 12. (CA201)

The quality of grade 12 students continued to be a concern to staff in the subject areas like Science and Social Science. Staff indicated that some students performed poorly in these areas and suggested that a longer period of study would allow more time for these students to grasp the content.

7.2.3a Affiliation with DWU

A major area of reform in the higher education sector was the development of new structures to safeguard academic standards. The aim of this policy was to improve the quality of education and service to the people of PNG. The discussions about the affiliation process commenced in 1993; however, HTTC had made little progress. The Catholic Agency was in support of the process of affiliation not amalgamation: "Affiliation is all that we are thinking of at the moment. Amalgamation, we can look at once we see what is happening with SBC and I think DWU should think along those lines too to make sure they work it all out – with one first, before they take on more" (CA201).

The staff stated that there was very little happening about the affiliation process. No-one seemed to know either what was happening with the process or what to do about it. One member of a strand focus meeting posited:

This place needs to be transformed. Happenings will go as slowly as snails because there is no leadership in the college to work towards the affiliation process. There is no planner for the college year. There was a committee formed to work on the affiliation and to date, there has been no meeting. (PS201)

The Catholic Agency wanted the College to hasten the affiliation processes with DWU: "We have been talking about it for five years and people are far too slow in working at it. The Agency, the GC and the administration all want it, but nothing seems to be moving" (CA201). These remarks exposed a lack of leadership needed to facilitate staff towards the affiliation process with DWU.

While the Catholic Agency was in support of the affiliation process with DWU, it had some reservations. The Agency was concerned about the history, identity and future of HTTC and how these characteristics would be preserved in the affiliation process. These issues needed clarification:

The university is down in Madang and we are here in Mt Hagen and HTTC does have its own history, identity and future. In fact, it was envisaged eventually to become a university; it wasn't envisaged only to be a teachers' college. The founders did have the idea that it would be wider and we are already thinking of bringing up some DWU business courses and offer them here. (CA201)

The other issue of concern was the financial implications of the affiliation processes. Staff members were concerned about how the issue of finance would be handled and who would control the finance of HTTC. It was no secret that money would be part of the affiliation process, and the Agency certainly did not want to lose their funds in the process. The fear concerned if HTTC would be better off financially with or without the affiliation with DWU. This was well articulated by the Agency's representative:

We have our own funds for the College and we don't want to lose them. I think in the long run there won't be a problem and with the proposed university foundation to have funds, a certain amount allocated for one particular college or one particular task that is how foundation works. Once it is up and running smoothly that will not be a major obstacle. (CA201)

The Principal revealed that some of the staff members were concerned about affiliating with DWU. These staff members were non-Catholics and the Principal was concerned that, if the affiliation process went ahead, they would not want to serve under a Catholic university. Besides, there were muted reservations about the conditions for staff under DWU compared to the TSC conditions.

Affiliation with DWU would guarantee quality of programs because the College programs would have to be scrutinized for quality to meet DWU standards. There was no doubt that such a process would improve the quality of teaching and learning. Also, the quality of students enrolling in the College programs would be determined by the DWU selection criteria. This would mean that entry requirements would be at university level, and therefore better quality students would enrol in the future. Besides, the student enrolments would be conducted by DWU selection committee and this would curtail the highlands' practice of pushing their children and relatives in for enrolment. Furthermore, with such students, there would be considerably better opportunities for them to excel in their education. Students in one focus group stated that they would like to be affiliated with DWU because: "The affiliation process would give us more status" (SS201).

Summary: HTTC had not made much progress with the affiliation process. While discussion on the affiliation process commenced in 1993, it seemed that the administration had not made any notable progress on the process. The concerns raised during the data collection period were

indicative of a lack of leadership to take the process forward. Furthermore, there was fear among staff members about the change and they were not prepared to take the risks. The fear factor seemed to have been a result of poor communication from the leadership team about the affiliation process with staff and students. However, the reality would be that the quality of education and the academic standards would be enhanced by the affiliation process of HTTC with DWU.

7.2b Issues that mitigate the quality education

The second part of the research question was focused on those issues that mitigated the quality of teaching and learning. Three issues were identified: lack of resources and poor infrastructure, politics of culture, and incompetent leadership.

7.2.1b Lack of resources and poor infrastructure

In order to improve the quality teaching and learning, there must be adequate and quality resources for the staff and students. The College benefited from the resources that had been received from PASTEP's assistance in developing modules for the various strands so that both staff and students could have access to these resources. The Deputy Principal confirmed that the College had received resources and that these resources had been distributed directly to the strands. Students indicated in their focus group meetings that the resources in the library were "limited and outdated" and that the "resources for use in the Reform Curriculum were limited" (SS201).

Another major obstacle to the development of students was a lack of appropriate funding sources and infrastructures to sustain their progress. Funding had continued to be a major problem. Without the financial support from the National Government and the Catholic Agency, the College could not provide quality education. The Catholic Agency suggested that the College start to generate more income through different projects:

I think the college should really generate a bit more income. It should use its classrooms after hours and facilities during break time, and the college would be raising a lot more money this way but teachers are reluctant. With the culture of long holidays may be the teachers need it, but the facilities don't need a holiday. With a few people around to maximize the use of the facilities, I am sure they could make more money. There are people crying out for short courses. (CA201)

This change of mentality could mean changing the way "things have always been done in HTTC" (CA201). There had been arguments for and against the idea of running educational institutions like businesses. Self-reliance was a new concept for the College because the College

had continued to receive funding from external sources such as the National Government, donor agencies and the Catholic Agency and they had not been encouraged to be self-reliant. The current funding seemed inadequate to provide for everything that the College needed to offer quality education in the training of future teachers. The lack of resources, inadequate infrastructures, and qualified personnel in the academic and administrative staff were some of the visible signs of the lack of funding in the College. The representative of the Agency elaborated: "The RE lecturers are paid by the Agency and a proportion is paid for ancillary staff and maintenance but it is not a great amount. This is deliberate to ensure that the College tries to manage with limited funds because that is the reality" (CA201). The issue of funding was important to ensure the quality of teaching and learning was provided. The study found that the funding was inadequate and therefore this affected the quality of the programs and the services provided to the staff and students.

7.2.2b Politics of culture

One of the peculiarities of HTTC is the Highlands' culture whereby parents and relatives of students applied considerable pressure on the College administration to enrol their children even when parents/guardians had already been informed about the lack of space. The administration had to exercise vigilance regarding the fairness of the enrolment process. Staff members believed that the Principal was inconsistent. Parents and guardians took advantage of the situation forcing their way into getting their children and relatives enrolled in the College. There were also other deleterious practices concerning enrolments of which the Principal was aware:

People from Enga and the Southern Highlands use the local people and bribe them because of my knowledge of them and their knowledge of me. I think they use 'backdoor' deals. They are the ones who pressure me. But when you ask them, 'Is this your child'? They say 'yes, this is my child'. But in actual fact, we find out later that that is not the case. So they have been bribed... in fact there's evidence of these kinds of things happening...These are the very ones who will come knocking because they have already been bribed. (PP201)

The other issue that compounded the situation with enrolments was a language problem. Pidgin was the medium of communication with the parents especially those who had not progressed any further than the primary school. However, there were variations in the Pidgin expressions adopted by the people in the four different regions of PNG. Knowledge of this dilemma assisted in understanding the complexities of the pidgin language. Having said that, one could appreciate the dilemma the Principal was in when communicating with the parents/guardians of the highlands students. This situation was further complicated by parents bringing vegetables and meat such as live chickens to give to the Principal in exchange for favours. The Principal was from Madang which was on the coast and communication in Pidgin with the highlanders was

challenging. The Principal admitted: "They use more confused slang and paradoxes, and I find it very hard to understand them" (PP201). One example was when the Principal used the Pidgin expression, "bai yumi lukluk" (we will see), the highlanders interpreted the expression to mean "there is room so we will keep coming" (PP201). So the Principal was advised to tell the parents that the "door was closed" which meant the enrolments were closed. These were some of the practices that parents/guardians of students adopted because they were desperate to get their children enrolled. Moreover, there were some staff members who exerted considerable influence on the enrolments making it difficult for the Deputy Principal.

Highlanders are more aggressive as opposed to people from the coastal areas of PNG. The remarks above highlighted the need for a more assertive person in the leadership role to deal with the Highlanders and their culture. The situation with the student enrolments in HTTC further highlighted a critical issue – the issue of culture. The cultural aspect of a particular context which in this case was the highlands region of PNG had to be understood for accurate interpretations. These people wanted their children educated so they were prepared to offer large bribes to achieve their children's enrolment. The students did not necessarily want to become teachers. They wanted any type of tertiary education. This was pointed out by a representative of the Catholic Agency:

Over here locally there was a dispute at the beginning of the year about enrolment not about money. They were just not eligible but they were quite prepared to pay the money to get anything. I don't think they really wanted to be teachers. They just want to get tertiary education so if we were in a position to provide something to get a diploma they would pay. (CA201)

These comments further explained why it was important to have ethical leadership to closely monitor and provide clear directions for staff and students during the enrolment processes. With ethical leadership, malpractices such as those identified in the comments above could be minimized.

7.2.3b Incompetent academic leadership

Leadership is a critical issue and will be discussed in greater detail under research question four in Section 7.5. However, in the second part of question one, the focus is specifically on the leadership provided for the academic programs. In the academic programs the key people responsible were the HOS. There were five strands and each strand had a HOS. These HOS were expected to oversee the academic programs, curriculum resources, assessments of their respective strands, and organize and/or conduct in-services for their strand members. The evidence suggested that there were problems with the academic leadership at the strand levels.

The Principal emphasized the importance of the CRC in the College. The CRC was responsible for the academic programs to ensure there was quality in the delivery of the programs. However, the Principal admitted that there were not enough meetings with the HOS. The minutes of these CRC meetings were supposed to be provided to the Principal but this was not occurring. Even when these minutes were requested by his office, only two strands produced these minutes. The others failed to comply. One of the participants in the strand group meetings asserted that:

There has been no academic leadership from the HOS. We are just teaching the same units for Program 2000. For reasons unknown things were just left like that. In allocating the units, we were told by the HOS; 'I don't need to worry about you two ladies because you know what to teach, however, this person (referring to one of the lecturers in the strand) doesn't prepare'. (PS201)

In the preparation for the shift from the three year program to the trimester, considerable content matter needed trimming. Two lecturers commented that: "There were very few meetings to prepare for the trimester program in the College which was also the case in the strands. There were no proper organizations and decisions were made haphazardly. Introductory meetings were dominated by a few resulting in things being left to happen with no fruitful outcomes" (PS201).

This suggested that academic leadership at the strand level was lacking. In one strand, they had "only two meetings, no workshops or in-services. There were no consultations in decisions and no responsibilities given to strand members" (PA201). Furthermore, the strands were not well organized resulting in some strands not teaching the methods courses in their strands. This situation led one lecturer to assert that "students are not getting the quality education that they should receive" (PA202). Overall, it seemed that the academic leadership of the College was weak:

Academic leadership is a weak area and the staff members feel the Principal needs to assert himself more as an academic leader in setting directions, maintaining and sustaining quality education for the College. What we have here are competent lecturers who are able to work and provide educational service as best as they can without that leadership. Sometimes during staff meetings this is what the HOS and lecturers ask for. There are a number of things that I feel have not been put in place for instance, the revisions and updating of our policies and so forth. That's been sitting there for the last three years. I am already burdened by the work that I do so somebody has to take the leadership there and it's not really moving. (DP201)

The situation had created concern among some of the lecturers especially those who had been in HTTC for a considerable period of time. These staff members were convinced that there was minimal direction provided for the future of the College. Even the Catholic Agency was aware of these concerns. It seemed that the biggest problem for the Principal was his notable absence

from staff meetings, his office and community functions at the College. As one academic staff remarked: "He is everywhere else except where he is supposed to be" (PA202). This remark summarized the views of the majority of the staff. Discussions with some of the academic staff led to the conclusion that the College leadership was inadequate.

7.3 PASTEP innovations

This section presents the findings of Research Question Two which explored the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges. HTTC benefited from the PASTEP innovations from late 1999 to the end of 2004. One of the major objectives of PASTEP was to improve the quality of teacher education and make it relevant to meet the requirements of the education reform agenda. There were two parts to this program, educational resource development through a system of Long and Short Term Advisors (LTAs & STAs) and an infrastructure refurbishment program. It was anticipated that in addressing these areas of need, this would generate beneficial and measurable outcomes for the administration, academic staff as well as the students.

7.3.1 Curriculum resource development

The participants acknowledged PASTEP's contribution to the development of the curriculum resources. These resources were beneficial to staff and students. Moreover, they were encouraged to know that some of the national lecturers had put the materials together with the assistance of PASTEP.

The data suggested two key positions held by the academic staff on the quality of the materials developed. The academic staff who advocated the first position accepted the materials and used them with little critical evaluations of the materials used. In contrast, the academic staff who supported the second position used the material to teach but they were objective enough to critique the material. Therefore the findings on the curriculum resource development in HTTC are presented under those two categories.

The first position presented the findings which supported the members of staff who accepted the curriculum resources as they were presented in the modules. The study found that these staff members were comfortable to receive the materials and utilised them in their teaching. The situation was well summarized by one HOS:

In terms of students text books, PASTEP helped produced a lot of books and these are the books that we are using at the moment. It's very helpful to the teachers, everything is written, it's prepared so what you do is just take the students through the book and the activities are also given in the book. I see it as a great resource. (HS201)

The lecturers utilized the materials as they were presented in the modules. Apart from the modules that were developed for the various subjects in the strands, disks were also supplied by PASTEP. Furthermore, PASTEP provided a staff computer laboratory with printing facilities. These materials were developed by PASTEP to assist staff in their teaching and learning processes. Having the materials in the Strand offices was one thing but actually using them was another matter. That was why the Principal commented that: "I am making sure that those materials are not just left on the shelves but are used for courses" (PP201).

One HOS further emphasized the importance of having the resources. The curriculum materials were reproduced and distributed to students for the units taught in each trimester. One of the HOS justified the benefit of these materials:

The production of the books and resources were the most obvious help. Now the lecturers just take the books for printing and give them out to the students and say these are books that we are going to use in this unit and when the next unit comes we are going to do the same. I think that is the major benefit. (HS201)

The materials produced and developed by PASTEP were utilized by the lecturers without alterations from some of the academics. Even the Principal registered his concern when he commented that "they are just taking what is on the shelf and just giving it out without sitting down and thinking through the materials" (PP201. Such practices were counter-productive in the pursuit for quality education.

The second position advocated a more critical outlook on the educational materials that were developed by PASTEP. In presenting this second position, the researcher was not advocating that the first position was better than the second or vice versa. Rather, the aim in presenting these two positions was to give credit to both positions as the researcher found them in HTTC. The participants of a strand focus-group meeting revealed that they encountered problems when they taught using these materials:

We found that the content of the resources is scanty and the quality is poor and inadequate. A lot needs to be done to improve the quality of these resources. Alone the resources produced by PASTEP are inadequate and therefore need other text books as resources to be used side by side to complete the work. (PS201)

Participants added that:

In Language, there were different types of texts and so there were two modules to be covered in a trimester. Now the quality of these modules is shallow in content. This means when these units were taught prior to PASTEP innovations there were whole books and chapters to cover some of these areas and now within the PASTEP modules, some of these same areas are contained in a paragraph or two, that is all, which we are saying is very shallow and of poor quality. (PS201)

Some lecturers offered another perspective. They indicated that they did not use the materials slavishly. Rather, they were able to critique and evaluate the quality of the content as opposed to the first position.

7.3.2 Staff mentoring and professional development

Staff professional development was an important component of the PASTEP program. In HTTC, there was a PASTEP consultant (LTA) based in the College and working with the HOS of the Language strand as well as other HOS from the other PTCs in developing the resources for the Language strand. In the strand meeting, one of the participants commented that there was minimal consultation with the strand members regarding the modules that were being developed for the strands: "In HTTC, the consultant and HOS for Language prepared resources on their own without consultation with the rest of the strand. The quality of their work was poor because there was consistent need for expansion in the content area" (PS201).

Such remarks highlighted the importance of consultation and collaboration with other strand members in the production of these resources. The comments seemed to have created a negative impact on the rest of the staff members. Furthermore, these comments led to a lack of ownership in what was produced in the resources, which was reflected in the earlier comments made by the strand members (PS201). In contrast, the experience in other strands was positive:

The lecturers in the different subject areas in the strands, like Expressive Arts as well as Social Science and RE had their workshops. So I think it was good because they got the people who are working on the ground to go, meet and discuss the kind of content that should be in the books. It was very helpful at the same time helping the lecturers to enhance their skills in curriculum development. (HS201)

In general, experiences shared by the participants reflected mixed outcomes in the development of the curriculum resources with the LTAs. Some strands had positive experiences while in others, concerns were raised about the lack of consultation by the HOS with the strand members in the development of resources.

7.3.3 Infrastructure development and upgrading

The infrastructure development of PASTEP in HTTC was the refurbishment of College buildings. These included the dormitories, dining hall, library and other buildings that were renovated in varying degrees. This particular component of the PASTEP innovations was massive because of the costs involved. The Principal confirmed that: "In terms of maintenance, we were lucky that PASTEP helped us a lot with our maintenance because maintenance is a very costly activity" (PP201). HTTC had adequate facilities for its students.

Library: The library was an important building as it provided the centre for learning. The library had been renovated by PASTEP and it was spacious with a conference room. In the three student focus-group meetings, students stated that the quality of the resources in the library was inadequate. Students commented that the books were outdated and there was need for more recent books to be ordered: "PASTEP has supplied the College with resources and there are new books in the library but students don't have access to these books" (SS202). The main reason seemed to be that the resources in the library were inadequate to cater for the pre-service and DEPI students. Moreover, the three computers in the library for students' use were inadequate to accommodate the student population.

Lecture rooms: The lecture rooms were adequately furnished for staff members' and students' use. There were blackboards, tables, desks and chairs set up in the rooms. One of the most notable aspects of the lecture blocks and all the buildings on the campus was that everything had security bars and grille doors all around them. Being in the highlands and in particular Mt Hagen, there was a high security consciousness among the college community. The pre-service students were out for the College practicum so the rooms were not utilized except for the lecture room that was used by the DEPI students.

Dormitories: Observations of the four female dormitories concluded that the facilities were adequate and students kept them clean. In each cubicle in the dormitories there were tables and chairs for two female occupants. The dormitory facilities were adequate and students were contented with what they were provided. One improvement that would need to be made was to improve the lighting system for study purposes.

The quality of the renovations done in the male students' dormitories was mixed. The students commented that they were appreciative of the maintenance completed in the male dormitories. At the same time, they stated that the responsibility was on the men to care for the facilities. However, one of the ablution blocks had been closed since the PASTEP renovations. One of the male students elaborated: "The work done on the ablution block for the male dorm 1 has been a

problem and locked ever since. There are difficulties with the water pipes and taps in the ablution blocks" (SS101). This meant that the students in that dormitory were using other facilities in the other dormitories. The representative of the Catholic Agency remarked:

I certainly heard about the dormitories, they were more the classic case. When it seemed obvious what PASTEP had in mind, I believe the staff and the Principal tried to intervene to say this is not practical and they were simply ignored, even by the PASTEP people who were here. These matters were raised but they were ignored. (CA201)

The remarks highlighted some of the problems encountered with PASTEP and their construction company during the refurbishments of the College buildings.

Mess and kitchen: The mess and kitchen were also part of the renovation program under PASTEP. Observations made of the kitchen contradicted the many positive comments made by some of the participants about the entire renovation program. What the researcher observed in the kitchen raised questions about the quality of the construction, and the practicality of the facilities. Clearly, the issues of the quality of the constructions, the materials used, and the practicality of the set up were poorly constructed and a disservice to the kitchen staff and subsequently to the students (Journal entry 2/8/04). There were incidents reported by the kitchen staff involving the selling of the College materials which were of better quality than what was used in the PASTEP constructions:

These Construction people just came and took stuff out of the College. They brought them to some warehouse in Mt Hagen town and sold the stuff. Some of the good things from the College like the strong doors and cupboards were sold and they took the money. They just came and told us that they were following the project plan and did not listen to us. They did not do a good a job. For example, they put in the laths for the storeroom which were not strong and secure so that when we are around working in the storeroom and the kitchen, then it's okay. However, when we went home, people could easily break in and steal the entire foodstuff. They put in the louvre frames and louvre blades in the kitchen and these are all broken. That was the same situation with the water taps in the kitchen. They replaced the old taps that were strong and of quality with cheap materials and these are all broken. (KS201)

Observations of the kitchen confirmed the damages. The project ended leaving the College with huge bills to remedy the damages. This situation raised the issues of consultation and collaboration with the Agency and the College. PASTEP and its construction company needed to consult with the College about their needs and how these needs could have been addressed. Besides, the people in the College knew their situation and their needs better than outsiders, hence, the importance of consultation. The Agency representative summarized the situation appropriately: "This was our fear when we saw it going on. We were afraid that the fixing up will end up costing us money. It really raised serious questions about the whole program"

(CA201). Complaints were also raised about the facilities provided for students at the mess. The evidence indicated that the recent renovations in the mess and kitchen by PASTEP and its construction company were poorly constructed.

Information communication centre: The latest infrastructure development was the "Information Technology (IT) or Learning Centre (LC)" built by PASTEP. One of the PASTEP Short Term Advisors (STA) explained the importance of this facility:

The IT Centre in the teachers' colleges resulted from a study conducted two or three years ago by an AusAID team investigating the computer skills, levels and needs in the teachers' colleges in PNG. This project was part of Australia's commitment to the World Bank war against poverty. (STA201)

The PASTEP STA explained that the IT Centre would employ a manager who was familiar with the College and the teaching staff. The manager would be supported by a technician whose role was to ensure the hardware was in full operation. The STA elaborated: "Every Centre has a standby generator and we do have a power condition to make sure we get 240 volts for our equipment. Each computer has its own small setup. At least they are all networked, 36 work stations in this Centre and a server" (PASTEP STA).

The Centre was an important asset to the quality teaching and learning in the College. Prior to the opening of the Centre, a demonstration of the facilities and their many functions was conducted by the STA for the staff members both academic and ancillary. The facilities were opened and the keys were handed over to the Principal of the College by the PASTEP STA on September 4th 2004 (Journal entry: 04/08/04). In thanking PASTEP, the Principal appealed to the staff and the community to care for the facility:

Now the ball comes back to us, either as an ancillary staff, teaching staff, student or community member. I feel it's important that all of us feel the importance of contributing to the care of the items. Firstly, my concern is security and some lighting system to make sure that the building is under lights. So two days ago I spoke to the PASTEP STA who agreed to do that. Now, in terms of helping the community that Centre will have a lot of use. (PP201)

Another responsibility for the College was the sustainability of the facility. This meant the College administration had to find ways to generate funds to maintain the Centre. With the closure of PASTEP, the College had to generate money to operate the facility. This task provided a new challenge as purported by a member of the Agency:

That will take some imaginations of the College leadership to generate some income, not only in the Computer centre but on all the resources and facilities we have here even in tertiary and secondary schools all over the country. There are a lot of wasted resources there. (CA201)

This was one of the greatest challenges that the College leadership and its staff had to initiate - the issues of ownership and sustainability.

7.3.4 Care for PASTEP infrastructure and resources

In general, there were two components to PASTEP innovations. The first component was the actual infrastructure development and refurbishment of the College facilities, the development of curriculum resources and the provisions of all the library resources and staff development workshops. The second component was related to the sustainability of all that PASTEP had initiated in the pursuit for quality education in the College. The issue of sustainability was a critical issue for PASTEP as demonstrated in the minutes of their meeting (Minutes: 24/10/03). This prompted the Principal to emphasize that:

The important thing I often see here is the need for tight security and we've got tight security. The second thing is using staff meetings and student meetings to try and get across to them the importance of taking care and respect for property and materials. Now, the other important aspect is to ensure that we have this inventory officer. Brother is currently doing that for us in terms of recording all the materials. (PP201)

The participants acknowledged that so much funding, professional and technical support, and time provided had been expanded to improve the conditions of the colleges. The test was whether the facilities would be maintained. The Principal offered the following reflections:

PASTEP started before I came. The contributions that they have made in terms of renovations, facilities from dormitories to staff houses to lecture materials – computers, white boards and markers, water tanks, and power situation, generator, computer labs that they are giving us, I say thank you very much to them while at the same time asking – how can I look after them? (PP201)

The Principal revealed that there were many things that PASTEP had provided that had been left all over the College without appropriate instructions concerning their use. There was no system established to check and monitor the use of these resources. Furthermore, the Principal admitted that the administration had not given any thought to revisiting the availability of the materials. As a result, he was unsure whether the resources were available for use or whether things had been stolen. This area needed serious attention from the College administration because of potential abuse by staff members.

7.3.5 Lack of consultation

PASTEP had made valuable contributions in most areas of the College. One area that seemed to be a sensitive issue for the Catholic Agency was the refurbishments of the College buildings. The Agency constructed the buildings and owned them. Therefore, the fact that PASTEP through negotiations with NDOE did not consult the Agency was unacceptable. This situation was appropriately articulated by a representative of the Agency:

The Agency, meaning the bishops were never really consulted as far as I know and that is part of subsidiary. We have a representative, we have the chairman of the GC and we basically trust the GC to make these sorts of decisions without interfering all the time. So I guess that is how it works. (CA201)

The situation was such that it was difficult for the Agency to participate even when the Agency did not approve of what was happening:

Had the Chairman or the Principal jumped up and down, more things might have been different, I don't know. If the Agency saw things we did not like and if we had simply stepped in at that point and it was all off. Would that be leadership, or is it interference, hard to say? (CA201)

The Agency emphasized that if PASTEP had used a criteria similar to the Incentive Fund where the person/group conducting the project took much more responsibility, it would have been helpful.

Summary: The general perception of the participants regarding the PASTEP innovations was positive. Participants acknowledged the huge contributions made by PASTEP through the various programs that were conducted in the College. At the same time, there were a number of other controversial issues that emerged in the process: First, HTTC had not created a monitoring system to ensure the care of the resources and facilities established by PASTEP. Second, in the infrastructure development and refurbishment component of this project, the process of consultation between PASTEP, NDOE and the Catholic Agency was conspicuously lacking. This situation left a negative impact on the Agency.

7.4 Curriculum

This section presents the findings of Research Question Three which explored how the curriculum in the teachers' colleges was perceived by the lecturers, students and recent graduates. With the implementation of the education reform in 1993, came changes in the curriculum of the PTCs. The discussions focused on five areas: two-year trimester program,

diploma in education primary in-service (DEPI), special education, assessments, and the college practicum.

7.4.1 Two-year trimester program

The two-year trimester diploma program was implemented in HTTC in 2003. The College did not readily accept the program. The Principal at that time had reservations about introducing the trimester program:

There was a need to form teachers as well as just teach them. The three year program was more likely to achieve that and the semesters enabled a lot more depth to go into subjects. So these were his reasons in opposing it and we generally supported him. The new Principal probably for a lot of reasons had to go along with the rule that we had to change into the trimester and so we have done it reluctantly for those reasons. The danger is that it is a much shorter course than the former. (CA201)

In preparation for the shift from the three years to the two years, staff members needed to work collaboratively to implement the change. However, this did not occur:

There were very few meetings to prepare for the two-year trimester program in the College. This was also the case in the strands. There were no proper organizations and decisions were made haphazardly. Introductory meetings were dominated by a few resulting in things being left to happen with no fruitful outcomes. (PA202)

This would suggest that the preparation towards the transition was not ideal. In the analysis process, the findings relating to the trimester program were grouped into two categories: enabling and disabling factors.

Enabling factors: There were two issues that staff identified as advantageous to the trimester program: Cost-saving measures and mass production of teachers.

(1) Cost-saving measures: It was relatively inexpensive to train more teachers using the twoyear trimester program than the original three-year program. Parents were happier to pay the fees because they knew that the training was for only two years; then their children could earn money. These children could in turn assist their parents in paying fees for their younger siblings:

Advantages, in terms of funding, will cost less to feed a student for two years...This is really in relation to the collection of college fees. Now we have more emphasis on parents to pay fees. Fees are increasing and the government contribution is decreasing and so, maybe this is a good thing for the continuity of the College. (PP201)

(2) Mass production of teachers: The College was producing more teachers each year to fill the many vacancies that were evident in the schools. This issue was in line with the goal of NDOE to produce more teachers within a short period of time for the school system. The Principal asserted: "With the growing population, the demand for teachers is so high that if the training is too long, it will slow down that process" (PP201). While this may be viewed as an advantage, the same issue could also be a disadvantage in terms of the quality of education provided by the College which could subsequently reflect the quality of graduates:

There is a strong motivation to study because one has two years to complete the program. Therefore the students are challenged to make good use of the two-year period. There is a greater emphasis on self-motivation because students have to make their own choices about study rather than merely obeying rules like in secondary schools. (SS203)

Achieving one's ambition of becoming a teacher after two years of training was a strong motivation for some students.

Disabling factors: The study identified two issues as disadvantageous to the two-year trimester program: short course duration, and quality of the graduate.

(1) Short course duration: The academic staff experienced enormous pressure trying to get all the academic requirements completed by the end of the trimester which was about twelve to fourteen weeks. The teaching content was perceived to be shallow and comparatively less than what they were able to teach in a semester of eighteen to twenty weeks duration. One of the students in a focus-group meeting asserted that:

Content provided is shallow because there is inadequate time for reflective teaching and learning. Content is less because of the short trimester. Often we don't complete the work before the trimester is over. For example, we may be halfway through a module and the trimester is over so we do not complete the work. (SS202)

Furthermore, the issue of time affected the inadequate preparation for the students prior to their practicum. The students believed that the two micro-teaching sessions they had prior to their practicum were inadequate. Consequently, some of them were "nervous, doubtful, unsure and felt inadequate" (SS201) about teaching and they did not like that feeling. The issues highlighted by the students were important for the College to address so they could improve the quality of the program and subsequently the quality of their graduates.

(2) Quality of graduates: There were concerns raised among staff regarding the motivations of students. There were subtle comments about whether students were really interested in teaching or whether they just wanted tertiary education not necessarily to become teachers:

The program is designed to 'churn' teachers out but maybe the question that people should be asking is not only about the quality but also the perseverance of the teachers that we graduate. There is always the question of how many people would really want to be teachers anyway and how many are simply wanting some form of tertiary education to go on to other things. But if they really wanted to be good teachers, then it does seem to me that the present system is not helping them to do that. (CA201)

The quality of the graduate did not depend on the trimester program alone but on the quality of the program. The Principal agreed that a concerted effort was needed to ensure the program nurtured quality graduates:

The College has progressed well since implementing the program, but in terms of the real task of putting the courses, timeframes and outcomes base indicators in place, there's nothing. It is only recently that the leadership is working with teacher education. In the five-year management education development plan, we are still using the objective based *Program 2000*. With the overall teacher-training program, when we came up with the new reform, the teacher-training program in the new reform is not given any of the text books. In the national management plan of education, there's nothing mentioned about teacher education. (PP201)

The College and NDOE had a considerable amount of work to be accomplished in the implementation of the trimester. In the discussions relating to the two-year trimester program, staff continued to make comparisons between the two-year trimester and the three year diploma program. Generally, on the issues of course duration and quality of graduates, the Principal stated that:

One advantage of the three-year diploma program was that there was enough time to cover the contents required to properly prepare a primary school teacher... Another advantage allowed for students as individuals the opportunity to seek more assistance in terms of becoming a teacher and properly grasping the units of a program, while at the same time it allowed for a good spread of practice teaching opportunities. (PP201)

Regarding student discipline and poor academic performance, there was an opportunity for the students to learn from their mistakes and improve. As a result, the students were more mature in their behaviour towards the program. These comments were supported by a recent graduate:

There was adequate time provided for weekly teaching in the schools for the first year students. In the second year, we had rural experience in the schools for the four weeks and in the third year we had weekly teaching, before the rural experience of four weeks in the schools. As a result, I was very confident when I graduated and commenced teaching. (RG201)

It seemed the graduates of the three-year program enjoyed the program. Through the program they developed confidence in themselves and their teaching. A senior teacher of a primary school concurred: "Our experiences have been that teacher trainees coming out of the three year diploma program had lots of teaching experiences in the three years which made them confident in teaching. They had sufficient time for preparation" (ST201).

In the three-year diploma, lecturers were able to cover more in-depth content because the content was spread over three years which was six semesters. Electives were offered. Apart from the theory and content, the practical aspect of training was appropriately covered. Over the three years, students did micro-teaching, weekly experiences prior to College practicum with rural experiences in the schools (PS201). However, in the two-year trimester program, staff members experienced difficulties in the preparation of students prior to their practicum and this inadequacy was having a negative impact on the students. Thus staff members needed to work through the trimester program to utilize the program for their own benefit and bring out the best in students.

7.4.2 Diploma in Education Primary In-service (DEPI) program

HTTC introduced the DEPI program in 2002. The lecturers from PNGEI moved to Mt Hagen to teach the course, and accommodation was provided within the College dormitories, as well as at Mt Hagen Technical College and the Highlands Agricultural College. However, in 2004 the GC made a decision not to provide accommodation for DEPI students following problems encountered in 2002. As a result, the sixteen students who enrolled in the DEPI program in 2004 had to reside outside and commute to lectures. HTTC was considered to be the appropriate college to conduct the DEPI program for its primary school teachers in the highlands region:

HTTC has taken this program as a full course. The major contact points in the Provincial Education Office are the senior inspectors. I visited all the provinces except the Southern Highlands and Eastern Highlands. Our plan/strategy is we take teachers from Simbu, Western Highlands, Enga, and the Southern Highlands. (PA201)

The DEPI program offered at HTTC was servicing all the highlands provinces except Eastern Highlands. That was why the coordinator of the DEPI program believed he needed to make strategic planning for these students:

There are some plans not very firm plans at the moment still in the thinking stage only. We probably have to ask for funds for extra dormitories, that's the only way we can go. Referring to this issue, I have been negotiating with Mt Hagen Technical College. I saw the Deputy Principal if they can allocate one dormitory for us for the whole year. The students pay us and we pay the College, but that did not work out well. So for next year we will still take on day students. (DEPI Coordinator)

In the analysis of DEPI, the findings were grouped into two categories: enabling and disabling factors. Enabling factors were those that supported the program while disabling factors were those that impeded the program.

Enabling factors: There were two issues identified: Support, and local access teacher upgrade.

(1) Support: There was support for the DEPI program. The coordinator acknowledged that:

The support is there – the Administration and the GC are very supportive with the program. I have sent copies of policies and papers to the Bishop. The Church is aware of the situation so with the blessing of the GC, the program has started. So we start with sixteen day students and the program will go on for a sixteen weeks block. (DEPI Coordinator)

(2) Local access to teacher upgrade: Most of the students had been teaching for more than twelve years. Access to DEPI was a welcomed opportunity. The students admitted that completing the DEPI program in HTTC was easier and less expensive than having to travel to Port Moresby. Students acknowledged that the program helped them to enrich their knowledge about the reform curriculum. This in turn would eventually lead them to upgrade their teaching certificates. The course was seen as a "door opener" for some pursuing the next level in their education career. One senior teacher who had been teaching for over thirty years commented on the program:

This DEPI program has helped me a lot because I have been teaching for over thirty years. Now through this new curriculum which has been introduced I feel that it is something new to me. In order to be with the new developments in the system I am most grateful that the lecturers are teaching us so that we really understand the new concepts of the new curriculum. (DEPISt201)

Disabling factors: However, there were some general issues that needed further negotiations with the different parties to conduct the program. The four main issues were: Lack of staff, quality of students, short course duration, and lack of facilities and resources.

(1) Lack of available staff: There was reluctance from the teaching staff to teach the DEPI program. Most staff saw it as an extra burden on their teaching load. One of the DEPI staff explained:

In the first block, we had six lecturers engaged in the teaching with one staff member taking three courses because some lecturers were hesitant to teach the DEPI students, because they considered this an extra load for them. For the second block, we had about eight of us teaching. So we had to convince the Principal to provide incentives otherwise

the program could not continue. When the incentive of K300.00 was approved for the lecturers who were involved in the teaching then the interest grew. (DEPI Staff)

Apart from the lack of staff for the DEPI program, there was also the issue of the curriculum. HTTC was teaching PNGEI units in its program: "We don't pay PNGEI. We only use their books. We are like their study centre. We use their books so the diploma will be a PNGEI diploma not HTTC" (DEPI Coordinator). Part of the reason for this situation was because HTTC wanted to commence the program too soon. If they were to write all the units before offering the program, it would take much longer to commence DEPI. One of the problems encountered in the current arrangement with PNGEI was the constant communication which proved costly for the College. The ideal situation was for the coordinator to have the College lecturers write the units so that the diploma would be HTTC. This did not occur.

- (2) Quality of students: The selection of students was initially done by the College. However, the coordinator was handing that responsibility back to the Provincial In-service Committee: "Now that the new program has been established, we give the selection back to the provinces to do the selection. They select the teachers, give us the names and when these teachers are released from the provinces, they come to attend the course" (DEPI Coordinator). The major requirements for students applying for the program were that they were serving teachers in the primary schools with a certificate in teaching regardless of age or number of years in teaching.
- (3) Short course duration: The students found the course duration a strenuous challenge because of its short course duration: "The program could be conducted for the full year instead of half or quarter year which results in squeezing everything and leaving some activities untouched" (DEPISt202). One member of staff concurred: "Students are very, very happy. They are excited and they are learning many things even though the time is very limited. I pushed for two semesters but that did not work out. So within the short time they are learning many new things especially the reform" (DEPI Staff). However, these students believed that the content of the reform curriculum was narrow. There was insufficient knowledge provided on how to prepare lessons. In addition, the students wanted computer skills included as a new unit in the program.
- (4) Lack of infrastructure and resources: These students wanted the College to provide accommodation for them and "for students in the future and increase the DEPI fees" (DEPI students). Moreover, they wanted the National Education Office and the Provincial Education Office to subsidize the teachers' studies.

7.4.3 Special education

Special Education was first introduced in HTTC in 1995. The first lecturer was Mr Michael Andrews, from the Volunteer Service Organization. This course was sponsored by the Callan Services for the Disabled. During the data collection period, the Special Education lecturer was a national occupying a TSC funded position.

The goal of Special Education in HTTC was to train teachers and equip them with special teaching strategies, knowledge, skills and attitudes for children with special needs and disabilities. Children with special needs were those with learning difficulties, language difficulties in reading, writing and numeracy skills. In the past these children were streamed according to their academic results. They were subsequently forgotten in the class as they were on the fringes of the class and in society because teachers did not have the skills to help them.

There were basically two units offered in Special Education. These were: Introduction to Special Education and Inclusive Education. The Introduction to Special Education unit concentrated on the different disabilities, the causes, how to prevent these disabilities and how to assist children with disabilities. The unit on Inclusive Education focused on how to include students with disabilities and special needs into the mainstream schools. In 2004, HTTC enrolled their first blind student into the diploma program. The Special Education lecturer asserted:

For the first time this year we have enrolled a blind student at HTTC. With this inclusion, the implications are that we have to work collaboratively with the Callan Resource Centre at Warakum in Mt Hagen town. This means that whatever materials or text books, tests, assignments and anything the student needs is written in Braille by the staff of the Resource Centre and this is working well. (SE201)

There was a good partnership between the College and the Callan Resource Centre. This partnership was important because there was more work required of the Special Education lecturer and his students when it came to the awarding of certificates in Special Education. The Special Education lecturer explained that there were two parts to the program: First, they started with the theory followed by the outreach program. In the theory there were units offered to students in all disabilities. Second, theory was followed by work experience with people with disabilities. The program was coordinated with the Resource Centre because the Centre had all the statistics. The students used the Community activity time to conduct their outreach. During the outreach sessions students were asked to work with children with learning disabilities; screening of the ears and eyes, doing diagnostic tests and lesson plans. The students kept reflective journals which comprised the student's progress, the presentations of lessons and the

evaluation of the teaching strategies. The final report contained the child's progress, teacher's teaching strategies and suggestions for parents and teachers on how they to assist the child. The entire program was supervised by the Special Education lecturer and the staff of the Resource Centre. A successful completion of the full program was the prerequisite to achieving a Certificate in Special Education.

Special education in HTTC was well resourced and supported. Adjacent to the College was the Callan Resource Centre with a staff of four, funded by TSC. Their specializations were in Deaf Education, Visual Impairment, Physical & Intellectual Disabilities or Learning Disabilities and Community Base Rehabilitation. In contrast, the College had only one Special Education lecturer position. Given the workload that was assigned to him, the Resource Centre staff were important partners in the program.

With such a vibrant program being conducted in HTTC, it may be expected that their recent graduates would be quality teachers in Special Education. During the focus group discussions, the participants reflected on the quality of their recent graduates:

A lot of the graduates see Special education as a burden or an extra responsibility for them. There is certain reluctance on the part of teachers and they are not willing to help children with disabilities. If school inspectors emphasize Special education, perhaps teachers will take it seriously. Currently, there are no special criteria for inspection of Special education. Perhaps if inspectors cared to pose a few questions like; 'With your training in Special education, what are you doing with it?', maybe that might change the teachers' attitudes. The program has now been running for 10 years and there is no special attention yet provided for Special education by NDOE even though Special education is government mandated policy. (PA202)

These comments reflected the poor attitudes of the policy makers at the national, provincial and school levels. If there was a more positive culture from the educational authorities and the community at large, then there may be more incentives for teachers with Special Education training established by TSC for teachers.

Summary: The provision of Special Education had been a government policy for over ten years. The program was successful and students were awarded the certificate after the completion of the program. The partnership between the Callan Resource Centre and the College was an asset. However, after ten years, there was little recognition for Special Education teachers from the education authorities at the national, provincial and local school level.

7.4.4 Assessments

Assessment continued to be an essential component of the College curriculum. Given that the trimesters were of twelve weeks duration, there was unacceptable pressure on the staff and students to cover all the subjects including the assessments within each trimester. In trimester one, the students took ten subjects but according to them there were minimal guidelines provided by the lecturers on how to approach them. One student elaborated: "Assessments in trimester 1 were almost entirely dependent upon each lecturer. Each lecturer gave students their assessment tasks and requirements. Students felt this was a much pressured time for them to get everything completed for trimester 1" (SS201).

The students believed that although they were able to cope, there was also the question about the quality of the work that they presented when rushed. As a result, the assessment requirements were modified to accommodate the concerns raised. In trimester 2, the College abolished the exam week and implemented continuous assessments for the students using different strategies. Some of these different strategies included tests, essays and lesson plans. The students valued this new system. However, they had one major complaint regarding the marking of the students' work: "We do not often get any feedback about our work" (SS202). Most of the students were relaxed and not worried about the Grade Point Average (GPA). They were happy to attain 60% which was the Pass grade because they would still graduate. These comments from the students seemed to communicate an attitude of complacency about the quality of their work.

7.4.5 College Practicum

The College practicum was an important component of the training program for teachers in the College. A Practicum coordinator was appointed to organize the program. The Coordinator's task included the school visits, organizations of the practicum and the logistics, placements of the students in the schools and placements of College supervisors and the assessments of students.

The College practicum was organized with primary schools around Mt Hagen to accommodate students into the schools' programs. The program was conducted early in the second trimester. The students had mixed reactions regarding the College practicum. Some of the students were confident while there were others who were nervous about the teaching experience. One staff member commented:

The Block teaching [Practicum] is too early and students have only done two microteaching sessions. The decision to send students out for their Block teaching now in July rather than later is based on the financial situation of the College. Furthermore, the primary school teachers are reluctant to take our students because there is no awareness done in the schools. The students who went to the urban schools to do their Block teaching are lucky because in the rural schools, there is less interest from the teachers to supervise students. (PS202)

Five student lesson presentations were observed. The trainees were put into groups of three to teach one class. The arrangement was such that when one student was teaching, the other two were observing and providing assistance when necessary. This seemed to be an appropriate arrangement for these first year students. There were a number of problems that the researcher identified during the lesson observations. First, students had difficulties conveying the real objective of the lesson. Second, there was a lack of teaching with explanations and further checking for understanding leading to more explanations if needed. Most of the time there was little formal teaching of new content. Third, it became apparent that an approach to teaching similar to the prevailing style of primary school teaching was adopted by the trainees despite the differences in the way the College structured the field experience.

The students experienced a number of problems during the Practicum: First, there was confusion about which curriculum to use. The trainees had some knowledge of the reform curriculum but schools were still using the old curriculum. So there was a mismatch with what they were told, what they found in the schools, and what they had prepared for the Practicum. One student said he was "really upset and angry about the situation" (2nd year student). Second, teaching practicum was too early and students had not been adequately prepared. So they were lacking confidence. Third, the language of instruction being English was problematic for both the trainees and the students in the schools. Fourth, there was also the assessment criteria for the students which some of the staff had difficulties using when grading students. This was a concern for the Practicum coordinator. One staff member was sympathetic: "Students are receptive to advice and suggestions provided by the lecturers. They are really 'learning on the job', hands on experience. We can't be too critical of them because they are trying their best. However, they are not well prepared by the College" (PS201). Similar comments were made by three senior teachers from one of the primary schools in Mt Hagen. The senior teachers confirmed that the current students were not confident in their teaching strategies and were shallow in their content knowledge:

Our experiences with teacher trainees passing out from the two-year trimester program have been that these teachers are not confident in their teaching strategies and are shallow in their content knowledge. Their preparations are not up to date and they do not prepare enough materials for their lessons. It seems they are forced into the situation and this causes frustrations. For instance 'one student told me that he is not going to remain in the teaching force. He just wants to get a diploma because there is so much work involved in teaching'. (ST201)

In comparison with the three year diploma program, these three teachers stated:

There was in-depth understanding of the subject content and plenty of practical sessions in the teaching skills. There was quality preparation by trainees because in their first year, they were taught the theory, in second year, theory and micro teaching and in third year, they did their Block teaching. When the students went for their Block teaching, they were ready and there were no problems with their subject content and teaching strategies. (ST201)

The findings demonstrated that the College practicum had inadequacies in the two-year trimester program.

Summary: The programs that were discussed in this section demonstrated major changes in the curriculum of HTTC. The results from the data generated a number of conclusions about the programs. First, the trimester program presented challenges for the staff and the administration to find ways to make it work for them in the best way possible. Second, the DEPI program was still a PNGEI program and therefore HTTC needed to write their own units for the program. Third, the provision of Special Education programs was successful. Fourth, the assessments had been modified to accommodate staff members' and students' concerns and the results were encouraging. Finally, preparation of students for the College practicum was inadequate.

7.5 Leadership

The fourth specific research question explored how leadership was demonstrated in the Catholic PTCs. In this study, particular attention was given to how the leadership influenced the implementation of educational change in teacher education. The discussions included: College administration, academic leadership, care for staff and students, impact of the leadership on the staff and students, and the role of the GC.

7.5.1 College administration

The leadership structure of the College consisted of the Principal, one deputy principal and five HOS. The five strands were: Professional Studies, Maths and Science, Social and Spiritual, Language, and Community Development. The important component in the leadership structure was to ensure that the College was functioning well at all levels. The Principal commented:

The important thing that I see in leadership in an educational institution is the importance of getting the staff to feel that we are all equal, rather than drawing tall structures in a management organization. It's good to draw a flat surface, maybe Japanese style. Everybody is seen as equal, but there must always be a leader. Actually, everybody is a leader but someone must play the role of directing power. (PP201)

The Principal's vision of leadership did not alter the fact that within the leadership structure, each person had specific roles to perform in order for the organization to function to fulfil its mission. While the Principal and the deputy were concerned about the daily operations of the College, HOS were responsible for the academic programs and their respective strands. In all these areas of responsibilities, establishing good relationships with the staff and students seemed to be an important tool. However, this partnership was lacking:

The Principal and his Deputy work in isolation and this is also reflective of the relationship with staff. There is little communication between the Principal and his deputy. The Principal does not communicate well with the staff and students and he is not present at community functions. He is everywhere else except where he is supposed to be. The Principal is not involved in any educational change that happens in the college. There are no decisions, dedication or vision so we don't know where we have come from, where we are going, or how to get there. (PA201)

A major concern expressed by academics was the lack of communication within the leadership team as well as with the staff and students. Leadership behaviour at the strand level was similar. Good communication links were essential in the College if the people in leadership positions were to encourage active participation on all levels with the staff and the students. This was lacking.

7.5.2 Academic leadership

The HOS were the leaders for the academic programs. They were expected to be better informed about the teaching and learning skills, and to provide curriculum leadership. However, it seemed that some academic staff had problems with their HOS:

There is a lack of academic leadership at the strand level. Since the commencement of lectures this year, we have had two meetings so far, no workshops or in-services, no consultations in decisions and no responsibility given to strand members. None of these persons know the roles they should play in ways of stabilizing the thinking of people involved. There is no leadership, examples or role models of good leadership. There is no commitment from the staff except the few who are concerned about students. (PS201)

These comments were contested by one of the HOS in his strand:

At the strand level, I provide the leadership in relation to the reform but at the moment I am not really giving 100% to the strand duties. There is a lot to do in the strand but there is another problem which has been in place, that is taking my attention away from the strand duties in the DEPI program. I oversee what is happening in the strand, in the different departments. So I am not really giving 100% because it is a new program. In administrative areas and things like policies, I have to get things right. (HS201)

The same senior academic conceded that leadership was needed in all the strands. He argued that all strands needed a dynamic person who understood the curriculum and was kept abreast with the changes. Moreover, the HOS was someone who could establish networks, conduct workshops and do research to enable him/her to be proactive in the process of change (HS201). This was not happening. He confided:

Lecturers help students to link the materials or resources to the Reform Curriculum. PASTEP materials taught should be integrated but that is not happening. It seems that students are feeling their way through the modules to the Reform Curriculum. All the strands are doing their own thing. There is no quality education because there is no commitment from the staff. (PS201)

In a strand group discussion, a participant explained that there had been no academic leadership from their HOS. They were teaching the same units as *Program 2000* and were left to themselves with few clear directions. This situation was repeated when it came to the decision about what units to teach in the trimester:

Another issue is that there is constant changing and switching of units taught in the trimesters which are based not on needs analysis but on the whims of the HOS. For specialized lecturers, this is not a problem because they can expand the content but for newcomers, it is a problem. Consequently, the students suffer as well as the lecturer and so the quality of education delivered is highly questionable. (PA203)

The observations made by the participants of their HOS reflected some insecurity. It was understandable because the HOS concerned had two staff members under her leadership who were better qualified with MEd degrees while a third member was completing her Master's degree and was more experienced in the discipline than the HOS who had BEd degree.

Alternatively, the students expressed that there were "poor communication links among the strands. There were times when the staff in the different strands had differences and did not work together and as a result, the programs and the students were adversely affected" (SS202). Furthermore, students asserted: "Not all lecturers provide quality preparation and work. Some lecturers take up lecture time talking about other issues not related to what they are supposed to do. Some come late or do not turn up at all. Assignments are not returned promptly to students" (SS202).

The students' observations of the staff did not reflect a good image of professionalism. Most of the students claimed that the emphasis seemed to be quantity not quality so a lot of the students displayed a poor attitude towards their work. One student appropriately articulated: "The emphasis is on getting the assignments done with the attitude, as long as I pass...I don't care what I do" (2nd year student). Consequently, academic leadership needed improved coordination among the HOS and their staff to define the quality of their programs and their expectations of students' work.

7.5.3 Care for staff and students

The issue of care for staff and students was an important one. When employing the staff, some of the obligations that HTTC had to fulfil for them included accommodation, safety, and resources for teaching and learning. On these issues, a member of the Agency agreed that: "We need to look at staff accommodation. One thing is to make sure that those are of a reasonably good standard and maybe the other facilities available to staff like the library, computer, internet access and email should also be checked" (CA201).

On the issue of staff accommodation, the staff members also had an obligation to pay the rent on time and look after the facilities provided by the College. The College bursar reported that:

Rent payment among academic staff is a big concern. Rents owing from the academic staff since 2003 is K12,000.00. Ancillary staff rents are automatically deducted from their salaries because they are directly paid by the College and this can be done at this level. However, this is not possible with the academic staff because their salaries are paid by NDOE and deposited into their bank accounts making it difficult for the College to do anything about the unpaid rents. All I am doing is sending out reminders but rents are not being paid. (CB201)

The problem of insisting academic staff pay their rents was further exacerbated by a dysfunctional College Housing Committee.

7.5.4 Impact of leadership on staff and students

The current leadership lacked the qualities that the staff and students were looking for in a leader. Some of these qualities were: risk taking, collaborative, visionary, participative, innovative, and challenging (Academic staff). There were further comments to suggest that the staff wanted an overhaul of the leadership and staff structure. This was because there was little cooperation among the staff. One staff member asserted: "There is need for a change in the total structure of the staff. If these same people continue to remain here, this place is going to decline. There is no leadership, no planning, no organization, no motivation and no evaluation" (PA203).

Such comments reflected the frustrations of the staff members who felt that the College was not progressing. In contrast, the Principal seemed confident that he was doing his best to provide the role model that the College needed. He admitted that considerable effort needed to be undertaken in the process of change. The Principal acknowledged that he could not effect the changes on his own and expected the staff to cooperate in the process:

I see myself leading as a role model. I am playing the facilitative role in terms of making sure that the academic staff accept the decision for change. Not for me to force it, but in a process to make them feel that the change would come when everybody wants that change. The change would come if there was a strong desire for change. As the Principal, I see there's more to be done, in terms of having staff really wanting change. It begins from there and then we all put our heads together and come up with the change. (PP201)

The comments made by the Principal seemed to suggest that he was aware of his role in the process of change. However, the comments made by the academic staff appeared to contradict the Principal's observations of the actual implementation process in the College because, "he is everywhere except where he is supposed to be" (PA202). One of the reasons expressed by one of the participants was that "the Principal does not really deal well with pressure" (CA201). Thus far, the findings presented a rather disappointing image of the Principal.

In general, the students did not have direct link with the College leadership team. The channels of communication were through the Dean of Men/Women and the SRC. However, the male students stated that "there was no good flow of communication between the SRC and the administration". Some of the concerns they raised were: lack of sporting activities for the students, no common room for the men and a blocked ablution block (Male students). It seemed nothing had been done about these concerns. In contrast, the female students said that they were happy with the channels of communication in place. However, they were concerned that the Dean of Women was living outside the campus. They emphasized that "she should live on campus so she can be contacted easily when problems arise" (Female students).

Students claimed that in matters relating to student discipline, they believed that the administration took too long to address the disciplinary cases reported. As a result, the students continued to repeat the offences which eventually led to their terminations and suspensions. These comments eventuated from the fact that four students had their enrolment terminated and two had their enrolment suspended. The students wanted the administration to address discipline cases when they were initially reported rather than waiting until the students re-offended (2nd year students). The students believed that if the cases were addressed when they were initially reported, it would minimize further suspensions and terminations of students' enrolments.

7.5.5 Role of the Governing Council

The Governing Council (GC) was a very important body in the teachers' colleges. The GC had three to four meetings annually. The Chairperson of GC was the Agency representative. He was active in the GC although he had to deal mostly with the proposals or applications that came through the administration. There were more than twenty members in GC which was "too large and not functional" (CA201). The GC had not had a meeting since the beginning of the year. This situation prompted a participant to make the following comments:

To have a really good functioning, effective, terrific GC would be ideal and I wouldn't be the first to say that our GC is a bit old, tired and dysfunctional. It is not providing the leadership nor giving custodian in its position. When meetings are not held, it is not proactive to say, 'we are having a meeting now and you, the Principal be there'. But we are all sitting and waiting for the Principal to convene the meeting. (CA201)

Besides the four GC meetings where all the members were expected to attend, the GC also had established standing committees with five to six members to address the issues of finance, staff appointments and discipline. Regarding staff appointments, the Agency was directly involved in the appointments of the Principal and the Deputy.

One of the GC standing committee's meetings observed was the Student Discipline Committee (SDC) meeting. There were two days (July 27-28, 2004) of deliberations of the SDC committee. At that meeting, four students were terminated and two suspended. The process was long but it was important to safeguard the integrity of the GC of the College and the rights of the students.

The leadership provided by the College executive was critical with the support of the GC. Observations of the working relationship between the Principal and his Deputy revealed that the two operated in isolation. This trend was reflected in the way they dealt with the staff and students and more importantly with the GC because there was minimal evidence of collaboration in the way the College was administered. The observations made by one of the participants best reflected the situation:

Well, it's like many such situations where people who are put into leadership are not necessarily as well prepared for it as we would like or as they would like to be. The pool from which we have to draw leaders is very dry, it's a puddle. Of course, when we get people who are well qualified, we are competing with other institutions including universities that could be very attractive to the sort of people whom we would like to be administrators of the teachers' colleges. (CA201)

The evidence suggested that there was a lack of trained people in the leadership positions in educational institutions. This was where the Agency and NDOE would need to develop training

programs to prepare people for leadership positions. The Agency representative asserted: "We have to be prepared to invest our resources and spend money on training people" (CA201). Securing good leaders for an institution was a big investment because the job needed to be more attractive not just in terms of money but also in terms of conditions and advancement.

Summary: The results from the data generated a number of conclusions that could be drawn about the leadership of HTTC. First, leadership was a very critical issue not just at the administrative level but also at the strand level. Thus far, there had been no training for the people who were in leadership positions. Therefore, leadership must be provided adequate appropriate training. Second, leadership dealt with people and therefore good relationships needed to be established with all the stakeholders within as well as outside the College. Relationships were important and were enhanced through good communication links. This was an area that was lacking in the College at all levels.

7.5.6 Conclusion

This chapter has presented the qualitative data obtained through the interviews, focus groups, documentary analysis and participant observations from Case Study 2. The data were used to address in turn the four research questions. Data obtained through one-to-one interviews with representatives from the Catholic Agency, PASTEP and primary school teachers have been recorded to reflect their involvement in the College. These data will be discussed and interpreted in Chapters Ten and Eleven.

CHAPTER EIGHT

CASE STUDY 3: SBC WEWAK

St Benedict's Campus (SBC) is situated in Wewak in the East Sepik province. Regionally, the College is in the Momase region of the New Guinea mainland. The College was established on the Kaindi Campus in 1969. Prior to the move to Kaindi, the teacher training school had initially been operating in Kunjingini for eleven years, 100 km inland. In its initial stages of development, the teacher training school was under the management of the Sisters of Mercy, a Catholic Order of Sisters from Brisbane, Australia (Anecdotal evidence provided by a key participant, 2004). However, when the College was transferred to the current site in Kaindi, the leadership of the College was then conferred on Br Graeme Leach. Br Leach is a member of the Congregation of the Christian Brothers, Queensland province, Australia. Under Br Leach's leadership, the Christian Brothers and the Sisters of Mercy worked cooperatively to establish the College structure and programs. The initial infrastructure development of the College was financed by "Misereor", a funding agency of the German Catholics (Leach, 2004).

8.1 Context data

The College was under the leadership of the Christian Brothers and Sisters of Mercy from 1969 until 1996. Since its establishment, the College had taken a leading role in teacher education. In addition, SBC earned itself a justifiable reputation as a pioneer of social justice initiatives.

Firstly, St Benedict's Teachers' College (SBTC) had a history of a concern for the poor and needy. In the 1970s, teachers were sent to support schools on the border of PNG, on the Sepik and Fly Rivers and other remote areas. In 1982, the Mercy Mission Society was founded in SBTC to send graduates to respond to the needs of the children in the remote rural areas in the mountains of the Gulf Province, as well as other remote places (Leach, 2004).

Secondly, in the 1990s, SBTC responded to the Iowara Camp refugees by providing for thirty educated refugees with the opportunity over some years to become teachers of the PNG curriculum. This enabled the integration of the West Papuan refugee children and the absorption of those people into PNG society (Leach, 2004).

Thirdly, in 1991, St Benedict's through its partnership with Callan Services pioneered the training of regular teachers in Inclusive Education so that mainstream teachers could respond to the needs of children with disabilities. Children with disabilities then had their rights recognized under a Government policy, and PNG could rightfully claim to be genuinely concerned with

education for all. In 1993, the Government of PNG adopted an inclusive education policy for all its educational institutions and St Benedict's continues to spearhead this development in the spirit of the PNG Constitution through training and services. This has been possible through a close partnership with NDOE (Leach, 2004).

In 1996, the leadership of the College was conferred on the first national principal. The Christian Brothers and the Sisters of Mercy were still in the College but no longer in the positions of leadership. Under the leadership of the national officer, the College initially continued with the programs as normal (PP301).

St Benedict's Teachers' College was officially amalgamated with Divine Word University (DWU) on the 23rd August 2003. The Memorandum of Agreement (MOA) with DWU was signed by the four Catholic bishops of the dioceses of Wewak, Aitape, Vanimo and Daru/Kiunga (who were the owners of the College) and NDOE on the future of St Benedict's at Kaindi, Wewak. This signing was witnessed by the Right Honourable Michael Somare, the Prime Minister of PNG at that time. Since the signing of the MOA, the College has changed its name to 'St Benedict's Campus' (SBC) of DWU (Leach, 2004). It is against this background that the focus now turns to the research questions.

The first specific research question explored the quality of education being experienced in the Catholic PTCs. In exploring the quality of education, there were many influences that resulted in the innovations that affected the quality of teaching and learning. In this section, the findings are presented in two categories: (a) issues that promote the quality of education and (b) issues that mitigate the quality of education.

8.2a Issues that promote the quality of education

There were three major issues identified: upgrading of staff qualifications, quality of students, and amalgamation with DWU. Consecutive discussions of each of these issues follow.

8.2.1a Quality of staff

The quality of teaching and learning can be improved greatly by having qualified staff. The total number of staff at SBC for the 2004 academic year was twenty-three. The Pro-Vice President (PVP) was the most highly qualified professional, with a Doctor of Philosophy (PhD). His area of specialization is in educational leadership. The majority of the staff possessed a BEd qualification. A total of fourteen academic staff were undertaking their MEd degrees – one at Griffith University in Brisbane, Australia, five at University of Goroka (UOG) and eight at

DWU. While undertaking post-graduate studies was seen as a positive move, the need for subject specializations was still lacking as expressed by a senior member of the executive:

The study is great but the problem is everybody is doing the same Masters programs in leadership and education. However, that is unavoidable because that is all that's available here. If we are getting everyone to doing Masters in Educational Leadership, we are never going to get people who have curriculum expertise in various areas that needs to be developed. (PA301)

Another concern raised was about the recruitment process of qualified academic staff. This process would be more possible if there was a pool of qualified academics to select from to fill the vacant positions in the College. There was no such pool of qualified academics. This led to the recruitment of unqualified academics. Such practices have a deleterious effect on the quality of teaching and learning in the Campus: "The problem is that there are lecturers who are not trained and specialized in the areas that they are currently teaching. They were just brought here because they were lecturers somewhere and we were short and they are just filling in wherever possible" (PA301).

According to one of the senior academic staff, the quality of the programs started to decline drastically in 1996 (HS301). The situation was confirmed by one of the recent graduates:

When I was here, I had never had a close relationship with my Principal because we hardly saw him or heard anything about him. Most of the time, he was in the house. I knew most of my lecturers better than the Principal. I think 90% of the students here at that time did not know the Principal. He was in his house all the time except every morning he got in his car and went to his office hiding away there. From there he got in his car and took his family to town. Every weekend, he went home to the village with his family. He hardly spent any time with the students. (RG301)

Similar concerns were raised by the PVP, when he acknowledged that even he was compelled to forego what he was comfortable with and subsequently this created tensions within. These tensions were healthy and he was forced to look at an entirely different program – one that he was not really comfortable with. For the PVP, the challenge was:

Working with a group of people who are not as qualified as the people who I've worked with is frustrating. Their presentation is not as high a level as those with whom I have worked. So I am in a position where I am working with a group of people who need to be pushed along and I am challenged to work with them. I am challenged to run with them, hold their hands and work together. Sometimes it's frustrating. Other times, when you particularly see the goodwill that is there and the genuineness that is evident within these people, you really rejoice in what little they can do. (PP301)

These comments reflected the reality of SBC with regard to the quality of its staff. The PVP realized that the quality of his staff needed enhancing and he was committed to working with them to improve the quality of the programs offered. Consequently, a strategic plan was established. This involved assistance from DWU:

The staff members have been challenged to start to think of a way of making the change, making that break. Now they have not done that yet, but we have already conducted an inservice where we have basically outlined where we are going to move. So that is going to come up in the not too distant future. There is already a plan to get key personnel from DWU to conduct some in-services on curriculum, course writing, and assessments. (PP301)

The assistance that had been planned for the staff illustrated the proactive decisions made by the PVP to assist the academic staff. These workshops will help to promote the quality of delivery in the teaching and learning of the programs.

While upgrading the qualifications of the staff was important for the quality of the programs, there were genuine concerns raised about the academics who were undertaking post-graduate studies. The concerns raised pointed to the quality of input and delivery by some of the staff. Instead of improving their own presentation of work, it seemed to be a distraction for some:

I don't see it reflecting too much on their work here. In fact, I see it detracting from their work because a lot of them are so caught up in doing their study that lecturing is being left behind. So what is happening in the classroom here appears to me that it is being neglected as they are focusing on their study as the number one priority. (PA301)

The PVP conceded that there were some challenges because of the need to balance work and study. He anticipated that this was going to happen however he was hopeful that in the end there would be a greater good emerging from this chaotic situation:

Definitely, any pressure like that does impact on delivery of programs. But I adopt the perception that there is a greater good at the end of the day. So we'll have to foot the bill, pay the price for the greater good at the end. That is my attitude. So yes, it does hamper the program. It also affects their studies but it is something we will have to go through. So we cannot just excuse it and move away. But I think that any lecturer in a position has got to be continually challenged by doing studies. That's part and parcel of it. If it is done in other countries, I don't see why Papua New Guineans should be excused from that. (PP301)

The comments reflected a sense of determination by the PVP to support the academics who were undertaking studies because there was a greater good at the end. The College-based staff development program has the potential of improving the quality of teaching and learning especially for those who were not undertaking postgraduate studies. However, there was

minimal documentation sighted on such a program for the staff during the data collection period. This was confirmed by one of the academic staff: "There is no regular in-service. I think it should come back to a planning and in-service committee. In any institution we should have a planning committee, and an in-service committee. When I came here there were in-service schedules but never taken or done" (PA302).

The researcher participated in a week organized for staff professional development. The sessions progressed satisfactorily. The presenters of the different sessions were key staff members including the PVP and staff from the five strands. The sessions were informative and targeted key areas. However, because the program was not conducted on a regular basis, it was difficult to gauge the impact of the program.

Under the PASTEP program, there were key staff members identified from each of the PTCs to attend and participate in a staff professional development program. These workshops were funded by PASTEP on a national level as clarified by one of the senior executive staff:

Some of these workshops were organized for the writing of curriculum materials while others had other foci. The collective productions of modules by lecturers from the colleges were put together and are currently being used in the colleges. All modules have been done for all the strands in hard copies and electronic copies and are in all the colleges in the country and should be used to supplement their teaching. (DP301)

The members of staff who were involved in this staff development program rated the program positively. However, the researcher's observations revealed that the number of staff who had undergone the staff development program had declined drastically because of the high turn-over of staff in the College. This high turn-over of staff seemed to have a negative impact on the quality of the teaching and learning in the Campus. In the Social and Spiritual strand, there was only one staff member left in the strand who had participated in the staff development program and the trend was similar in the other strands. Thus the HOS confirmed that: "The six staff members that I have are all new and have not experienced any of those workshops" (HS302).

The other staff development program was conducted for all the RE staff. This program was organized by the National RE Coordinator for the three colleges with funding provided by "*Misereor*". This program ceased in 2005. In contrast to the PASTEP program, the RE program had all the RE staff involved.

The success of these national staff development programs depended on the ability of those who attended the workshops to return to their colleges and help their colleagues in their strands through workshops. According to one of the academic staff, this did not eventuate because: "I

don't think they understand and the problem is that with these PASTEP workshops they get quick high-powered input and they don't have time to process it and ask questions" (PA301).

Ideally, if these workshops were well coordinated with the College-based staff development program, the two programs would have greatly improved the quality of delivery by staff in the teaching and learning areas. However, the study identified that with the high turn-over of staff in the Campus, there was a lack of continuity resulting in the quality of the programs being compromised.

8.2.2a Quality of students

89

Total

93

Since 1998, the students' entry requirement into the PTCs was raised from grade 10 to grade 12. The minimum entry requirement is "C" grades in all the subjects. The total enrolment of students for 2004 is depicted below.

Table 8.1: The student population for 2004

	Male	Female	Total
Year 1	89	93	182
Year 2	93	77	170
Total	182	170	352

The students were grouped into six groups in each of the year groups. Groups one to six consisted of Year One students while Groups seven to twelve are Year Two students. The class size for each group is depicted below.

Table 8.2: The year one and two groups

Year One - Groups 1-6 Year Two - Groups 7-12 Class Male Female **Total** Class Male **Female** Total 30 Group 7 17 14 Group 1 14 16 31 Group 2 14 15 29 Group 8 15 13 28 Group 3 19 Group 9 16 15 34 13 29 Group 4 15 15 **30** Group 10 15 13 28 Group 5 11 15 26 Group 11 15 12 27 Group 6 Group 12 15 12 16 17 33 27

182

The students who enrolled in the 2004 academic year were all grade 12 graduates – one group enrolling directly from the secondary schools as school leavers while the second group enrolled from matriculation centres around the country as non-school leavers. While enrolling grade 12

Total

93

77

170

graduates could be viewed as a positive move in the pursuit for quality, it needs to be noted that the students who apply for the PTCs were not the top students because these students would go to universities. Most of these students struggled through their work. One of the staff made the following observations:

The majority of the work I mark here is fairly low standard and I think the students are capable of doing better and I know they are, but they are not encouraged to. There is no common referencing system in this college so students don't reference, they just go and copy, nobody references. There's no understanding of how you should write an assignment or a bibliography and these are coming from grade 12 students and supposed to be diploma students. I know they can do it but they don't know how so I taught them last trimester in text referencing. I had about six or seven students who did it and did it perfectly. They are capable but they are just lazy because they know that they can hand their work in and get away with it. (PA301)

These comments were supported by one of the staff from the Language strand who expressed her concerns that the grade 12 graduates were not meeting the staff members' expectations in the presentation of their work. She said: "The students really lacked literacy skills especially in effectively presenting what they want to say. Many of them lack that and present shallow work" (PA302). The discussions led the same participant to assert that:

I think it goes back to their former language teachers prior to them coming here. We could question a related issue and that is; how well were they assessed to come to this place? Assuming that there is no uniform assessment system in the different assessment systems of each school, this could also be a contributing factor in the kind of assessments given to students. (PA302)

Another issue was raised about the quality of the current grade 12 students compared to the grade 10 graduates who enrolled to be teachers under the three year program. The difference was that the grade 10 graduates came to the College because they wanted to become teachers and they worked hard. However, according to the academics, this was no longer the case with the grade 12 graduates. One of the HOS made the following observations:

There is the difference that now the students can understand the level of teaching of information that we are providing but in the context of getting the work done, I see that the ones who came from grade 10 were willing and eager to learn. They did not argue and were not lazy but the current grade 12 students are lazy. The grade 10 students that came in for the three-year diploma really worked hard. The grade 12 students are lazy, in the sense that they do little about activities and duties given to them... The grade 10 students would have done the work because they wanted to learn, but the grade 12 students do not care and that is worrying me. They seem to just pass the time. (HS302).

The following comments reflected concerns from staff about the quality of the students who were enrolling to be teachers. While on the one hand, the raising of the entry requirements to

grade 12 standard was a positive move in the pursuit for quality, the evidence seemed to suggest that the motivation and commitment to the teaching profession was lacking in the students and this was causing concern among the academic staff.

8.2.3a Amalgamation with DWU

St Benedict's Teachers' College became an amalgamated campus of DWU on the 23rd August 2003. This was a huge change for the staff and students of the College. As a teacher education institution, the College had a two-year transition period to work through the change with DWU and NDOE. This change entailed a new process which meant that new structures would need to be established to cater for the changes as determined by the amalgamation process. The PVP explained:

The structures, for instance, in decision making processes and academic results now have to be submitted to the academic senate in DWU so that results can be endorsed. So we are taking on board another structural change by having academic results processed through DWU. They used to go to the Education department, but we are serving two masters at the moment because of the move to change. That is one aspect of the change, and that is something that I foresee as a way that this particular Campus will have to go as a consequence of the amalgamation. (PP301)

Under the leadership, there was strategic planning occurring on different levels in SBC as well as at DWU. While the staff and students at the College continued with what they had always done, the challenge was to start thinking of making the change, making the break from the old system under NDOE to being a DWU campus. The evidence suggests that there were some staff members who were not coping with the amalgamation process because of the uncertainties about their own future and also the importance of upgrading their own qualifications to meet the university requirements.

Alternatively, there were other members of staff who were strongly encouraged by the amalgamation process. The most obvious change as a result of the amalgamation process was the new leadership. There was unanimously agreement that the leadership of the PVP was the best thing that happened in the College. This leadership improved the staff members' and students' morale for the better and subsequently impacted on the quality of the programs.

However, there were challenges that SBC leadership had to negotiate with the staff, NDOE, and DWU. One of the greatest challenges faced by the Campus leadership was the absence of any established structures at DWU for SBC to be incorporated into the university structure. Conscious of this situation, the PVP confirmed:

It's all muddled up. The faculties are new. So there is no definite structure that had already been in place at the university level, so it's an evolving thing. So I cannot give you anything definite. It's still growing. It's only this year that the university has established faculties and we are still thinking and processing a way of looking at the whole structure. We are still pursuing that. (PP301)

Another challenge was the issue of communication between SBC and DWU because the two institutions were situated in two different provinces, 200km apart without road connections. The PVP elaborated further:

Communication is the big challenge, because, any institution that has campuses outside of the main centre has to encounter and be faced with the challenge of communication. Communication goes a long way through the sheer fact of having meetings which could prove to be a hindrance to the whole process of me making decisions. It could become costly also with travel costs and all of that. So with the implementation of decisions, the main campus would be working on its own issues without sensitivity to the issues of an outside campus. The parent campus is always perceived to be the one that is always controlling things. The distribution of resources would also be a challenge where sometimes the outer lying campuses may not be adequately equipped with the resources to conduct their own programs. (PP301)

These comments illustrated some of the challenges that were experienced by the PVP in his first five months of assuming the leadership position in SBC. In addition, the staff and students were gradually beginning to experience the impact of the amalgamation process through the visits by key personnel from DWU. There were two formal visits to SBC by one of the senior executives of DWU administration. These visits were important in the process of change. The next section addresses the issues that mitigate the quality of education in SBC.

8.2b Issues that mitigate the quality of education

Three key issues were identified: lack of resources and inadequate infrastructure, poor literacy level of students, and land compensation. Each issue is explored consecutively.

8.2.1b Lack of resources and inadequate infrastructures

Quality resources in teacher education are fundamental for quality output in the professional training of teachers. Observation of the facilities at the Campus illustrated a lack of quality resources for teacher educators to utilize in the areas of teaching and learning. While the Campus had received materials and curriculum resources from NDOE and PASTEP, it appeared these materials were inadequate:

Most of these modules are set up in the way that the lecturers are going to teach us. There are limited copies and these are put in the library so we have to come and pay for the photocopies of these modules. However, if we don't have any money, then we have to

come to the research section, borrow these books and use them in the library, and return them because we are not allowed to take them out of the library. (SS301)

Most of the curriculum resources developed by PASTEP were in class sets. There were six of the same year groups so obviously the resources had to be shared among the students. In the library, there were a limited number of copies of text books which were bought for the library. PASTEP contributed resources to the library but these text books and other resources were inadequate for the student population. One of the students in their focus group stated:

There is a lack of resources in the library and so when we try to complete our assignments, we find there are inadequate resources to help us with our work. Even the syllabus material is not enough to go around for everybody so we always have to share a book among two or three students. For research, we find that there are limited copies so it's 'first come, first serve'. The rest will have to wait until the others are finished and by that time the due date is up, so the fortunate ones are lucky while the others just have to rush through with their work. (SS302)

Funding is a very important component in the successful implementation of educational change since it is closely connected to quality resources and appropriate infrastructures. Teacher education has the important function of preparing and training teachers but this function cannot be done without appropriate funding. The second year students confirmed that: "The College had financial problems which resulted in us being sent home in November 2003" (SS301). Funding is provided by NDOE but this is often inadequate to meet the demands of the College as expressed:

Normally, there is a budget but last year there was no money coming from the government so there were restrictions and students were sent home early because there was not enough money to buy food for the mess till the end of the year. We could not photocopy anything or duplicate anything and there were few text books to use. There was no facility last year to show any audio visual material because there was no video in the College. So you were stuck with what you could find in books that you had in your office and gave that to the students. (PA301)

One of the departments which had inadequate funding was science. Observation of the science lab revealed that the problem was not just a simple funding problem. A HOS reported:

When I came back from Kabaleo, this laboratory was already empty and this is my third year. So demonstrations, lectures and group discussions are the approaches that I use. This year I brought this to the attention of the deputy and he said he would bring this to the attention of the administrator at that time, but he never did. Today the administrator himself walked into this place and said that he did not like the setting. If we are going to upgrade from diploma program to the degree program, the whole arrangement and set up of the place will need to be changed. (HS301)

The HOS indicated that apart from the inadequate funding, there was also the problem of the science equipment provided by PASTEP being sold off by a member of staff who had resigned from the College in 2003. Furthermore, whatever the construction company did in the science laboratory was inappropriate, poorly constructed and had not been operational since. The HOS described the work done by the construction company under PASTEP as: "I would not call that 'construction'. I would say it was 'destruction'. I would not say PASTEP was responsible but the construction company that came here. They did not do a good job" (HS301).

The situation in the science department was the most extreme situation in the College. However, similar problems were experienced by the other strands and departments. The reality is that without the provision of appropriate funding or even extra funding by NDOE, the quality of the program will not be enhanced.

8.2.2b Poor levels of literacy in students

The medium of English has continued to create problems for the students in their spoken and written skills. For future teachers, this is a serious concern because English has been prescribed as the official language of instruction in schools. Therefore, if teachers experience problems in understanding and speaking English, this will seriously influence the quality of teaching and learning of students in schools. According to the staff, plagiarism was a problem because they could not write sufficiently well in English:

Because the lectures are in English which they have to be at this level, I think there should be an English test here. Some students pretend to speak English but they can't. Some are very good, some have enough and they will pick it up as they go along. Some can't so when you talk to them, they can't reply because they don't know what you are talking about. (PA301)

This experience was consistent with that of the PVP. He was concerned about the impact these teachers will have as teachers on their students. These were his observations:

I had been alarmed at the inability of a few of the students who have come up to see me to hold a conversation in English. They've always reported back and excused themselves when holding a conversation in 'Pidgin' and to me that is very alarming. Because you know fully well that these are the students who are going to be teaching out there and with that level of English, I know that it's not fair to ask them to go and educate PNG children at that level. (PP301)

The academic staff noted a huge difference in the ability of students. There were marked differences in the quality of work produced by students who came into the College after completing grade 12 and those enrolling from the matriculation centres. However, even among

the grade 12 students who have enrolled directly from the secondary schools, there was a big range in the quality of their work. The academic staff were concerned that the quality of these grade 12 was not as good as they had expected. There was an attitude problem and a lack of commitment in producing quality work from some of them. The problem was articulated well by the PVP:

A mixed bunch, I don't really have a hands-on-experience on the academic side of it because I am not teaching the students here. But when going around and working with them, I've got a few who are really bright, who have the flair, so there is that few who give you that sort of encouragement at that level. However, I am concerned at a bigger majority who are not as bright. To illustrate this fact, a good majority cannot actually hold a conversation in English and yet we are training these people to go out and become teachers. These will be teachers in the community where it's bilingual and English is the medium of educational instruction and that really concerns me. As head of the institution and also as a colleague to all the academic staff who are here, I am really concerned about that. (PP301)

These comments reflected a problem that was not unique to SBC. The evidence illustrated that the current literacy level of the students was adversely affecting the quality of teaching and learning in the Campus. Identifying the problem could be the first step but how the College addresses the issue in trying to improve the literacy level of the students is another. Obviously, this is a serious issue needing attention.

8.2.3b Land compensation issue

SBC is prone to constant harassment by the Saure tribe, landowners of the property on which the College is built. This is a problem that is unique to PNG and detrimental to education services especially in teacher education. Each year, there are protestations by landowners to pressure the national government to pay land compensation. While SBC is not involved directly with the landowners, these Saure people use threats of closure of the Campus to try to force the current government to settle financially. This form of harassment is detrimental to quality education. Staff and students are affected by such a culture because it creates unnecessary fear within the community and destructive raids on the College. Furthermore, such actions tend to disrupt the educational services to PNG.

Summary: There are a number of conclusions. First, the quality of teaching and learning depended on qualified staff and this issue was being encouraged and supported by the leadership. Second, the quality of current students was a concern but more concerning were their poor literacy skills. Third, the issue of quality resources for the library and the strands needed improvement. Fourth, the process of amalgamation with DWU seemed to be a big boost for SBC even though the structures were still evolving to accommodate the education faculty.

Finally, the land compensation issue affects the development of quality educational services and delivery to the community.

8.3 PASTEP innovations

The second specific research question explored the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges. The following issues were identified in addressing this question: curriculum resource development, the construction and refurbishment program, lack of consultation, and care for the resources and infrastructure provided by PASTEP. Each of these issues is explored consecutively.

PASTEP has made major contributions to the colleges. The participants unanimously expressed appreciation to the Australian Government for the assistance provided through the PASTEP program: "I want to thank the Australian people and their government for that kind of assistance" (PP301). Nonetheless, there were criticisms and lessons to be learnt from the way PASTEP innovations were implemented.

8.3.1 Curriculum resource development

The participants were grateful for the assistance provided by PASTEP in the development of curriculum resources, staff development workshops, skills development, and computing. PASTEP provided considerable resources for the lecturers and students although "these were not always fully utilized" (PA301). The modules developed for the various strands were made available. One of the HOS explained:

Since I have been involved in the writing of modules, I see that as a very big help. I joined teacher education at the time when lecturers were developing their own modules. For my case, because of my previous experiences, I was able to fit in but some of my colleagues could not so they left. Now with PASTEP materials, the new lecturers who are now joining teacher education are finding it easier because the modules and units have been organized in sequence so they are finding it helpful and they are lucky. (HS302)

The modules were helpful because within the trimester system, there was little time to think and write their own course materials. Therefore the modules helped the lecturers to elicit the relevant and main ideas and use them to teach with meaning (PA303). While in agreement, one of the senior executives clarified the purpose of the modules: "This is what PASTEP said, 'What we give you is just a skeleton but you have to fill it out and change it to suit your local context' but staff have followed the skeleton very, very strictly and without sort of budging and moving it which makes it a bit difficult" (PA301).

The explanation highlighted the value of relevance in the teaching and learning processes. Contrary to the intention of PASTEP, some of the staff utilized the materials as presented in the modules without adaptation. Similar processes were observed during the staff professional inservice week. In some of the presentations on the curriculum there seemed to be little creativity which reflected a lack of understanding of the content.

However, there were a few sessions where there was better participation by the members of staff. In these sessions, there was good preparation which reflected adequate grasp of the content by the presenters. There was one particular member of staff who was excellent in her presentation because she understood the content, and was able to prepare activities to involve every member of staff. Her sessions were informative and created variety.

Having acknowledged the usefulness of the curriculum resources by PASTEP, there were also indications from the strands that the modules had created a sense of laziness in students not to be innovative in researching other literature to complement and improve their work. One of the staff commented: "The modules have encouraged plagiarism among students where they are simply copying whole paragraphs from books without acknowledging the authors and sources" (PA301).

The RE department did not receive resources from PASTEP except a module on Melanesian Spirituality that was written in the workshops. One of the RE staff asserted:

I think it was more to do with the AusAID, Australian government thing. They said that because in Australia RE is not really part of the curriculum in schools, they were sort of treating it in the same way so it was not really part of the curriculum with the funding. It was included a little bit but the problem with what they included in the two modules that they wrote ended up being written mainly by expatriates and the national staff here don't use them because it doesn't fit in with the context. So the Melanesian spirituality is not used by the staff because they don't like how it is written and some of the things presented in it. Also the morality module doesn't fit in the Melanesian thinking about reality. It is very western so they don't use it either. (RE301)

The comments reflected a sense of discontent among the RE staff because the issue reflected a different value system being applied which was contradictory to the values that SBC practises. RE is very important in the formation of teachers in SBC. However, this view was not shared by PASTEP as reflected in the distribution of curriculum resources.

8.3.2 Construction and refurbishment of facilities

The construction and refurbishment component of the PASTEP program was very important for SBC. SBC needed to carry out maintenance of its facilities but could not because of financial

constraints. So with PASTEP funding, this was made possible. A new staff house and the students' kitchen were constructed. The refurbishment component was more extensive. The head of the Campus stated:

I am happy that PASTEP has created an infrastructure. ... In terms of infrastructure, and the provision of resources materials for teaching, I have actually been pleased with that aspect of it. They have assisted us. With the assistance of PASTEP, they renovated the Expressive Arts block, they renovated the computer room and also bought a number of materials, including seven "tufa" tanks, valued at more than K30, 000 and paint brushes and things like that. I've just got a shipment of computer tables coming in. While there have been flaws, PASTEP has done a lot. It has actually forced us to renovate the place. And it's coming in at a time when we do not have sufficient funds to run the place. (PP301)

The comments acknowledged the invaluable contribution provided by PASTEP. However the main criticism was with the actual method of delivery:

The delivery of it is not as good as I would like it to be. For example, they have tendered the jobs that they wanted to a number of private companies and I am undoing some of the construction work that the private companies have done. For example when the Downer Construction Company put up the kitchen, they put it in the wrong position. (PP301)

The remarks reflected a sense of dissatisfaction about the quality of the construction done by some of the private companies. PASTEP tendered all the construction jobs to private companies who carried out the refurbishment program in SBC. While there was no problem with such a process, it seemed that there was a lack of proper supervision and consultation among the parties involved:

I would have liked to personally supervise some of the work that's going on. I want to be consulted, I want to go and say to them, 'Look, the kitchen is facing the wrong side. Can you turn it around and do this?' So the onus is on the person on deck to also do supervision. I cannot just walk in, put up a building without consultation with the people there....But this has happened a lot. Whether the principal talked to them, and they refused, I don't know. But if it was redone, I would be there myself to check it out and I would make sure that they would talk to me first about where things were going. (PP301)

The issue of consultation between the College administration, PASTEP and the construction companies seemed to be a sensitive and controversial issue throughout the study. Related to the issue of supervision was the issue of poor workmanship. Poor workmanship was observed by the researcher in a number of the facilities constructed. The most obvious was the students' kitchen and the other was the Expressive Arts (EA) building. Observation of the two buildings demonstrated the poor completion of the facilities (Journal entry: 10/2004). One example was the painting of the EA building. Several weeks after the painting was done, there was discoloration caused by the growth of mould. This would suggest the use of low quality

construction materials. However, because there was constant supervision from the College leadership, the construction company was asked to redo the job properly before getting paid. This they did. If there had been no proper supervision, it could have ended up the same way as the students' kitchen. The repairs for the damages done by some of these construction companies were costing the Campus a lot of money. The head of the Campus admitted: "There is no other way. We have to foot the bill. I am coming in at the tail end of the project and the PASTEP project has finished and the money is running out" (PP301).

Lecture rooms: Observations of the lecture rooms showed that these were gradually being improved with new tables and chairs being assembled. The new tables and chairs were part of a PASTEP's consignment to SBC in 2004. When the consignment arrived, it was opened immediately and the items were brought to the lecture rooms and this was a great improvement. However, the blackboards and notice boards needed improvement. Discussions with the PVP revealed that little maintenance had occurred in the last twenty-five years and most of the facilities in the Campus needed refurbishment (Journal entry: 11/2004). The maintenance was a very expensive exercise. Therefore, maintenance had to commence on a small scale, and rather slowly which meant prioritizing the maintenance tasks.

Dormitories and ablution blocks: PASTEP had also supplied beds for the students' dormitories in that same consignment. Like the tables and chairs, the beds were distributed and assembled in the students' dormitories in one afternoon. Discussion with the PVP revealed that he did not want to store things unnecessarily; he wanted to put things where they are utilized. The students were happy with the new beds.

Part of the refurbishment program was fixing the students' ablution blocks. The male students destroyed the ablution block by breaking all the toilet bowls and damaging the entire system. This incident happened in 2003 at the graduation night. The male students who did the damage were all under the influence of alcohol. The damage bill amounted to thousands of kina. Consequently, "when the team leader of PASTEP saw the damage, he refused to spend any more funds in SBC" (BC301). So the evidence spoke for itself. These male students did not appreciate or value the renovated facilities done for them by PASTEP. The incident was summed up well by one of the senior academics:

If you look at the whole thing, a lot of money has been spent in the dormitories and kitchen and a lot of those things have been damaged by students. Books that are not being used and other things have been misused by staff members so you wonder whether in the end, it was a great loss of money or whether it was worthwhile. You probably could do a whole study on each teachers' college relating to the materials wasted. (PA301)

The comments demonstrated a total disrespect for public property. It also reflected poorly on the College administration at that time and subsequently brought into question the quality and professionalism of these graduates who were going to join the teaching force the following year. It was one of the major obstacles that the new leadership had to deal with in 2004. Consequently, a zero tolerance policy for alcohol on Campus was strictly enforced by the College administration and GC.

Kitchen: The construction of the kitchen was a sensitive and controversial issue. The most obvious flaw was the conversion of the plan into the actual construction of the building as clarified by the PVP:

Instead of putting the entrance facing the dining hall, they actually turned it around so that the back is facing the dining hall and the front is facing away from the dining hall, which means they have to bring the food through from the back door into the dining hall. There was also a badly done job on the electrical fittings; they cut off the electricity coming from the adjacent building into the kitchen. This year we've had to realign the electricity. Apart from that when they were putting in the electric pots and gas stoves, they removed some of the old ovens that we had, which were still in good working condition, but they just went ahead and removed them. (PP301)

The construction program raised questions about the quality of the workers. Furthermore, there were complaints raised regarding the quality of the materials used in the constructions and the kitchen equipment that was replaced. In fact, some of the kitchen fittings that were removed by the Downer Construction Company were still in good working order which begs the question, why replace what was in good working condition? The issue of practicality was also raised: "Did they ever ask for the price of gas before they installed the gas stoves? The College could not afford gas so the kitchen staff use the wooden stoves outside. There are a lot of gas stoves in that building. Most of the cooking happens outside the kitchen" (PA301). These comments highlighted the importance of consultation with the people on the ground when introducing anything new in a foreign context. Consultation with people can minimize the problems discussed.

Access to information and communication technology: The availability of a staff computer laboratory was a boost for the staff. The computers were part of the procurement of computers and equipment under PASTEP for SBC. Though the computer lab was relatively small compared to what the other two colleges had, the lab was well utilized, perhaps overused because of the limited resources available for staff. The staff had access to email which was great. Most of the staff used the computers to prepare their work. Those staff members who were undertaking studies were able to get their work done and printed for submission.

SBC missed out on getting an Information Technology/Learning Centre (IT/LC) built on Campus because "the Wewak College (sic) affiliated with Divine Word University. I think the National Department of Education did not know what to do there" (PASTEP STA). Not getting an IT/LC was a setback for the College: "They [PASTEP] did not give us that, and the previous Principal who was here was upset about it and it would have also put me into that position" (PP301).

The students had a computer lab. The lab was relatively small for a class so the lecturer conducting computer classes would divide them into two groups so students would have access to one computer. Even in those sessions the students were grouped in pairs because of the limited resources and that was the way they worked in the computer lab. The students revealed that they appreciated having the computer classes even though the lab was too small to fit everyone. Having access to IT enhanced their computer knowledge and skills.

8.3.3 Lack of consultation

The Head of the Agency in the diocese was content with the assistance provided by PASTEP in conducting staff development training and developing curriculum resources for staff members' and students' usages. The Agency acknowledged that these contributions were invaluable. However, the Agency was critical of the construction and refurbishment component because of the manner in which this particular component was conducted. In support, the head of the institution elaborated:

The whole maintenance of buildings, electrical work and if any new buildings were to be built in the place, the diocese should have had a say in it. The diocese should have been informed about the new buildings, where to build, electrical work needed and maintenance, and yet the diocese was never consulted. Downer Construction just went ahead and built without consultation. (PP301)

In addition, the Downer Construction workers failed to consult the diocesan electrician about the electrical work that was going into the new kitchen. Consequently, the College had to redo and fix the electrical work that Downer Construction damaged. For two years, no electricity was connected to the building. Restoration of the power was expensive for the Campus. The lack of consultation with the diocese was irresponsible because the diocese owns the College, and has the responsibility for the maintenance work at the College (Journal entry: 09/2004). When asked to fix the damage done by Downer Construction, the Agency's head electrician was angry and stated: "You go right ahead but don't come to me" (CA302).

The Catholic Agency was disappointed with the strategies adopted by PASTEP. The Agency believed that PASTEP did not respect them as owners of the College. The Head of the Agency registered this view:

These people seem to come in and act independently of the diocese but forget that the diocese owns the institution. Even though they are there for the good of the institution, we need to know what is going on and we feel that we should be consulted. We have a Catholic institution and ... we want to have a say in what is happening in our institution, we are not a puppet nor do we want to be manipulated. (CA301)

These comments reflect the discontent of the Agency in the way the infrastructure construction and refurbishment component was conducted.

We are there to see the College go ahead. We like to do everything we can and the best we can, but when an idea becomes a reality and we are told, this is what's happening, what do you do? You don't just stand up and say, 'go home'. That's the problem... They make the decisions for us, for our institutions. (CA301)

Another issue was the liberty that the construction companies took in disposing of assets belonging to the College. Similar concerns were raised in HTTC Mt Hagen. The head of the Agency was particularly concerned about this issue:

Well, I wasn't the bishop then but we were not consulted. We were told that certain things came up and the contract was given. The generator was to be taken away... and I put my foot down straight away and told them, 'that generator was bought by a German Brother and not to be given away, it belongs to the diocese'. (CA301)

Fortunately, the generator was not removed and it has continued to be an important asset for SBC. During the data collection, there were consistent power failures from the town generator. With their generator, the Campus was able to continue with its normal program though it was expensive to operate the generator daily.

8.3.4 Care for PASTEP infrastructure and resources

One of the areas that was found to be lacking in SBC was a quality monitoring system for all the resources, instruments and equipment that PASTEP had provided for SBC. Staff revealed that so much had gone missing. A senior member of staff confirmed:

Things were not managed well. If you go into the workshop now, the materials that were donated by PASTEP, in terms of tools, hardware, kitchen, eating utensils, they are not there. Many things have grown legs. I have not seen a proper audit system for recording College assets. (DP301)

It seemed everyone was aware of the disappearances of these PASTEP resources but thus far no mechanism was in place to minimize the problem. The Deputy Principal planned to establish a resource centre to house all the PASTEP resources and equipment. It would appear that while waiting for the establishment of such a system, more things were disappearing:

There is other equipment that has been given by PASTEP which has been sold by staff members or has ended up in staff houses. Stealing is rife, people are just taking and not acquitting. There is equipment and instruments such as guitar, keyboard, and a couple of video cameras which have disappeared. These things can be forgotten and then they are suddenly lost. People can't find them. (PA301)

The need for a monitoring system to ensure proper use of the facilities and resources provided was essential. PASTEP had contributed so much to SBC and the onus was on the staff and students, not just the leadership, to look after these facilities and resources so that more people can enjoy the benefits. Since there was no proper monitoring system, the contents of consignments that arrived at the College were not checked by PASTEP or the College administration. That was partly the reason why so many things were disappearing:

I remember one time when a container arrived from PASTEP. It was left outside the workshop for a few days and no-one was there to check it when it was opened. Nobody was there to check what came and what did not come. I think the administration was only partly to blame. PASTEP were foolish because in any place not just PNG, you don't just send all sorts of equipment and have nobody to check it out. I think PASTEP were foolish because they kept sending things here with nobody to come around to check the contents. (PA301)

These were some of the problems identified with the monitoring of the project. In terms of the funding, PASTEP managed everything. One of the administration staff explained:

They come in and run their own show according to their purpose. Once everything is done, I go in and record them as College property. The major concern is how we care for the facilities and use the facilities to the maximum potential. For example, when the PASTEP team leader came at the beginning of the year to the College, he saw the damage that the male students had done to the facilities installed by PASTEP and he refused to do anything else which was a real pity. It also comes back to the administration and the staff to ensure ownership in all the facilities built. (CB301)

The remarks made by the Campus bursar validated again the importance of educating the students who will be future teachers to have an attitude of care for public property. Caring for the resources provided and the facilities built will ensure sustainability and ownership, two important issues that need to be promoted.

Summary: A number of conclusions can be drawn in this section. First, there was a general acknowledgement and appreciation from all the participants for the invaluable contributions made by PASTEP. SBC had been a big beneficiary in the PASTEP project. Second, the infrastructure construction and refurbishment program were good. However, there were concerns raised by the Agency that needed attention, especially the need for better consultation processes in future. Good consultation processes minimize misunderstanding and help build better partnerships. Some of the strategies employed by PASTEP were unfortunate but they were important lessons that needed to be taken on board in future dealings with donor funding agencies. Third, the attitude of care was probably the most important. Staff and students need to be educated to take care of resources, infrastructure and everything provided freely for them especially at a time when funding for the Colleges was scarce. This is an area that SBC was trying to deal with under the new leadership. Thus far, there was little evidence to illustrate that there was any appropriate monitoring system established for all the PASTEP resources and equipment that were still left in different offices and staff houses.

8.4 Curriculum

The third specific research question explored how the curriculum in the teachers' colleges is perceived by the lecturers, students and recent graduates. In response to this question, the following issues were identified: two-year trimester, DEPI, special education, assessments, and the College practicum. Each of these issues will be discussed consecutively.

The education reform has effected changes to occur in the curriculum of the teachers' colleges. The staff believed the entire curriculum was aligned with the philosophy of Integral Human Development which is the basis of the Education Reform. The evidence suggests that the staff were trying to use the reform curriculum materials to create relevance in education. However, one of the problems encountered in the process was the lack of resources (consumables).

One academic staff member stated: "The curriculum is very much geared to the outcomes based approach (OBA) driving the curriculum and that is what we prepare our teachers to get into" (PA303). Another senior executive concurred: "Regarding the writing of the course outlines, everyone is using exactly the same model. The staff members are up to date with the latest curriculum developments from NDOE" (PA301). While the lecturers were confident, the students found that there was a mismatch in what they were being taught compared to the real situation in the schools. One of the students describes the mismatch: "We are taught the reform system so we need to go slowly and help the teachers in the schools to understand the reform system and work through it with them. Many teachers are comfortable with the old system and

so they are still teaching it. As new graduates, we need to help them to understand the education reform" (SS302).

These observations highlighted an important area of which many teacher educators seemed to possess little knowledge – the reality of the school situation. This is an area that needs attention if the curriculum and the professional training of teachers are to be effective. In support, one recent graduate asserted:

In language we were introduced to the thematic approach and related it to what we were teaching. We were more creative in what we were teaching using our own style of teaching. Teachers in the past were using the subject approach not the thematic approach. The subject approach was more like teaching from the text book which was not really useful but the thematic approach was more creative where teachers had to use their own initiative in their teaching. From the theme we had to do our yearly plan and then term plan, weekly plan and daily plan. (RG301)

Similar comments were shared by three recent graduates (PN, MJ and JS). These graduates were confident with their own training. However, when they commenced teaching at their new schools, they found that the teachers in the schools were still using the old syllabus. This situation was confirmed by one of the academic staff member: "It is hard for the graduates when they start because they are going through the inspection system. Since the administration of some schools have told them not to start teaching anything new, they are just 'toeing the line', they are not implementing what they have learnt in the College" (PA301). These were some of the difficulties that recent graduates encountered when they commenced teaching.

8.4.1 Two-year trimester program

One of the major changes under the reform is the two-year trimester program. The perceptions of the participants regarding the trimester have been grouped into two categories: enabling and disabling factors.

Enabling factors: There were three issues identified that were perceived to be promoting the trimester program. These were: the trimester is a good concept in principle, mass production of teachers, and cost-saving measures.

(1) The trimester is good in principle: One academic staff member asserted that the trimester program was good in principle. However, in practice, its implementation has been misguided. He explains:

The trimester course is designed to get the same results as the three years but it's supposed to start early in January and finished late in December to give it the time. We are not doing that. We start at the normal time and finish at the normal time and try jamming the three years into two. So trimesters can only work if they are extended, that's the whole point but that's not happening. Instead, we are having the three small terms. The first trimester is trying to get organized and the last trimester it's only eight or nine weeks of lectures, normally ten weeks with one week of exams. (PA301)

These comments suggest a need for NDOE and the colleges to revisit the concept of the trimester program and evaluate its output.

- (2) Mass production of teachers: This issue was consistent with the goal of NDOE. The PTCs were producing more teachers each year for the school system and this was positive for the country.
- (3) Cost-saving measure: Students were happy that the program was two years. This was cost-saving for them and their parents in terms of tuition fees. For the families and guardians, it was cheaper to get their children educated in two years than three. At the end of two years they would be teaching and earning a salary and thereby assist their younger siblings to be educated.

Disabling factors: There were basically four issues identified by academics as disabling factors of the trimester program. These were: short course duration, reduction of content, work pressure and quality of graduates.

(1) Short course duration: The staff experienced a lot of pressure trying to meet the academic requirements for each trimester. The staff rushed through grading papers to meet deadlines. In addition, they had to start planning the units for the following trimester which was a challenge for most.

Another important component of the program was the College practicum. Since the trimester was so short compared to the semester system, the students were not prepared adequately for the College practicum and this caused concern: "At present time we don't have much time on hand to think through what we are doing. We are just being pressured to pass the course and move on to another one. There are some things we really don't understand" (\$S301).

Students were under pressure to complete all their assignments and in the process they completed their work with the bare minimum of resources. Lack of resources and short course duration affected the quality of work presented by students. One of the students stated: "We are

just trying to complete all our assignments on time but we really don't have time to sit and reflect on our own learning" (SS302).

The reduction by one year from the three year program to the two-year trimester program meant that some content of the three-year program had to be reduced. One of the RE staff said: "The trimester is too short a time to cover adequate content" so they recommended that "SBC returns to the three year diploma program" (RE staff). In addition, there was the issue of the subject offerings within a trimester. One of the academic staff asserted: "Students are doing too many subjects, seven or eight, in one trimester. They have too many tasks to complete for each subject when there are two or three tasks given by each subject lecturer to complete for such a short trimester course" (PA301). In support one of the recent graduates concurred: "In my experience, I saw that everything was squeezed up in the two years. We were trying our best to keep up with everything that was taught within the two years and we never slept well. We had so many assignments and too much to do" (RG301). The evidence suggests that the majority of staff wanted a return to the three year program.

- (2) Workload: Of the seven or eight subjects that the students were taking in trimester, each subject lecturer was giving two or three assessable tasks to the students. The reality was, the students were expected to complete between fourteen and twenty-four assessment tasks in each trimester and that was a considerable workload for them. Besides, the lecturers had to grade all the assessable tasks across the year groups within the trimester. The quality of such tasks produced by staff and students would be highly questionable in the pursuit for quality education.
- (3) Quality of graduates: Given the short course duration and the workload that students had, they struggled. Based on all the experiences articulated about the trimester program, the study found that most of the academic staff were not confident about the quality of their graduates (HS302).

8.4.2 DEPI program

All the PTCs were invited to conduct the DEPI program for primary teachers. The PVP of SBC refused to offer of the DEPI program for the following reasons. First, he believed that since the amalgamation with DWU, the university was already conducting a BEd degree program for experienced teachers. With their experience, they could have enrolled into the BEd program. Second, the facilities at SBC needed improvement and the PVP did not think he could provide quality service to these teachers. Third, he was also conscious of his own staff and their needs because some of them were involved in the rewriting of courses and undertaking studies for their own professional development. Given those responsibilities, the PVP felt he could not

overload the staff further with a new program in addition to their current work load. Finally, since 2004 was his first year in the leadership position, the PVP felt he needed to familiarize himself with the primary teacher education system, staff, students and the community to better appreciate their experiences and needs.

8.4.3 Special education program

SBC was the cradle of the Special Education program in 1991 and the Callan Services in PNG. The Callan Services was initiated by the Congregation of the Christian Brothers, and had been responsible for the establishment of the Resource Centres attached to the teachers' colleges for the training of Special Education teachers and the Outreach programs in the communities.

Special Education continues to be a vibrant program in the Campus. Cooperation between the staff and the students of SBC and the Callan Resource Centre was positive. The communities around the Wewak and Maprik areas of East Sepik were the major beneficiaries of the program (Journal entry: 09/2004). Apart from the Special Education units that the students took in their formal program, the students were also involved in the "home contact" program. The successful completion of the Special Education units and the "home contact" program were accredited towards the awarding of a Certificate in Special Education as well as the Diploma in Teaching (Primary). The "home contact" program was introduced in the College in the early 1990s and continues as explained:

The student teachers volunteer to be part of this program. However, once they have their names submitted, it becomes a commitment so they have to honour that. The students go out on Saturday mornings in pairs and work with disabled people for one hour. At the moment there are about 46 children we have identified so we have two students to one disabled child. I have put them into six zones with one supervisor for each zone. So every Saturday morning the supervisors go with their student teachers to their zone. The students prepare lesson plans and they go and teach that. Then they come back and write the reflections and every Thursday we meet in tutorial sessions and discuss how we went with our Saturday programs. These 'home contact' sessions are done outside of the normal teaching time within the program which have now become part of the program for special education in SBC. This is done with the help of the staff of the Callan Resource Centre. (SE301)

The interest shown by students in Special Education was overwhelming. The Special Education lecturer confirmed that he had to turn students away from the program because they were too many. This meant that these students have to wait their turn in the following trimester or even the following year to be included in the "home contact" program. There were three phases to the program whereby the College also involved the parents for the first time in 2004:

We invited the parents to this meeting so they have an opportunity to express their views on the program and make suggestions about anything that they would like to see done to improve the program. Most of them were satisfied and wanted it to continue with very few suggestions to change the program. When the students go in to help the disabled children for an hour the parents are free to do something else. (SE301)

PASTEP provided resources such as text books, lecturer's manual and student support materials which the College was using. In addition, there was also a staff development program in which all the Special Education lecturers participated. The Special education lecturer explained:

We were the special education lecturers in the teachers' colleges, under that program to receive training from Australia on attachment organized through Charles Sturt University in Australia. The training program was recognized and credited towards a Graduate certificate in special education which was a big contribution. (SE301)

Observation of the Special Education lecturer demonstrated considerable commitment to the program. He further acknowledged the support of the Callan Resource Centre because without their assistance he would not have been able to conduct the program successfully. Moreover, the lecturer added that he owed the success of the program also to the new College administration:

The administration is very supportive towards the special education programs because our program is not confined to the College but it is also reaching out to the communities around the vicinity. This fact requires logistics in terms of organization, phone call, and transport but the administration is always there to support the program and this makes it a lot easier for us to work. There is also support from the staff. (SE301)

The comments above illustrated the importance of collaborative partnerships with stakeholders.

8.4.4 Assessments

Assessment is a critical component in the pursuit of quality education. The College assessment policy stipulates the assessment procedures. However, in fulfilling this policy, the assessment tasks are left to the discretion of individual lecturers: "Some people do other tasks besides assignments and tests like presentations and so forth. Depending on the credit points, there could be a minimum of two, maximum three assessment tasks. This is in the assessment policy" (PA301).

Students appeared overloaded with assessment tasks from their lecturers in the course of a twelve week trimester. Consequently, this affected the quality of their work. The assessment tasks set by lecturers were influenced by their ability to complete the grading to meet the assessment deadlines. Some of the lecturers had to mark an entire year group which meant 200 assessment tasks which was a high marking load. Under such conditions, it was difficult to

determine the true quality of output from the staff and students had they been given more time and fewer assessment tasks.

During the data collection period two assessment meetings were observed. The first one involved all the academic staff with the five HOS presenting their assessments. There was no consistency in the manner of presentation or in the manner that the staff scrutinized students' results, especially those who failed. There were assessment results that were not presented because lecturers had not completed grading students' work (Journal entry: 08/2004). As a result, the PVP engaged a small committee to monitor the assessments and prepare them for the GC meeting.

In the second meeting these assessments were presented to the GC meeting for endorsement as a formality. Discussions with one of the senior academic staff about the assessments indicated:

There is a culture of marking that needs to be looked at. If you go through their books and lesson plans you see 10 out of 10, page after page throughout their work so there is a problem with our marking. So students get used to that so when I give them 7 out of 10, I get complaints from them. So there is a culture here that everybody has to pass. In the assessment meeting, there were so many fails to start off with and the next day the list was reduced to 10, how did that happen? They had gone and changed marks overnight. Having 30 fails out of 105 students is not unusual, it is quite normal. The fact that my HOS asked me to change the marks was quite a shock but I did not change my marks. ... Part of the problem could be related to the amount of marking that lecturers have to do and the number of courses that they have to teach. If you have 300 students' papers to grade, you can't really set a critical piece of assessment otherwise you will never get it marked. (PA301)

The comments highlighted a number of issues that need to be addressed in the search for quality education. The culture of ensuring every student pass even when they were under performing was disturbing. One of the ways of dealing with the problem of grading students' work was suggested by one senior staff:

There should be a system where if somebody does not teach many lectures, they should help in the marking of other people' work so that the marking is evenly distributed amongst the lecturers. Because what's happening is if someone has 18 hours of lectures they are not going to set much assessment work because they have a lot of students and they will not get the work corrected. (PA301)

The academic staff members were conscious of the need to improve the quality of assessment. This included the tasks given to students, the work presented by students, the grading of final products, and the final grades awarded for the unit of work. The study found some weaknesses in the process which suggest the need for review of the assessment procedures if SBC is serious about improving the quality of education that it provides.

8.4.5 College Practicum

The College practicum is an integral component of the training of teachers. The majority of the students felt they were not provided with adequate preparation prior to the practicum. One of the reasons for the lack of preparation was the trimester system: "Last year we went out for the practicum, it was okay but in these two years, everything is squeezed up and it's too fast for us" (SS301). Furthermore, the students stated that while they felt confident teaching, they were concerned about their lack of content knowledge: "We were not confident that 2004 would be different because last year there was not enough content covered because the year was short and we left early and this year again we are not really confident for the practicum" (SS301).

There were only three practical sessions provided – one session for blackboard skills, one for peer teaching and another for micro-teaching. During the focus group discussions (SS301 & SS302) students were concerned that they were inadequately prepared for this important segment in their training program:

When we went to the schools some of us expected to find some of the things that we learnt at the College but we found that some of the things we learnt here were not practiced in the schools. For example, programming and timetabling, teaching and how to impart the knowledge to the children was different to what we learnt here. They were teaching the children using the old system instead of the new OBE system. (SS301)

This mismatch caused confusion for some students. When they approached some of the recent graduates, they were told "to follow the tide because it is hard to go against the teachers" (SS301). These recent graduates did not really have any alternative but to comply.

Observations of the Campus illustrated that SBC had some of the best facilities for students to prepare for their practicum in comparison to the other two colleges in this study. SBC had the micro-blocks available for students to utilize for their preparation of blackboard and teaching skills. However, the staff and students had not utilized these facilities even though they were in good condition (Journal entry: 11/11/04).

Furthermore, to assist colleges in the practicum programs, demonstration schools were established near the colleges on the same campus or nearby. Kaindi Demonstration School was established within the same campus for the purpose of being available for use by students for their classroom experiences. In conjunction with not making use of the College micro-blocks, Kaindi Demonstration School was not utilized either for students' observations and practice teaching for two reasons: Firstly, the partnership between the two institutions needed to be reestablished so the students could use the school for lesson observations. Secondly, it appeared

that the quality of education in the school had declined considerably in recent years because of incompetent leadership. Consequently, this was an area that the PVP planned to improve in 2005 so that the students would be able to use the micro-block facilities and conduct their lesson observations in the Demonstration school in preparation for their practicum.

Summary: The data generated a number of conclusions. First, the curriculum was relevant and aligned with the national education reform. However, there were difficulties encountered by recent graduates in the school situation. Second, the trimester was not as popular as the three year diploma program, hence the desire to return to the three year diploma program. This was due to the difficulties experienced with the short course duration which affected the programs, content, assessments, and the practicum. Third, students needed better preparation prior to their practicum. Finally, students' assessment procedures needed to be reviewed in the quest for quality education.

8.5 Leadership

The fourth specific research question explored how leadership is demonstrated in the Catholic PTCs. In response to the fourth research question, five issues were identified: College administration, academic leadership, care for staff and students, impact of the leadership on the staff and students, and the role of the GC.

8.5.1 College administration

Leadership in SBC had undergone considerable change over the last decade. The situation was confirmed by one graduate:

When I was here, I had never had a close relationship with my Principal because we hardly saw him. I knew most of my lecturers better than the Principal. I think 90% of the students at that time did not know the Principal. He was in his house all the time. Every morning he got in his car and went to his office. From there he got in his car and took his family to town. Every weekend, he went home to the village with his family. He hardly spent any time with the students. (RG301)

The biggest change occurred as a result of the amalgamation with DWU in 2003. Without a suitable applicant for the leadership position, the Dean of the Education Faculty of DWU was requested to assume the position as administrator of SBC in 2004. So the administrator-cum

Dean of the Education Faculty was then appointed as the Pro-Vice President (PVP)⁶ of SBC. Against this background information, the focus turns to the leadership structure of SBC.

In the initial stages of the data collection, the leadership structure of SBC consisted of the Administrator/PVP, one Deputy Principal and five HOS. The Deputy Principal was responsible for both the administration and academic programs. However, it was evident that the Deputy Principal was not coping well with the responsibilities (Journal entry 13/5/04). The evidence suggests that the PVP was "inspirational and supportive of the educational changes happening in SBC" (Strands).

8.5.2 Academic leadership

The courses were conducted under five strands like all the other PTCs. The strands were: Professional Development, Language, Community Development, Mathematics and Science and Social and Spiritual. The evidence seemed to suggest that the academic leadership provided at the strand level was disappointing and needed improvement. The academic leadership issue was further exacerbated by the fact that four out of the five HOS were newly appointed in 2004. In part, this was due to the high staff turnover at the end of 2003. The situation was well summarized by one of the academic staff:

So the new HOS now are in because there is really not much of a choice. The strand heads 'thing' should work but it doesn't work. They should be doing a lot of work but the Deputy currently does not give them time to do that. Apparently, they only have to do six teaching hours a week because they are strand heads and the rest of the time should be used in the administration of the strand. A lot of things that we waste time doing like college assessment meetings (CAM), should be done by them because they are getting paid at a higher level. Really, they are on an easy boat ride and the Deputy needs to deal with that. (PA301)

Furthermore, it appears that the strand structures need re-organization because of the difficulties experienced in getting the strands to merge and work together. The subject coordinators come directly under the HOS. However, it seems their roles are restricted because of the lack of leadership at the HOS level. The situation is encouraged by the strategies taken by the Deputy Principal. One of the academic staff elaborates:

There are also subject coordinators and I really don't know what they do. I don't see any difference in what they do and work done by anybody else. A problem related to this is that when a subject coordinator is not performing it seems that the Deputy gets somebody else from the lower ranks to do the job for the subject coordinator which is unfair. If the person is not performing then that person should not be in that position nor be paid on that

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⁶ It is important to note that the Administrator, Dean of the Education Faculty (DWU) and Pro-Vice President of SBC were titles given to the same person in 2004.

level but this is happening with the current Deputy. Apparently, this is happening across the strands. (PA301)

Moreover, there was discontent among the staff about the lack of strand meetings. This resulted in lecturers doing their own thing. One concerned lecturer emphasises:

One thing that we miss in the strand is constant meetings about the units that we offer, who is teaching what units, and the assessable tasks. At the moment, we are not having meetings resulting in people doing their own thing... and therefore this is an area that needs attention and improvement. (PA303)

In this particular strand, it was reported that they had not had a meeting in the last six months of 2004. Such practices perpetuated a lack of confidence and misunderstanding at the strand level. This situation would certainly be a cause for concern in terms of quality teaching and learning in SBC. The lecturers came from varied backgrounds; primary, secondary and university. The students preferred this variety: "The lecturers from the primary schools seem to be relevant to us because they know the situation in the primary school system so it's easy for us to follow them and understand them" (SS302). The students had expectations about their training and believed that some of these expectations were not adequately addressed by the staff as reflected:

The idea behind coming to the College is to become a teacher and to know the conditions of a teacher. It seems that we are passing the time to get the knowledge on programming, timetabling and how to teach, what we need to impart to students. The other problem is the planning which is confusing there is no uniformity about the format. It seems we don't know what we are expected to face in the school environment and we need to know this as we need to be aware of these conditions before going into the schools. We can do programming but the thing is how to get what is in the syllabus and fit everything into the program. (SS301)

The students indicated that some of the lecturers were helpful while there were others who were not available in their offices. This concern was further substantiated by some of the staff including a non-academic staff member who asserted: "Some of the academic staff just come to class in the morning, knock off and go back to their houses. This culture needs to change" (CB301).

In the pursuit of quality education, lecturers were strongly encouraged to undertake post-graduate studies. While this was a positive move, there were also difficulties experienced in the process. This was articulated well by one of the students:

At times they (staff) are busy with their assignments and they are not preparing for the lectures. When it is time for the lecture, they just come in and reiterate what we learnt the day before and then they send the students to go and do research in the library. It seems

that they are not preparing their lessons but continue to do their own studies and assignments. (\$S301)

The above comments reflected discontent among the students. This would suggest a need for lecturers to coordinate their work and study commitments better so that the studies do not interfere with their professional work in teaching. The PVP was aware of the poor performance of some of the staff but conceded he was unable to address the problem.

The staff members agreed that the problem was also attributed to the incompetence of the Deputy Principal. If the academic program was to run effectively, the Deputy needed to be in the lecture rooms where the lecturers and students were. This was lacking since 2003. The following quotation is representative of the views of most staff members:

The same problems occur in timetabling, electives, and mistakes in report cards as happened last year. Each trimester, the electives and timetable are put out very late. In terms of the overall leadership of the place, how the place looks, and the ancillary staff that the PVP is overseeing at the moment, we see a huge change. The PVP has deliberately left the academic side to his Deputy which he finds necessary because he can't do everything. Because of that, the academic side is going well but it is much the same as previous. People have the same frustrations as they had last year. (PA301)

Some of these frustrations were caused by the Deputy Principal "not following through with recommendations from staff and students" (HS301), "inflexibility and lack of consultation" (PA302), and the "lack of meetings" (PA302&3). Because of these concerns, the staff strongly recommended that another Deputy Principal be appointed for the 2005 academic year: Another academic staff member added:

There were other little things like making sure the students who are academically suspended are sent letters are important. This year we have had cases of students on campus who were suspended by the GC but were never told by the Deputy. Such incidents have created problems for the administration. These records need to be checked well. (PA301)

The Deputy Principal was a competent academic. However, it seems that he lacked the knowledge, skill and experience needed for the demands of his current position. This prompted another suggestion from the same staff member: "Perhaps in five years' time he may be a good Deputy but he needs to work under somebody and learn the 'ropes' before doing a job like this" (PA301).

8.5.3 Care for the staff and students

Leaders need to be aware of the various groups within the organization. To establish trust and collaboration among these groups, good relationships needed to be established between those in authority and the subordinates. This was not easy but vital for SBC. The study found that this was the very first issue that the PVP embarked on in his leadership role. He reflected:

In any organization and particularly here, relationships are a big factor for an effective and a good working environment. I've learnt very quickly that you are the only person who can go out there and solve most of the problems ... There are tensions that you experience. In my own position and I am in a very difficult position, because I've got two jobs, no one is a robot where you just feed him stuff and he obeys whatever you say. I quickly get to know where my limitations are and what I am capable of. So I pick and choose the type of tasks that I take on and the approaches to it. I rely on a lot of people. When they do the job, I have to be conscious of being with them all the time and making sure that they work well. So, I think in providing a vision for a place, you've got to be conscious of the task and the people who are going to perform the task. (PP301)

These comments were consistent with the experiences shared by the staff. The staff found this new approach by the PVP encouraging and they responded:

He has a good vision for this place. He has been here only for five months and a lot of people on Campus feel that their spirit has been revived. In the past the place was just run down and when the PVP came in, he had a more humane approach to people and talked to everybody. He was there to listen to people... He listened to our views and appreciated them. I really appreciate him and what he has done for me personally. Under his leadership I am willing to support him because he has a good sense of humour which balances everything out because he can make people work and at the same time make them laugh and enjoy life which is good. (PA302)

Furthermore, the students were more disciplined in 2004. They felt that they were cared for and as one student described the situation: "It is much better" (SS302). In support, one member of staff reiterated:

The place has changed for me in terms of the student body. Last year they felt that they had no leader. The PVP is giving strong leadership and they are happy. The boys are completely different this year down there in their dormitories. Last year, they couldn't sleep there, there were drinking parties most nights of the week for the whole year, loud music, fighting all the time, it was like a club. Most of this year, this is not happening at all. (PA301)

The students agreed that the atmosphere in the Campus had improved. However, some of their grievances were not adequately addressed by the administration. The female students stated that at times they have expressed their concerns to some of the staff but felt that these concerns were blocked along the way and this caused frustrations. When asked if the administration was attending to their grievances one student responded: "Not really, they may be carrying out their

task but not to the expectation of the students. When we present our ideas, we expect them to do something about them but things are not really going our way" (SS302).

There were considerable criticisms raised about the Deputy Principal's poor communication skills. He adopted a robust stance on issues with the staff and students and at times these incidents generated criticism of him:

He is very bureaucratic and follows a set rule and is rigid too. Sometimes he does things on his own accord without consultation with the rest of the staff and that has often created problems. Generally his leadership needs a lot of improvement. He has to be flexible sometimes and not be too rigid. (PA302)

In contrast, the PVP was able to oversee and manage the College collegially. One of the staff elaborated: "He did this by getting the people enthused, thanked people and did all those things that kept people on side, and kept the place running and the spirit going" (PA301).

For the spiritual formation of the staff and students, SBC was very fortunate to have a Chaplain who was also a lecturer. There was daily celebration of the liturgy for anyone who wanted to attend. On Sundays the Campus community celebrated together with different groups of students taking charge of the liturgy. During the week, there was a scheduled Pastoral hour where the students prepared and led a prayer service for the community.

8.5.4 Impact of the leadership on staff and students

Generally, there was a good spirit on the Campus. People were ready to change and ready to work. This was observed particularly with the ancillary staff who were prepared to work overtime including Saturdays, whenever there was something that needed to be done. One of the non-academic staff described the situation:

It is a different culture that people have to get used to and the administrator is very good. He has gone out of his way and his style of management is the thing that will get us through. People have expressed openly that they like working with him and that is an advantage we have. There has been a lot of change and people are giving us positive feedback on what has been done so far. (CB301)

The comments reflected a new beginning for the staff and students. The challenge was to get the "staff motivated to work and not just show up to get their pay" (PA301). Creating an environment conducive for work and study should be everyone's responsibility. Thus far, the PVP has been leading the way:

The other thing is the current administrator is everywhere and takes an interest in what people are doing. He is out of the office where people are, talking to them and where there is a program, he is there. That is something I think that contributes towards peace plus the fact that he publicly acknowledges people's achievements, whether big or small - anything positive that happens. These are some of the things that are boosting people's morale. (PA303)

The staff indicated that "it is the person" (HS301), the "support he provides" (PA301&2) and the "decisions he makes" (HS302) that they believed have made the difference in SBC. In response to these assertions, the PVP stated:

With the staff, I've tried to visit them and listen to them and I've responded to some of their needs. We've started maintaining some of their houses. The job is not perfect since not every one of them has paid his/her rent. There are some people's houses that still need attention, but I've started. So to summarize, what I have been conscious of doing, is to be aware of their dignity and there are many ways of creating that consciousness. (PP301)

These comments highlighted the importance of building good relationships with the staff. Good relationships are built on trust. The comments also pointed to the responsibilities that staff members have of fulfilling their obligations of paying their rents. This was one big weakness which has resulted in the lack of maintenance being conducted in staff houses for a long time. This is an area that needs improvement and commitment from the staff.

The students' official body "SRC" operated under a constitution with the approval of the GC. The Executive comprised a President, Vice President, Treasurer and a Secretary. The student body is represented by the SRC at the GC, Academic Advisory Committee (AAC) and SDC meetings. In 2004, the SRC account was handed back to the students to manage as a test case to monitor whether they could be trusted and be held accountable. Previously, the SRC account had been managed by the College administration because of misuse by students (CB301).

Consonant with SBC's gender policy, both male and female students were well represented on the SRC with equal representation in each ministry. The ministries were in discipline, chapel, social events, kitchen, dining hall, dormitories, sports and environment. A new President of the SRC was elected each year. In 2004 the President of the SRC was a male and the Vice President was a female student. Then in 2005 the President elected was a female and the Vice President was a male student.

Leadership is about influence. Good communication skills can assist greatly in building sound relationships. Therefore, the PVP worked hard to try to understand and build a good rapport with the students. He emphasized that establishing positive rapport is a gradual process:

I do it by listening to them; I do it by being present. I make sure that I go and visit students when they are eating, go out there and work with them when they are doing morning chores. At the beginning of the year when the Director of Student services organized work parades I was out there with them picking up scraps and rubbish and helping them to get the place right. (PP301)

Building positive rapport with the students is generated by being present with them. The majority of students responded enthusiastically while there was a minority who continued to do what they wanted regardless of authority.

8.5.5 Role of the Governing Council

The Governing Council is the decision-making body of the College under the Teaching Service Commission. The Governing Council has three to four meetings annually. The composition of the Governing Council included members of the Agency, Campus, NDOE and the community. Some of the members of the GC were diocesan secretaries of Aitape, East Sepik, Daru/Kiunga and West Sepik dioceses, the National Catholic Education Secretary (NCES) whose office is in Port Moresby, a representative from NDOE and the provincial education authorities. The amalgamation with Divine Word University has included also representation from DWU in the GC meetings during the transition period. Membership of Governing Council is important because:

They are stakeholders to the institution.... In the acknowledgement of absentees, people from NDOE who were supposed to be there, were not. These are stakeholders to an institution like this and I am sure in the governing bodies that we are going to have in the future for the university. We will still have representation of these stakeholders because they contribute to the whole education pursuits for this place. (PP301)

The representation of the Catholic education secretaries was vital for SBC, since they were the links between their individual dioceses and the College. Since taking on the leadership role in 2004, the Pro-Vice President acknowledged that the Governing Council had been a very important body: "The GC is a body that actually runs the institution. I have been delegated that responsibility to run the place on their behalf. They are the decision-making body. Now under the amalgamation process, the GC becomes answerable to the policies of DWU" (PP301).

The Governing Council is primarily responsible for the development of policy in regard to the operation of the College. The implementation of that policy is left to the administration of SBC. Two Governing Council meetings were observed by the researcher during the data collection period. The Chairperson clarified the role of the Governing Council:

We have tried over the years to keep things at that level where the GC does not become directly involved in the administration of the College and start to take over roles of the Principal and the staff. It is a sensitive area and there are pros and cons that there could be times when members of the GC think they could do things better than the people in the administrative roles. You have to allow people space to take up their responsibilities and if you allow people the space to succeed in their responsibilities, then you have to allow them space to fail to some degree in their responsibilities. (GC301)

These comments stressed the importance of maintaining the balance between playing a supportive as opposed to an over-powering role of the Governing Council in the administration of the Campus. There was a harmonious relationship between the Campus administration and the Governing Council. Discussions with the Chairperson and the Pro-Vice President regarding the future of the Governing Council revealed a lack of direction. The Pro-Vice President made the following observations:

I am not too sure whether that is good or bad, but in terms of direction, the GC is helpful in that it provides you the direction. With certain ruling concerning discipline, that is what the GC is on about, it is saying, 'any violence to any other person in this community is not tolerated'. That is the direction that is given. Any one person who runs the place needs that form of direction. If after the two years, whether we get that sort of direction from the GC or from DWU, I am not too sure. But definitely the person who works here needs that direction and at the moment, that is what the GC is providing for me. Now in the event that the GC may not be there, DWU will have to provide that direction. (PP301)

The remarks emphasized the important role of the Governing Council to offer direction for the immediate leader of the institution. The Pro-Vice President acknowledged that the Governing Council provided direction for him when he took up the leadership role. Some of these directions related to student discipline and staff appointments. However, the Pro-Vice President was conscious that there was uncertainty about the role of the Governing Council after the two-year transition period. The situation was compounded by the evolving structures under Divine Word University. Clearly, the Governing Council was part of the structure of the old system. It seems the new structure was still being developed.

Summary: The data generated substantial discussion on the importance of the leadership in SBC. Most of the areas discussed were positive and encouraging. It was evident that the PVP was providing leadership in the educational change in SBC. The main areas that needed improvement were in the academic leadership and the general attitudes of the staff towards their work commitments in taking ownership of creating an environment that was conducive to quality work and study. Consequently, one of the possible weaknesses is total reliance on motivational leadership for an institution to be successfully turned around. The total dependence on one single person as leader can also be a disservice to an organization after the departure of

that one person. Leadership qualities have to be developed and nurtured within more people rather than having success being dependent on just the one person.

8.5.6 Conclusion

This chapter has presented the qualitative data obtained through the interviews, focus groups, documentary analysis and participant observations from Case Study 3. The data were utilised to address in turn the four research questions. Data obtained from interviews with representatives from the Catholic Agency and Members of Governing Council about their roles in the College were recorded to illustrate their influence in the College programs. These data will be discussed and interpreted in Chapters Ten and Eleven.

CHAPTER NINE

OTHER KEY STAKEHOLDERS FROM NDOE

The purpose of this research is to explore how educational change is being led in primary teacher education in PNG. To obtain a balanced view of the results of the study, this chapter presents the perspectives of the other stakeholders outside the three colleges. The underlying principle for gathering data from other perspectives is to either authenticate or challenge issues generated through the perspectives of the participants from the three colleges.

To recapitulate, the research questions that focussed the conduct of the study are:

- 1. What is the quality of education being experienced in the Catholic Primary Teachers' Colleges (PTCs)?
- 2. What are the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges?
- 3. How is the curriculum in the teachers' colleges perceived by the lecturers, students and recent graduates?
- 4. How is the leadership demonstrated in the Catholic Primary Teachers' Colleges?

9.1 Quality of education

In response to the first question, there were no direct references made to the quality of education in terms of the actual teaching and learning processes in these colleges. This is understandable since these participants are not directly involved in the daily operations of the colleges. Most of the perspectives raised were related to the outcomes of the programs, in particular, the quality of the graduates. Therefore, the issues raised were related to the quality of education of its graduates and the strategies employed in the process. The main issues identified were: quality of lecturers and students, the upgrading of the colleges' facilities, the quality of recent graduates, and the affiliation and/or amalgamation with Divine Word University (DWU).

9.1.1 Quality of lecturers and students

The findings highlighted the importance of recruiting qualified staff for teachers' colleges. However, the current process is such that there is little being done on the national as well as the local level to assist staff to obtain appropriate qualifications unless they are able to support themselves financially. One participant stated:

Our level of staffing at the present time is very poor, particularly in the areas of people qualified to move into administrative positions because they have been absorbed into the administrative Division of the department. Then they'll either drop out of the system from there or because they are not being treated as professionals, they exit the system voluntarily. Therefore we need a major re-thinking on how we staff our teachers' colleges. Their [staff] basic responsibility is to advance learning at a tertiary level for the students who are in the colleges and that is not happening at the present time. (EP005)

Furthermore, the same participant added: "Teachers' colleges also need a staff that has an orientation towards advancing learning at the tertiary level not advancing primary teaching or secondary teaching" (EP005). This was an area that seemed confusing. There was a misconception that since these colleges are primary focused, the colleges should recruit only primary teachers.

The issue of subject specialization was raised as being important. However, there was some debate regarding the issue because of the perception that primary teacher education was about general education and teaching. In the present teacher education staff development program, there was little happening in the area of subject specialization. The same officer elaborated:

That is why some staff are taking it upon themselves to advance themselves further into Masters' degrees and post-graduate work. I fully encourage that. But in terms of the basic staffing of our teachers' colleges, at present, whilst it's controlled by NDOE, it's restricted as to who can come in there and yet there is no longer any preparation of staff for it. (EP005)

In the past, teacher education provided programs through Canberra University and QUT but those programs have ceased to operate. Some participants believed that NDOE was not actively supporting teacher education staff to obtain more relevant qualifications. In addition, the course content seemed not to be directly linked to the experiences of primary teachers' college (PTC) lecturers. Moreover, NDOE made it difficult for teacher educators to enter the system because they had to endure lengthy periods of induction which were inadequately supervised. The attempts to attract staff appeared haphazard. Some participants believed that good lecturers often were transferred to the bureaucracy in Port Moresby to become bureaucrats. NDOE did not see it as its responsibility to supply qualified staff for the colleges. One of NDOE bureaucrats elaborated:

PTC programs basically have been structured to support the basic education approach of the national education plan so that the faculty and the program are structured in that way. I am not in a position to say whether their programs are of a quality degree or not. However, in terms of the requirements of the basic education policy of government, I think they are meeting these requirements. Here I am directed by a number of studies done under the Higher Education projects that the Science and Mathematical capabilities of many teacher educators are not very high. The primary school teacher should not be

just somebody who can teach only, but they have to be a step ahead of their students. PTC lecturers should be at the level of a second year student at university. Some of our teachers who are working with us at the moment seem to pick up towards the end of their course. (EP003)

In the last meeting of Commission of higher education (CHE), the policy decision was made that as of 2005, all PTCs would enrol grade 12 graduates. The decision was taken because the number of grade 12 graduates was now large enough for students selected for universities as well as colleges so CHE is encouraging colleges to do that. Another reason was provided by the Commissioner:

To raise the quality of the programs in all the teachers' colleges which was supposed to be three years to give more time to study and concentrate in their subject areas at tertiary levels. These are the reasons for recruiting students from grade 12 rather than grade 10. (EP004)

There was a further suggestion that the current selection processes adopted by the colleges to select students were unhelpful because it over relied on students' first choices rather than their actual grades. A senior executive of Office of higher education (OHE) explained:

In the study that we have done on an analysis of the grade 12 graduates in 1996 and 2003, what we have found is that the teachers' colleges are selecting students who have scored lower which means, PTCs are selecting students scoring B's and C's... All the first choices are considered but they are not necessarily the top students. There are second and third choice students who are scoring A's and B's and choose to go to primary teachers' colleges and are not being selected. Primary teachers' colleges are taking mainly the first choices. (EP003)

This view indicated a need for more vigorous selection processes adopted in the recruitment of students for teacher education to ensure quality because, "Teacher education is inbreeding, but that's not to say that all the candidates are weak students. No, but we regard that all the selection of students about 47% - 50% of grade 12 graduates want teacher education" (EP003). However, there were mixed views regarding the student selection process that was employed by PTCs.

9.1.2 Upgrading of college facilities

The research participants acknowledged that the current state of facilities in all primary teachers' colleges needed enhancing. Facilities had not been maintained. Moreover, the colleges had limited teaching resources. Clearly, the current state of affairs has had a deleterious influence on quality education in PNG:

It depends on the kind of people who are there to support these teachers. Where you have expatriates, you are sure to have good teachers graduating but where there are many

inexperienced Papua New Guineans on staff, results are poor. I am not undermining Papua New Guineans, but as a whole, some colleges are weak. Some colleges don't have the facilities, the buildings are about to collapse, no labs, students' dorms are bad and the outcome from those colleges is not usually good. (EP003)

Funding was a critical factor in providing resources to enhance the quality of education. A senior NDOE executive asserted that "higher education is not being addressed substantially or consistently by the government" (EP005). Education was a commodity and so universities and colleges were obliged to generate additional revenue to support their programs if they were serious about delivering quality. Another senior bureaucrat explained:

Equipment plus facilities like laboratories and classrooms are falling apart since they have not been supplemented by the government. Somehow you have to refurnish them and make them more attractive for the kinds of students of today ... We ourselves are competing with other countries and other institutions that operate within PNG. Teacher education is no longer a service; it is part of the total economy system. (EP003)

Annually, CHE made recommendations for funding allocations. With the education reform there were new changes which required better funding. However, it was revealed that the rate of the change was dependent on the type of resources and support the institutions received from Commission of higher education (CHE). The funding that the Commission received from the government was inadequate:

Sometimes our aspirations are not achieved at the rate that we would like them to be. Having said that, there is a general view that the way forward is through the amalgamation process. At the same time we will continue to encourage the government to try and recognize the efforts of the institutions to achieve the quality higher education programs for our people. (EP004)

The majority of the research participants agreed on the need to improve the conditions for teacher educators and teachers. The community placed strong expectation on teachers to help children obtain good results while simultaneously neglecting their living conditions. The same participant elaborated:

Better conditions will help to improve the quality of delivery. The government needs to take some responsibility for teachers. The issue of salaries and conditions for teachers will need to be addressed to bring out the best in teachers. The issue of quality in higher education has become a personal agenda especially with the achievement of the individual's career advancement. It has an educational value so you can contribute better. So attitudes need to change and we need to modify the system as a result of the review currently being done. This review will take about another 12 months to complete. (EP004)

Achieving quality education in primary teacher education was dependent on a number of factors, one of which was the need to upgrade institutional facilities. The current state of these facilities was not conducive to quality teaching and learning in the colleges.

9.1.3 Quality of recent graduates

One appropriate benchmark to ascertain the quality of a country's teacher education program is the quality of graduates. A senior NDOE bureaucrat justifies this view:

In terms of the education reform and the curriculum reform, we will be looking at the contributions those institutions should be making towards helping us implement the reform. Specifically, we will be looking at the quality of the graduates of the teachers' colleges. So we will want to know what types of programs the teachers' colleges are implementing that will help us improve the quality of the graduates of these colleges. (EP001)

School inspectors are some of the officers who directly have contact with new graduates. One of the primary school inspectors noted:

You have the graduates coming from Kaindi, Kabaleo and Holy Trinity teachers' colleges. I admire them because there is commitment, work ethics and morals. You know those teachers are working, they are coming out and showing there is a sense of, 'I have to get this done'. (EP008)

Nevertheless, this inspector had concerns about some of the practices that she observed in some of the graduates:

They are coming out with the in-depth knowledge, but one of the things that I am critical of is that they need a bit more force in their presentations to be confident; to come out and deliver without being fearful. I feel they are incompetent, not practical and with teaching you are dealing with children. I wish they would have more time to do micro-teaching. They should have more practical teaching because with my experience, they know the program but to teach that program standing up is difficult. Half of them just lose control of the class. The discipline of children is poor. For me, a class is there and you build an environment for learning, but once you lose control and confidence as these new graduates do, there is a problem. You hear remarks like, 'In the beginning I was strict but now that they know me, I don't need to be strict any longer'. (EP008)

Clearly, this inspector identified a theme of some importance illustrating a deficiency in teacher education programs. She emphasized that preparation was crucial for new graduates. The inspector recalled inspecting a new graduate recently where there was no evidence of lesson preparation:

A week or so ago I went to a class of a new graduate from Balob Teachers' College. She did not have a teaching program; discipline was poor so she used corporal punishment (hitting the children with a stick). There was no lesson structure meaning, no introduction and no conclusion of the lesson. This was a grade three class. (EP008)

Similarly, reports from one Catholic Education Office indicated that the perceived quality of graduates from one of the three Catholic PTCs was disappointing. The officer stated: "People are complaining about the quality of our graduates. The bishops were complaining because RE teachers are hesitating to teach RE in the Catholic schools" (EP006). The data collected on the quality of the graduates from the teachers' colleges indicated mixed outcomes regarding what they can and cannot do in the school environment.

9.1.4 Amalgamation/affiliation policy

The amalgamation and/or affiliation policy was established by Commission of higher education (CHE) to ensure quality education in all tertiary institutions in the country. The current higher education plan is an Act, that is trying to bring together and coordinate colleges offering higher education programs and teachers' colleges come under that. A senior executive outlines the policy:

So the current policy is to try and raise the quality of teachers in the PTCs, to a higher level of academic programs so that teachers are better qualified to teach in our community and primary schools. So one way CHE should be looking at this is to try to associate or affiliate as many of these colleges to universities so that they [the universities] can help and develop their academic programs. They can also raise the qualifications of staff and the curriculum used in teachers' colleges to ensure the quality of the graduates coming out of these colleges. (EP004)

The head of CHE revealed that the "Commission at this point in time has not specified the level of the quality of staff because the appointments of staff are still with the parent department, NDOE" (EP004). It is expected that this will change once the affiliation processes are in place and colleges affiliate with the universities:

Before an institution can affiliate with one of the universities, they will have to undergo an assessment, a quality assurance assessment mechanism with their programs where these institutions must lift in order to be affiliated with the universities. The Commission has approved what they call academic quality assurance measurement instruments and we are currently working with universities and colleges towards meeting those mechanisms. Before the affiliation process takes place, there is a committee that evaluates their programs and uses the academic evaluation mechanisms to determine whether the institutions can and are ready to affiliate. They check their programs, student assessments, quality of the programs, the courses that they are offering, curriculum and teaching materials, library resources, and the capacity of the institutions to deliver programs at a higher level. If these criteria are not met by the institutions then they will be encouraged to work on this before the affiliation process is approved. (EP004)

The amalgamation and affiliation processes with DWU involving these Catholic institutions invite another partnership between the Church and the Government. There seems to be an understanding that these processes are positive developments for the education system. Nevertheless, the amalgamation process attracts criticism from some of NDOE personnel:

We support the partnership. We have gone into signing an MOU with the Catholic Church, DWU and NDOE for the handing over of the first teachers' college at SBC Kaindi. So that's the one that is going on and I think that will be the way to go to support that partnership. I think it's a good way because it is quality improvement. But we still have to define areas where we can still help each other because once they come fully under DWU, they come under a different Act altogether, which will be a bit difficult. (EP001)

The different Act that is proving to be difficult is the one pertaining to the responsibilities. In the training of teachers, the affiliated colleges and the universities are expected to educate students. However, NDOE would continue to possess the authority to certify the professional credibility of those graduating from affiliated and amalgamated colleges. Another officer explains:

People being prepared in teachers' colleges or universities will have certain expectations demanded of them. These include quality assurance in preparing teachers. This will be done through the quality control mechanisms across all universities so the government and NDOE will certify teachers by those standards. That is part of the National Plan which is going to come into effect [force]. (EP002)

The aim of the process of amalgamation and/or affiliation was to establish appropriate standards at the tertiary level. Ironically, in the process of teacher certification, an educationist questioned the "ability of many of the people at NDOE to be able to think at an academic level" (EP005). This was a concern that had been raised by research participants on a number of issues regarding the changes that were being implemented.

Another important issue involved the funding of these affiliated/amalgamated institutions. There was no mention regarding government funding. However, OHE was candid about the issue:

The whole idea about partnership is imbedded in the 1970 Unified Education Act. That one remains strong and that's the agreement between the churches and the government. The affiliation and amalgamation has changed that and forced it to shift. I think DWU could continue to be a university and continue to achieve its objectives of creating a Catholic higher education system by using a different kind of formula rather than amalgamation. Amalgamation basically says, 'you come to us, you are now part of us'. I would say you would continue in an affiliation mode in that way and the government will continue to pay the recurrent funding for those colleges as they do in SBC. The reason is that now that you have amalgamated, the mainstream talk in politics is that, 'you want them, take them and you fund them' and I think that is not right. (EP003)

There were positive values in the process. However, there were also issues that invited scrutiny by the Catholic colleges, NDOE and Divine Word University (DWU). These were contextual issues: "Resources don't get trickled down to the people who want it. They stop at the main university administration so that is another issue of affiliation that people need to think about, the benefits, is it going to help or is it not?" (EP002).

The issue of amalgamation and/or affiliation attracted considerable and mixed reactions from the community, the senior bureaucrats in NDOE and the government. Nevertheless, the process as a strategy to improve the quality of education and its delivery in the colleges required quality leadership: "leadership is the key to it" (EP005).

9.2 PASTEP innovations

The second research question explored the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges. The implementation of the education reform in primary teacher education was assisted in a big way by a number of foreign funded projects. One of these projects was Primary and secondary teacher education project (PASTEP). In response to research question two, there were two major areas that were identified: contributions of the PASTEP innovations and the Church and State partnership.

9.2.1 Contributions of the PASTEP innovations

The participants stated that the PASTEP innovations in the teachers' colleges generally were beneficial. A senior executive asserted: "Much of the assistance we have been getting is from AusAID. We would not have been successful without the help of the donor agencies" (EP001). The impact that PASTEP made in the various areas of the primary teachers' colleges was physical and valuable. Under the education reform PASTEP innovations were timely:

PASTEP came in to help continue the work arrangement that the Australian government had earlier in the training of national teacher educators. The NEB wanted all national teacher educators to have a first degree. So under the UPNG/UOG programs the people were qualified but the curriculum at those colleges had not been audited. PASTEP was to look at those areas that were untidy so that under the PASTEP project they could be fixed. Some of the areas addressed were: gender, special education, infrastructure for teachers' colleges, and curriculum in various disciplines. They did a good job for what they were tasked to do. At the college level, they worked at the process level in terms of the curriculum in special education and gender. However, due to time constraints they did not complete the curriculum on special education and gender. (EP002)

These senior government bureaucrats were satisfied that PASTEP had expended considerable work into the review of the two-year trimester program. These programs allowed for the comfortable transition from one institution to another because of the common core programs that were being conducted in the various institutions, and credit transfers of students from one college to another.

Moreover, the refurbishments and development of college infrastructures had been beneficial since these would assist all the colleges to develop appropriate programs. The curriculum upgrading provided resources for staff using the curriculum. In contrast, one participant argued that the concept of a centralized curriculum was disempowering:

We still go back almost to a concept that everyone must be doing the same in all colleges. Now that is not realistic for education and that's not a good view of education. There needs to be an expectation of a core curriculum of what should be taught but the concept of everyone doing the same thing, we are not out to make 'clones' of people. Education means you have to have diversity, people who can face the challenges and people who can think for themselves. A core curriculum where everyone is doing the same, almost expects that everyone is going to be produced like little 'clones' and do the same thing everywhere. (EP005)

This view indicated a need for competent academic leadership to lead professional development and curriculum innovation in these colleges. This phenomenon was well articulated by another participant:

Curriculum leadership is crucial. PASTEP did its work and I don't deny that their work was a catalyst, a supportive role in the teachers' colleges even though they went ahead and developed curriculum materials for teachers' colleges. Teachers' colleges just accepted these without any opposition. But it would have been more rewarding for lecturers if they were involved in deciding what material to teach and compiled their own books. (EP010)

The lack of curriculum leadership in these colleges was perceived to have contributed to a lack of ownership of the curriculum resources developed. The materials were accepted as presented by PASTEP with little input from the staff. The same participant elaborated further: "The colleges readily accepted PASTEP material because they did not have an alternative. PASTEP was influencing a lot of the work on curriculum writing because the colleges did not have curriculum leadership" (EP010).

Consequently, curriculum leadership in the colleges was inadequate and provided insufficient direction for staff. Apart from the development of curriculum and other resources, there was the issue of partnership in education that the research participants highlighted.

9.2.2 State and Church partnership in education

Personnel from NDOE and the Catholic Church officials revealed that there was evidence of a strong partnership between them. Both partners emphasized its value and the need to review it because of the new changes that were being implemented in the education system. The church and government partnership was vital as clarified by a senior government bureaucrat:

Teacher education is a set function under the education legislative requirement where the Church and the Government have been in partnership since 1952 in sharing the costs and support in preparing teachers. Our role in NDOE is to be able to ensure that the partnership arrangement is accomplished and maintained... This is a normal process and we have moved ahead but there are a number of things that we have not been able to achieve. One of these is the expansion of the current PTCs because of costs by both agencies – Church and State. (EP002)

As a consequent of this Church and State partnership, the issue of consultancy was raised in relation to PASTEP. The Catholic Agency representatives claimed that they were not consulted about the PASTEP innovations in their colleges. This claim was perceived to be a breach of trust by NDOE. While the claim was refuted by NDOE officials, there was perfunctory evidence to demonstrate that this partnership was adhered to by PASTEP in its dealings with the colleges. This was confirmed by the Executive of the National Catholic Education Secretariat (NCES):

With European Union and Asian Development Bank, I have always been involved with all the consultancies, not AusAID. With AusAID I was not involved because the money goes through the government and the government wants to decide by themselves on the implementation of the project. PASTEP decided on everything by themselves, I was not involved. With EU and ADB, I was there right from the beginning. (EP006)

Some participants believed that NDOE should have honoured the partnership and therefore a process of consultation was appropriate. The Catholic Agency believed that they were bypassed in the process and they were not happy with PASTEP's lack of protocol especially with the construction and refurbishment components of the project. In response to the concerns raised, one of the NDOE executives stated:

There was bidding for the project. Part of the problem could be the non-registration of those concerns from the Principal and the Governing Council of the respective colleges to the department. My recollection of the final executive report that I got was that there were no concerns raised about those contractors from SBC and HTTC. (EP002)

These comments were contradicted by representatives from the Agency and the colleges. They believed that PASTEP was not flexible in negotiating partnerships. Another senior executive in the Education Department shared similar experiences:

This is where PASTEP is different from the Curriculum reform implementation project (CRIP). We could have worked side by side with PASTEP but the Australian Team Leader was not open to us and others. Under his leadership, there were no negotiations. For example, in our first meeting with the team leader, he laid down the rules and we just sat and listened to him. At the end of that meeting, one of my staff remarked that she could not work with him. CRIP was willing to work with him and the PASTEP team but he did not want to work with us resulting in PASTEP not gelling with CRIP which was a real pity. (EP007)

Summary: The data gathered under Research Question Two generated a number of important findings. First, PASTEP made invaluable contributions towards the implementation of the reform in teacher education. Second, the materials developed by PASTEP were accepted uncritically by the teachers' colleges. These colleges used the curriculum and resources materials produced by PASTEP. Third, one of the major flaws in the PASTEP innovations seemed to be the lack of consultations with relevant stakeholders in the colleges.

9.3 Curriculum

The third research question explored how the curriculum in the teachers' colleges was perceived by the lecturers, students and recent graduates. In response to research question three, the following issues were identified: teacher education curriculum, outcomes-based education, college assessment criteria, and the link between the colleges and NDOE.

9.3.1 Teacher education curriculum

The current teacher education curriculum was perceived to be appropriate. However, problems were identified by the teachers' colleges staff and students concerning the trimester program which was introduced in 2000. One of the NDOE personnel extrapolated:

What is happening is that teachers are trying to teach everything within the two years. If they analyze what is given within a timeframe, it is their business to decide through CRC, AAC and their governing bodies to say what they can and can't do depending on their resources. Regarding practicum, they need to see what they can do well and be selective, and leave other things out so the practicum can be done properly to ensure quality. Don't talk about quality and standards if you have not prioritized what you are capable of doing well. (EP002)

These comments underscore the important role curriculum leaders perform in the implementation of the curriculum. This implies striking a balance between what is and is not possible depending on the availability of resources. Moreover, there are bodies such as the CRC, AAC and GC established within the colleges to monitor and regulate the quality of programs. The same officer added:

If they have the level of understanding of what it means to achieve the quality that they want, they need to work together to find ways to do things. That is the competence we haven't got in all our teachers' colleges. We do have people but we don't have the people who are able to bring together the concerns and issues and to be able to ask, 'what do we do now?' (EP002)

These are considerable expectations exerted on teacher educators to implement new policies. This becomes problematic when minimal in-service education is provided to lecturers:

People don't develop as they should. Comments about the comparison of PASTEP with standards now and literacy level at the time of basic skills are critical. Basic skills were never about basic skills it was always about controlling of curriculum and staff within the system. There was no flexibility of movement as to how you taught or what you taught; it was a perfect means of control but a very unjust system in the whole process. (EP005)

There were contrasting views from the various participants about the purpose of the teacher education curriculum. One view was that the curriculum of the teachers' colleges should be responding to the needs of the children and the subjects that are taught in the primary school curriculum. Another view was that the teacher education curriculum should not be responding to the needs of the children but rather be challenging and reflective for future teachers. Supporting the latter position, one participant emphasized:

I am not sure that the teachers' college curriculum actually should be answering the needs of the children in PNG. Teacher education has to be about educating the teacher; it's not educating the children for the future. So you have to produce a person who is thinking, advancing themselves, you are not just giving them a teaching content that you are going to teach for the future. The basic curriculum in the teachers' college as tertiary education should be advancing the mathematics skills, thinking skills, knowledge level of the particular student teacher not just giving them what they are going to teach in the future. They have to learn teaching skills, teaching methods and so on but the real task is about educating the student teacher as a young adult learner. (EP005)

In contrast, another participant advocated that an increase of time should be planned to assist student teachers understand concepts - why they do things in a certain way in Mathematics or why they use English in a certain way in language or why people behave in a certain way in Social Science (EP010). His proposition was:

We want to challenge the teacher to create curriculum in the school according to the needs of the students in schools and be more reflective. Being reflective is engaging in research in their schools and our teachers don't do any research at all. In research they are not asked to do experimental research but just basic research – going into a classroom and giving them work, and finding out how the students attempt that kind of work. And writing up reports on how students have learnt a certain topic in the different strands and the thinking of the students as well as the teacher's own methodology. (EP010)

These views were challenging for the colleges. The comments emphasized the importance of having energetic and reflective curriculum leadership in each of the colleges.

9.3.2 Outcomes-based education

Under the reform, the new curriculum that is being developed by the Curriculum Division of NDOE for schools is outcomes-based education (OBE). Currently, all PTCs utilise both the old curriculum while some have introduced the new - OBE. It is anticipated that:

The old curriculum will be out of date because it will not address this new reform curriculum package. It will be completely different because it is a more outcomes-based approach. The one that we are currently using is more subject based so we start with an objective. This new one is more outcomes-based where you start with the outcome and work backwards and all the programs and lessons are organized around the main outcome. Every syllabus will have a set of outcomes. ... The teacher will have to organize the lessons around the outcomes. (EP001)

The assumption that teacher educators can implement change without assistance in the process seems flawed. The teachers' colleges are expected to implement the curriculum change as indicated by a senior bureaucrat:

We have the new curriculum coming while we are still running with the old one. We need to look at the requirements of the new curriculum and then align our programs and activities to make them consistent with the new curriculum. That is what everybody is expected to do. (EP001)

In preparation for the change, leadership practices will need to change. The same participant elaborates:

The overarching aim is for the Principals of the teachers' colleges to re-align their leadership practices. They will have to set their vision consistently with the overall vision. From there they will have to influence their deputies, academic heads, and subject heads to re-align all their activities, to make them consistent with the overall aim of the curriculum. (EP001)

The outcomes-based approach to curriculum development has drawn mixed reactions from within NDOE. While some of the personnel are pushing for the new curriculum to be implemented, saying that it is a "PNG home grown curriculum", there are others who are sceptical about the concept:

The reform curriculum is rehashing what is in the old curriculum in skills, knowledge and attitudes in a new cover plus a lot more ideas of what should be taught in school. There is far too much for a classroom teacher to cover in a year. ... The current reform curriculum language is beyond the means of people who don't know what it is. (EP002)

The curriculum implementation is challenging for stakeholders because too many lecturers lack a solid understanding of outcomes based processes: "The new curriculum material is pitched at a level beyond the level of the current classroom teachers and even beyond the level of the people who either have a diploma or a degree, who fear reading the texts" (EP002).

These comments represent a dilemma that lecturers face – a lack of understanding of the OBE. The new curriculum will not change or improve the quality of education just because it is "PNG home grown". The example below highlights the importance of understanding concepts in teaching and learning:

I was with the group of elementary inspector trainers this morning trying to translate the syllabi that they have now in school. They have different concepts to do with patterns, sizes and shapes. I asked them, 'What would you do to assist a classroom teacher in explaining the concept of patterns in your Ialibu vernacular? What is the word for patterns in the Ialibu vernacular?' 'There is no vernacular word for it', was their response. Now if there is no word for it then that is the problem because we are talking about translation of a syllabus... This is a concept that has been used in NSW and Queensland and has failed because it is too difficult for teachers, and these are teachers who have English as the first language. Here the concept is introduced to PNG teachers who have English as the third or fourth language trying to address the same concepts - it is difficult. (EP002)

The lack of equivalence in the vernacular with the English language is an important issue in teaching and learning. English as the medium of instruction in education is an important factor to consider in the implementation of the new curriculum. Moreover, the fact that the outcomesbased curriculum has not worked in parts of Australia should be reason enough to make NDOE cautious about its immediate implementation without sufficient preparation and training time allowed before the concept is introduced gradually.

While there are mixed reactions to the teacher education curriculum and the quality of its graduates, some of the recent graduates who understand OBE are making a difference in the school system where they are encouraged. However, there are still many schools where the old curriculum is currently in use.

9.3.3 College Assessment Criteria

Assessment is a critical component of the teachers' college curriculum. With the change from the three-year program to the current trimester program, colleges have had to make changes to assessment processes. One of the former Deputy Principals of one of the PTCs elaborated:

One of the main changes was from the criterion reference to norm reference. We were told that the top 10% would get an A, the next 20% get a 'B', the next 40% get a 'C', and the next 30% get a 'D' and anybody that got less than 60% got a fail. Again as the government policy came from headquarters, we were told to implement it as of the year 2000. The College was told to set up an Academic Assessment Committee (AAC) and they had no power to change the guidelines and any deviation outside of those distribution areas had to go to the National Education Board (NEB) for justification. To avoid this, teachers had to be assisted in getting their assessments right in their distribution. My understanding is that some colleges still today have not implemented this national assessment policy. This reflects a poor monitoring system from headquarters in Waigani regarding the implementation of that policy. (EP009)

The fact that NDOE has failed to closely monitor the implementation of the assessment policy raises questions about the competency of NDOE personnel in being critical about the curriculum of the colleges. However, a senior executive from NDOE was not convinced. He stated: "We are training teachers to go to schools using numerical and letter grades and write comments about students without understanding the system. People are... not thinking critically and are not pragmatic" (EP002).

The new curriculum has new assessment guidelines. The data collected indicated a need for improved monitoring to ensure the guidelines are adhered to by the colleges. Thus far there has been minimal monitoring with colleges working in isolation.

9.3.4 Partnership between the colleges and NDOE

The importance of active collaboration between the teachers' colleges and NDOE was emphasized as an area for improvement. Collaboration includes a common vision for teacher education:

There needs to be a vision but we can't expect a vision down at the teachers' college if there is no unifying vision. If we have a unifying vision at the broader departmental level, the vision in terms of access is that we are trying to open up more schools so that more children can go to school. This has got implications for teachers' colleges. This means they have to produce the number of teachers required to help out so that there will not be that access problem. (EP001)

Access to education by the ordinary local people is a controversial issue for the three Catholic Colleges. One of the three colleges in particular has been over-enrolling students consistently. This has caused frustrations among staff and students because of the scarcity of resources and lack of facilities. As a result, the quality of teaching and learning has been adversely affected. The other two colleges have rejected pressure to enrol more students because the facilities and resources available are inadequate to cater for any increase. It appears that the educational institutions and NDOE are working in isolation. A senior executive asserted:

What we need to do is work with the teachers' college principals to develop the training programs. We need to start with that almost immediately, to work on getting the teachers' colleges to have a course that could be called 'curriculum development or curriculum implementation course'. It has to be a course taken by one of the lecturers on the new curriculum and its implementation. At the moment there is nothing in place so everything is done on ad-hoc basis. (EP001)

With the introduction of the new curriculum into the school system, it is important that the level of collaboration between the PTCs and NDOE be strengthened. The same officer adds: "We are in the process of developing the curriculum. But one of the problems that we find is that we need to educate the lecturers at the teachers' college on the new curriculum so they can teach it" (EP001). In establishing the links between the teachers' colleges and NDOE, the principals of each of the colleges are the key players. They need to establish workable networking systems within their colleges to ensure there is dialogue and active participation in the process of educational change. Under these new curriculum changes, it was emphasized that:

The Principal in each teachers' college is the most important person. They have to share their overall vision so that's what we need to do in the colleges. I think many of the structures of the colleges are going to be out of date because of the new vision. So the leader at the teachers' college will have to establish close dialogue with them and get them to understand the broader vision of the curriculum and re-align all their programs. (EP001)

While responsibility is placed with the principals in each of the colleges, NDOE personnel need to be well-informed about the changes as well. The current senior management is an "ageing group of people in their 50s so there is need to develop and have a young cadre of leaders" (EP003). Furthermore, the same participant added:

I have not seen any people that I would call 'rebels', critical people in NDOE. Critics are not bad people, they help people think. The idea of professionalizing teacher education has been muted. I don't know whether they put it in the National Plan but the Teachers' Association with some in-roads made by certain people need to look at teacher education slightly different. I think one of the things we can get out of this is that we must not see teacher education and preparation today as if we were in a crisis situation. We are not in a crisis situation, maybe we are but there is a need to look at the long-term preparation for teachers that will facilitate the kind of society we are living in now. (EP003)

This quotation emphasizes the importance of re-establishing active links between the colleges and NDOE to improve teacher education so that it is relevant to the needs of PNG.

9.4 Leadership

The fourth research question explored how leadership was demonstrated in the Catholic PTCs. Educational bureaucrats emphasized that leading change in an educational institution was a big responsibility and the most important person was the principal. In response to the fourth research question, the following issues were identified: quality of the colleges' leadership, training and professional development, and teacher leadership.

9.4.1 Quality of leadership

The general impression among the participants was that the current leadership in teacher education institutions including the three under study was inadequate. One of the participants observed: "It is the effectiveness of the principal that will influence the rest of the staff and even the community to support the development of the college" (EP001). Another participant agreed: "Leadership is about 'influence', influencing people" (EP002). While many participants believed that the ability to influence was a major characteristic of good leaders, other participants believed that a more fundamental prerequisite for leaders in PTCs had to be appropriate qualifications. One of the principals was an energetic leader with a PhD qualification. However, his presence in the college had not solved their problems. It was one thing to have the "head as the most qualified, knowledgeable, and very good in administration, but it's another thing to have a college that produces graduates who are of a high quality from people who are of a high quality, as well as those within the lower ranks or middle management" (EP010). The head of the institution alone cannot effect change. The same participant continued:

What is needed is that all of those people in between have to play their role in the structure to effect change successfully. To me it is a waste of human resource when the top management is the only qualified and the rest are not able to assist him in playing their part in the overall structure. That is something that SBC has to quickly attend to in putting in place people who are going to support a very good administrator so that this effort is not wasted in a low quality outcome because he does not have direct influence on the learning that takes place by the students. The people who are also important are those who have direct influence on the students' learning with their curriculum leader who should have a vision for learning, what's appropriate for teacher education at that level. (EP010)

Consequently, a major difficulty in improving quality in PTCs was to identify appropriate candidates to leadership roles. One of the participants asserted: "We haven't got a person within the teacher education system, able to take on the leadership at the present time. This is true of the other colleges as well" (EP005). One of the ways that Commission of higher education (CHE) was pursuing the leadership issue was through the process of affiliation. The CHE executive explained:

CHE is policy oriented and advises government on policy levels. CHE perceives the leadership to be taken up by institutions themselves. In our case in PNG, we are looking to the universities to cater for those leadership programs and the Commission is

encouraging the universities to closely work with those institutions to liaise an affiliation mechanism with them so that the colleges can help bring about the change. (EP004)

Affiliation with universities was a possible mechanism to use in the leadership issue. CHE wanted universities to take up the leadership of institutions for higher education and work in partnership with smaller colleges like teachers' colleges.

9.4.2 Training and professional development

Another major strategy that was identified was the issue of training and professional development for current as well as prospective leaders. In the Catholic colleges, there were two basic problems highlighted by a former Principal:

One is that our bishops' background is generally not education and whilst we as religious ran the schools/colleges they were happy because we had our own schools as religious and we had our own background as congregation to support it so the bishops very much appreciated us being there. When we appoint a lay principal, the bishops are hesitant because they don't know a lot about education themselves and they are afraid to interfere because they might step out of line. Yet, the lay principal needs that support; they need to know that the Agency is supporting them and working with them and that they are prepared to do it. So then both sides are afraid – the principal is afraid to approach the bishop and the bishop is afraid to go. So while I am critical of NDOE, I am also conscious that our own structures haven't grown well enough in the church agencies to support what we should be doing too. (EP005)

The data reflected the unique experience of leaders in Catholic institutions. Having a good principal/leader was not the ultimate solution to effecting quality change. There was the need for support at all levels for the principal not only structurally but professionally, personally, and emotionally as well. This was a critical issue for NDOE, the Catholic Agency and the individual.

Professional training and development for prospective leaders was once a vibrant program conducted by NDOE. However, this was no longer the case. It seemed that NDOE and the colleges were over relying on the current Masters' programs that were currently being conducted by Divine Word University (DWU) and University of Goroka (UOG):

The kind of leadership that we want in curriculum, administration, in the overall institution demands that we now bring teacher educators to the next level to increase their mindset, to broaden their understanding to the next level to think ... to talk about practical issues. That is what we want our colleagues and college students to be thinking and they are not able to do so. (EP002)

The views expressed above provided hope that at the successful completion of the Masters programs, these academics would return to their institutions and make significant contributions

to the programs. However, there was also an underlying assumption by NDOE that the current pool of people who were in the teachers' colleges did not have the capacity to think and manage what was required for the institutions. The same officer outlined the intentions of NDOE:

We have indicated to UOG and also to DWU that in building our capacity for the colleges we have to look at various areas. 1) We have people with definite roles in positions of responsibility as leaders and the Masters program should address that. 2) Curriculum leadership is the second area of training. According to the Secretary of Education, our focus should be the teacher in the classroom, in terms of how good the teacher is. If the teacher is good, that leadership or influence can take place then she can influence the children otherwise if she is not competent then little will be achieved. (EP002)

This is a real challenge for the universities conducting the programs and for teacher educators who are undertaking those programs.

9.4.3 Teacher leadership

The third issue identified was teacher leadership. Teacher leadership is an area of leadership that seems to be taken for granted in teacher education. Yet, it is a critical component of teaching. A senior bureaucrat emphasized that: "In teacher preparation, there needs to be encouragement for student teachers to be creative, investigative researchers because those are the kinds of influences that make a difference in the workplace. Leadership is about influence" (EP002).

The training of student teachers to acquire these skills cannot be purely theoretical. There needs to be a practical component of that occurring in each lecture-setting within the colleges. An educationist asserted:

The lecturers must engage in research and present those research findings to their colleagues just as they are expected to present workshops and conferences that they have attended outside of the college. It is one way of ensuring that they are engaged in their professional development, they are learning new things, and they are worth keeping in the institution. They have to show cause, they have to show they are academics. We have to ask them: 'Tell us ten reasons why we have to keep you here and five of those ten things would be related to research. (EP010)

Schools need teachers to be self-reliant and well-informed. For teacher educators, it implies they need to be made aware of those modes of delivery and prepare student teachers so that they can take up those leadership roles in their training. Teachers need to be taught the skills in research, encouraged to use their initiative, and nurtured to be educational leaders. Teacher leadership is fundamental because of the influence teachers have on their students:

What you do as an individual and how you go about influencing that change whether you are a classroom teacher or a lecturer in various disciplines in the teachers' colleges or in administration is vital... This is not taking place much because the lecturers don't have the understanding or the mindset to be able to do that competently. (EP002)

The views expressed by the NDOE participants regarding teacher leadership highlighted a need for a paradigm shift in teacher education. While it can be concluded that teacher leadership was not a unit taught in the current programs, there was sufficient evidence in the data to suggest that this was an area to address.

9.4.4 Conclusion

This chapter presented the qualitative data obtained through one-to-one interviews with other key stakeholders of the National Department of Education (NDOE). The data were utilised to address in turn the four research questions. Four major issues were addressed. The implementation of the affiliation and/or amalgamation policy by the Catholic primary teachers' colleges (PTCs) with Divine Word University (DWU) received mixed reactions. This appeared to be a contentious issue for NDOE, the Catholic Agency, Divine Word University, and the primary teachers' colleges. Leadership was highlighted as a critical issue because it was inadequate at all levels of the teacher education structure. These data will be discussed and interpreted in Chapters Ten and Eleven.

CHAPTER TEN

DISCUSSION OF THE FINDINGS THROUGH THE LENS OF THE LITERATURE

The purpose of this research is to explore how educational change is being led in primary teacher education in PNG. The purpose of this chapter is to discuss the major themes presented in Chapters Six to Nine through the lens of the literature. The literature review in Chapter Three, and its links to the PNG cultural context in Chapter Two, will inform and guide the discussions. The following major themes comprise this chapter:

10.1 Quality of education;

10.2 PASTEP innovations;

10.3 Curriculum;

10.4 Leadership.

10.1 Quality of education

The first major area for discussion is the quality of education. In the presentation of the findings, the key themes that are discussed in this major section have been identified because of their relevance to the research purpose. These themes are discussed consecutively to reflect the substance of the perspectives presented in light of the literature.

10.1.1 Equivalence between higher qualifications and subject specializations

The first emerging theme is the need for an established process of equivalence between higher qualifications and subject specialization in primary teacher education. In the pursuit of quality education, the quality of the teaching staff is essential. Figure 10.1 represents the qualifications of academic staff in the three colleges in 2004 and 2005. Figure 10.2 illustrates a substantial increase in the number of staff with BEd degrees undergoing MEd degrees in PNG and Australia. The numbers at OLSHTC Kabaleo increased 26%, HTTC Mt Hagen increased 30% and SBC Wewak increased 66.6%. The substantial increase is due to an increase in scholarships provided by NDOE for PTC teacher educators to gain MEd degrees through the program offered by University of Goroka (UOG). Furthermore, there are more scholarships provided by other sponsors such as European Union for some of the staff undertaking studies in Divine Word University. However, the rest undertake studies because of their conviction for job security and the importance of the appropriate qualifications required by institutions affiliating and/or amalgamating with Divine Word University.

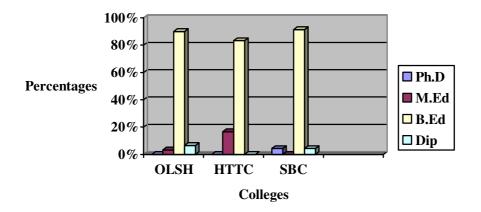


Figure 10.1 Percentage of academic staff qualifications at the three colleges

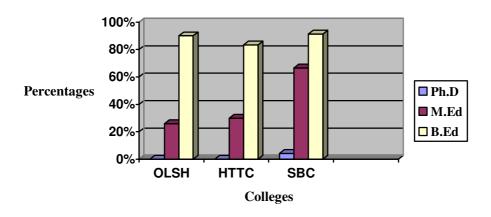


Figure 10.2 Percentage of academic staff with B.Ed degrees undertaking MEd studies

While the increase in staff qualifications is encouraging, the equivalence between higher qualification and subject specialization is still lacking. The MEd degree offered by UOG is in General Education while the two MEd degrees offered by DWU are in Educational Leadership and Curriculum Studies. These achievements may assist in improving the quality of delivery in teaching and learning but not necessarily in specific subject areas.

Subject specialization is professional education and training within the subject content and pedagogy. Teacher educators acknowledge the importance of professional training in their areas of subject specialization to enable them to make valuable contributions towards improving the quality of teaching and learning. Subject content knowledge is a prerequisite for the promotion of deeper learning of staff and students (Biggs, 1979, 1986). However, this need is not being addressed adequately: "The problem here is that there are lecturers who are not trained and

specialized in the areas that they are currently teaching" (PA301). These findings appear to be consistent with earlier research which concluded that college lecturers, after completion of their professional development training, were perceived to be lacking in confidence about teaching in their own subject areas upon their return to their respective PTCs (Australian International Development Assistance Bureau, 1989; O'Donoghue, 1995; O'Donoghue & Austin, 1995). While subject specialization was identified as a key component in the improvement of quality education in the teachers' colleges more than a decade ago, it seems little has been done to address this deficit. Furthermore, the mounting of full time courses overseas for teacher educators out of context may have added to the lack of confidence: "No one denies the need for such training or questions the role of overseas aid in this process, ...the track record is not a good one, for the methodologies and terminologies we have exported to developing countries are often obscure and unworkable" (Hawes, 1979, p. 62). This problem is particularly relevant when developing postgraduate programs for teacher educators. The results of this study illustrate that there is currently no postgraduate program offered in PNG to address subject specializations at postgraduate level.

Consequently, this situation has created a dilemma among teacher educators who want to undertake postgraduate studies but cannot do so because of the unavailability of such programs in PNG. It appears that the majority of teacher educators are enrolling in the current programs because of the requirements for higher qualifications at Masters level in these teacher education institutions. The current in-country postgraduate programs are not tailored to address the needs of particular subject specializations that are lacking in the colleges. As disclosed by one of the participants: "The study is great but the problem is everybody is doing the same Masters programs in Leadership and Education. However, that is unavoidable because that is all that's available here" (PA301). The literature identifies similar concerns regarding staff development programs conducted in Australia for the PTC lecturers in the 1980s (Australian International Development Assistance Bureau, 1989; O'Toole, 1989). The absence of an established process of equivalence between the higher qualifications and the subject specializations in-country is perceived to compromise the chances of improving the quality of education in teacher education institutions in PNG. It is expected that the college lecturers who are currently completing their Masters Degrees will gain expertise in general education, educational leadership, and curriculum studies, but will be lacking in their areas of subject specialization (O'Donoghue & Austin, 1995). This appears to be one of the contentious issues that needs to be addressed in pursuit of enhancing the quality of education in teacher education in PNG.

Evidence to sustain the above assertion is demonstrated by the failure of some participants to make any observable impact in the college workforce upon completion of their professional education: "I don't see it reflecting too much in their work" (PA301). These teacher educators seem to be enculturated into the conservative traditions of the colleges without transforming the colleges. One of the participants in the UOG program stated: "The real concern is about getting a Masters Degree in a particular area. But this Masters Degree that we are doing is more general, so I don't know whether it's going to help us in the long run" (DP101). Ironically this issue is consistent with the literature on the staff development program for PTC lecturers conducted both in Australia and PNG. Although this issue was identified in the late 1980s and 1990s, (Australian International Development Assistance Bureau, 1989; O'Donoghue & Austin, 1995; O'Toole, 1989) the findings of this study illustrated that there has been no strategy created to address this issue of subject specialization at postgraduate level. The current postgraduate programs have different foci and therefore cannot be expected to improve significantly the actual classroom practice of teaching and learning. Therefore the need for an established process of equivalence between the two issues of doing postgraduate studies and subject specializations in-country is critical to address this deficit in teacher education. At this stage, it is too early for this study to make any assessment of the impact of the current postgraduate study programs.

10.1.2 Quality of student teacher trainees

The second emerging theme is the quality of the students who are entering the teachers' colleges. The calibre of students who enrol in the teachers' colleges has a considerable impact on the quality of any education program. The entry requirements into the teachers' colleges have been raised from grade 10 to grade 12 (Department of Education, 2004, p. 19). While this can be viewed as a positive initiative towards improving the quality of education, this policy needs to be treated cautiously, because the grade 12 students who enrol in the teachers' colleges are not the most academically inclined students. The best students choose to pursue their studies at universities. Teachers' colleges appear to enrol the "average" students who fail to gain entry into the universities (Waninga, 1998). These results are consistent with the *White Paper* which notes that while there is outstanding initiative and commitment displayed by staff in particular institutions of higher education, "the quality of higher education programs and the standard of the graduates they produce, fall well short of what is required for self-reliant, national development" (Commission for Higher Education, 2000a, p. 51).

This issue is one of several constraints identified by CHE, as affecting the relevance and quality of higher education (Commission for Higher Education, 2000b, p. 28). This issue is further exacerbated by the short course duration in the trimester program, which fails to permit colleges to develop remedial courses for weak students.

Another contributing factor to this issue is the criteria used in the selection process of students by the PTCs: "An analysis of the grade 12 graduates in 1996 and 2003, ...found that the teachers' colleges are selecting students who have scored lower ... scoring Bs and Cs...That is not good..." (EP003). This concern highlights the importance of getting the most academically inclined students enrolling in PTCs because "if Grade 12 graduates entering higher education institutions are less well-prepared, it will be more difficult to achieve the quality objectives of the White Paper" (Commission for Higher Education, 2000b, p. 29).

Another concern identified is the retention of teachers. The study identified that some student trainees fail to become teachers. Rather, they come into the PTCs to gain tertiary education qualification and use such credentials to gain entry into other sections of the work force. "I don't think they really wanted to be teachers. They just wanted to get tertiary education" (CA201). Participants acknowledged that retaining competent teachers for the primary schools continues to be a challenge for NDOE because the teaching profession is unattractive – too much work for too little pay (Department of Education, 2002a). Education authorities are conscious that "the issue of salaries and conditions for teachers will need to be addressed to bring out the best in teachers" (EP004). Teachers' terms and conditions are important considerations in the retention of teachers (Department of Education, 2002a, p. 42).

10.1.3 Teaching and learning strategies

The third theme is the importance of good quality teaching and learning strategies. The teaching and learning processes in PNG education have been comprehensively researched in the 1990s. These studies recommended strategies to improve the situation (Avalos, 1993; D. McLaughlin & O'Donoghue, 1996). Nevertheless, this study suggests that little has changed in the pedagogies employed by current teacher educators. This situation is exacerbated by a "lack of academic leadership needed to provide directions for change" (EP010). The situation is potentially muted by the mechanistic curriculum still operating in the colleges, as well as the conservative bureaucratic administrative practices of government agencies (D. McLaughlin, 1990).

The delivery of lectures appears to follow the strict observance of the curriculum resource guidelines, with minimal innovations that demonstrate ownership of content and pedagogy relevant to the context. Teacher educators continue to work within their "comfort zones", creating few major challenges to change their teaching pedagogies as demonstrated: "They are just taking what is on the shelf and giving it out without sitting down and thinking through the materials" (PP201). This situation may be due to the fact that the curriculum is externally developed and driven. As disclosed by one of the participants: "Now the lecturers just take the

books (PASTEP modules) for printing and give copies out to the students and say: 'these are the books that we are going to use in this unit and when the next unit comes we are going to do the same'" (HS201). Such practices are counter-productive in the pursuit for quality delivery because lecturers are not challenged to be innovative in their teaching strategies. Instead, they are over dependent on the modules that have been produced for them. Such practices demonstrate that the majority of teacher educators, even after further education, are still at the stage of "formalism" (Avalos, 1991; McNamara, 1989, D. McLaughlin & O'Donoghue, 1996). English is the medium of educational instruction in PNG and research has demonstrated that teacher educators and teachers experience great difficulties in understanding the language, let alone teaching it (D. McLaughlin & McLaughlin, 1995). Indeed, the quality of teaching and learning remains a challenge for teacher education institutions.

The choice of pedagogies is a crucial strategy for lecturers in improving the teaching and learning processes in teacher education. Lectures are still predominantly lecture-centred. There are few opportunities provided for reflective teaching and learning. Zeichner and Liston (1996) argue that this is an essential component for quality teaching and learning. The quality of teaching and learning is hampered by the following factors: (1) cramped conditions of the educational environment because of the over-enrolment of students; (2) inadequate funding and lack of resources; and (3) lack of infrastructures. Under such conditions, the quality of education will continue to be compromised unless these teacher education institutions are adequately staffed, financed and well-resourced for the task that they are expected to deliver - future quality teachers. The literature highlights that the provision of quality resources and infrastructure is critical in the pursuit for quality education (Beeby, 1966; PASTEP, 2002).

The scarcity of quality resources and inadequate infrastructure in primary teacher education in developing countries is widespread (Ishwar Lingam, 2004). In this thesis, quality resources are inclusive of everything that promotes quality teaching and learning and all other programs of the institution. This means appropriate infrastructures, adequate funding allocations, curriculum resources in the lecture rooms and more importantly in the libraries, audio visual equipment, and an environment conducive to academic research to enable quality education to be harnessed and nurtured. The evidence suggests that: "Equipment, facilities like laboratories, classrooms...are falling apart since they have not been supplemented by the government but somehow you have to furnish them and make them more attractive for the kind of students of today..." (EP003). Participants agreed that: "Better conditions will help to improve the quality of delivery" (EP004). However, the participants are aware that accessibility of educational resources in the different departments and strands is hampered by limited financial allocation: "These books are no longer ordered because they cost a lot and there is limited finance for such

expenses" (PS201). Moreover, the substantial contribution by PASTEP to the colleges' libraries and the five Strands is inadequate. The current resources are limited and inadequate to service the staff and student population (HS101). The scarcity of resources has a detrimental effect on the quality of their presentations. For example, the quality of students' presentations of work is affected by the lack of text books and other resources in the library.

The colleges' administrations acknowledged the importance of quality resources and infrastructure, but added that there was insufficient funding so they had to prioritise their needs. However, the manner in which some of the colleges' leaders prioritized their spending was questionable: "There is greater emphasis on the physical development of the administration building and so that is where the money is spent. The money is not spent on academic programs and resources..." (PS103). The implication is that, with the scarcity of educational resources and inadequate infrastructures which are consequences of inadequate funding exacerbated by wrong priorities, the quality of education is not likely to improve in the immediate future unless these issues are addressed. This problem seems widespread in developing countries (Ishwar Lingam, 2004).

10.1.4 Quality assurance mechanisms in higher education

The fourth theme is the establishment of quality assurance policies and mechanisms. The results of this study indicated that the issue of quality assurance is an important one for the colleges. Accreditation, affiliation and amalgamation policies were introduced to guarantee appropriate academic standards and the provision of quality educational services. The policy of accreditation arose out of a concern about the number of institutions granting academic awards, which in turn raised questions about the need to maintain the standards of such awards. The processes of affiliation and/or amalgamation are in accordance with the national government's directives to affiliate and/or amalgamate all colleges and institutions to universities in the country. These processes resulted from the Higher Education Project facilitated by CHE in 1995-1996 and involved policy changes emanating from the following documents (Commission for Higher Education, 1996a, 1996b, 1999).

The processes of affiliation and/or amalgamation in each of the three colleges involved in this study were at various stages. Each college and the Agency had the prerogative to decide the appropriate process. The results indicated that SBC is an amalgamated campus of DWU (Leach, 2004) while OLSHTC is an affiliated college of DWU (24th November, 2004). In contrast, HTTC is still working towards the process of affiliation with DWU (Alphonse, 2005). The bishops responsible for these colleges believed that DWU is the appropriate university with which to work: "Absolutely, I think the Agency is wholeheartedly in favour of the affiliation

with DWU... we need help and I think it can be given through DWU" (CA101). The results demonstrated that the directions that the colleges are taking in the implementation of the affiliation and/or amalgamation policies with DWU are in accordance with the two policies of affiliating with a PNG university to guarantee quality programs and educational services (Commission of Higher Education, 1996a, 1996b). Consequently, the colleges have to fulfil certain guidelines before being granted the status of affiliated colleges of DWU.

In the process, the staff and students of OLSH and HTTC encountered two major challenges: (1) Lack of communication by the college leadership with their staff and students and (2) Lack of leadership to work collaboratively with staff towards affiliation with DWU. In contrast, the study identified a different set of challenges faced by the administration, staff and students of SBC - the amalgamated campus of DWU. There were three main challenges encountered by SBC: (1) No established structure in place for SBC at DWU as this was still evolving; (2) The issue of communication between SBC and DWU which is complicated by distance; and (3) Funding and resources for the amalgamated campus whereby the main campus is perceived to be the one that is always in control. The results revealed that these processes are extremely slow and require considerable collaborative effort from all stakeholders. Despite these challenges, there is commitment from these colleges to work with DWU to improve the quality of their programs.

10.1.5 Participants' perceptions of the term "quality education"

The final emerging theme is the notion of quality education as perceived by the research participants. The definition of quality education varies from participant to participant. "The issue of quality and higher education is also a personal agenda especially with the achievement of advancing in the individual's career" (EP004). "I think in any teaching quality program anywhere in the world; you will always get graduates who are better than others or worse than others" (EP009). While NDOE clearly outlines its definition of quality education as providing appropriate attitudes, knowledge and skills relevant to community development as well as a degree of competency in English, Mathematics and Science (Department of Education, 2000b, p. 14), other stakeholders have their own definitions of quality education. There are as many definitions about quality as there are people who try to define it. There are those who view education as the key to paid employment. There are those who believe that "education should be the foundation of a pluralistic society where education should open doors for all" (Wheatley, 1999). Others believe education should lead people to a life better than the one they were brought up in. The startling conclusion is that with such a variety of definitions among stakeholders regarding quality and relevance of education, educational institutions are faced with an almost impossible task of producing the perfect teacher who will suit all these

definitions. However, in terms of their graduates, quality will have to be measured not during their training or directly after graduation, but over time based on their performance. The measure of quality is in their endurance (PP101). Furthermore, Beeby (1966) emphasizes that quality will occur only when teachers understand what they ought to teach.

While policy makers for the education reform have provided some benchmarks relating to quality education for educationists, the actual implementation and how it is conducted is left to the educational institutions. This has subsequently led to staggered levels of success due to the unavailability of qualified personnel, lack of funding and inadequate infrastructure. Criticisms and comparisons have often been levelled at teacher educators for not producing quality teachers. The citation that follows is representative of a position shared by a number of academics:

What benchmark are we setting? People have always been critical of our students' level of English since I started teaching in PNG. Who sets the bench marks? Who sets the standards? I do not believe that the standards are worse now than what they ever were before. I question what people use as the benchmark. To say that you should put expatriate teachers back in the school today is totally wrong. If by having nationals take up the system and the standards are different then that's just the way it is and I think we just have to adapt to the level or standards that they are able to achieve. Teachers in schools face huge problems with the terms and conditions that they are in and the schools are in. I think the education system has achieved marvelous things for PNG considering the conditions that the students and teachers have come from. (EP009)

These comments reflect a general feeling among teacher educators about the views of the community towards teachers concerning the quality of general education in the schools. While teacher educators may not always agree that criticism from the public is balanced, it is important to focus on what actually occurs in the training of the student teachers and how this occurs with the limited resources available. One participant argues that: "There is absolutely no research to show that a one-year trained teacher can't teach as well as a two-year trained teacher" (EP009). While this may be a rational argument, the results of this study have illustrated that these colleges are inadequately resourced, staffed and financed. Under these circumstances, this argument may be a weak one considering that qualitative change will occur only when teachers understand their subject content (Beeby, 1966, 1979). This relies on meaningful experiences in the colleges and less on resources.

Professional teacher education is more than just equipping the student teachers with teaching skills. The literature illustrates that relevant policies and programs are essential to ensure the provision of an adequate and enriching professional preparation of teachers (Ishwar Lingam, 2004; Musonda, 1999). This implies that the higher education policy of raising the entry

requirement for teachers' colleges to grade 12 students is a positive one (Department of Education, 2000a) but it does not inevitably lead to quality output in education.

Summary: The five emerging themes that comprise the discussions for Research Question One are important in the pursuit for quality education. Despite constant educational change over the past three decades since independence to professionalize teacher education, the results of this study reaffirm other research that much still remains to be done to provide a set of teacher education experiences that will develop the cognitive abilities of teachers, thereby enabling them to move from the stage of formalism to the stage of meaning (McNamara, 1989). The impact of these findings has implications for the other three major areas of this study that are subsequently discussed in this chapter.

10.2 PASTEP innovations

The second major area of this chapter discusses the perceptions of the research participants of the recent PASTEP innovations in the teachers' colleges. In the presentation of the findings, four key themes emerged which connect foreign aid to educational change in PNG. In the ensuing sections, each of these themes is discussed in light of the relevant literature.

10.2.1 Contributions of the PASTEP innovations to the teachers' colleges

The first theme that emerged is a positive acknowledgement of the contributions made by PASTEP to the teachers' colleges. In the implementation of the national education reform, PNG has depended on overseas donors because "donor support for education and training is essential" (Department of Education, 1999b, p. 7). This dependency relationship has enabled PNG to implement its education reform program. Overseas donor funding agencies have provided financial and technical assistance. Among the donor funding agencies, AusAID has been the most prominent (Editorial, 2003a; Wendt, 2004).

PASTEP was an important AusAID project for teacher education in the implementation of the education reform. The project was funded by the Australian Government through the auspices of NDOE. PASTEP engaged in a number of activities in these teachers' colleges such as: refurbishment and construction of facilities; development of curriculum support materials; procurement of curriculum resources, computers and equipment; provision of in-PNG and in-Australia training, and establishment of information and communication technology learning centres and programs (PASTEP, 2002). PASTEP provided a timely opportunity to intervene in teacher education programs and to develop the kind of teacher that is required, given the present social and economic contexts of PNG (Guy et al., 2000, p. 60). The intervention of PASTEP in

teacher education programs produced some positive outcomes. The participants unanimously expressed their appreciation to PASTEP for the contributions: "I want to thank the Australian people and its government for their kind assistance" (PP301). Similar expressions of appreciation were echoed by senior bureaucrats of NDOE: "Much of the assistance we have been getting is from AusAID. We would not have been successful without the help of the donor agencies" (EP001). The contributions and levels of success provided were consistent with the general aim of PASTEP which was to raise the quality and relevance of teacher education to meet the requirements of the PNG national education reform agenda (PASTEP, 2002). The contributions by PASTEP highlighted the important role that teacher education has in the education of future teachers and further demonstrated that the appropriate infrastructure needs to be constructed and maintained if quality education is to be achieved. This situation could have improved had there been sustainable partnerships established with stakeholders (Vick, 2006). NDOE's lack of commitment to provide adequate funding to support these colleges and to continue what PASTEP has initiated is an example of unsustainable partnerships. Without such commitment from NDOE, the colleges will encounter problems in maintaining their facilities and the quality of their programs. This implies that colleges generate other funding sources to become self-reliant because of the inadequate funding from NDOE and the Agency. The evidence suggests positive undertakings by colleges.

10.2.2 Sustainability and accountability of PASTEP

The second theme is the importance of sustainability and accountability of the PASTEP innovations. Sustainability and accountability includes the need for care and maintenance of the PASTEP innovations. This duty of care is a major concern for PASTEP as they were ending the project. There are millions of dollars worth of educational resources, computers and IT materials, building materials, chairs and tables, beds, and Learning and Information Centres provided by PASTEP to the colleges at no cost to colleges. The evidence suggests that sustainability and accountability of the PASTEP innovations are not given a high priority by the colleges. Of the three colleges, there is evidence of an inventory established to closely monitor the use of the PASTEP materials in one college while the other two have no such system established. These situations illustrate lack of leadership and accountability in ensuring that a monitoring system is established to monitor these assets provided by PASTEP. Furthermore there is evidence to suggest that the materials/equipment provided by PASTEP for staff members' and students' use are stored away safely - some in containers and some in the administration's offices instead of being utilized to improve the conditions in the colleges. This suggests that the college administration has a culture of hoarding equipment/supplies instead of making these available as was intended by PASTEP. It seems the administration is fearful of providing access to these materials in case the materials are damaged or stolen in the process. Such attitudes fail to encourage a sense of responsibility and ownership, but immaturity and dependency.

Generally, there is a lack of care for the materials, resources and equipment provided by PASTEP. This "no care" attitude may be a reflection of a lack of respect and/or a sign of resistance. Consequently, this non-caring attitude among staff and students suggests that better strategies need to be created to promote a sense of ownership and sustainability in projects being funded by overseas donor agencies to prevent a repetition of such practices. The literature attributes this lack of ownership to the non-involvement of the recipients in donor funded projects (Burnside & Dollar, 2000; World Bank Group, 1998, 1999). If stakeholders are active participants of any foreign project from the initial negotiation to the conclusion and evaluation processes of the project, it might help create a sense of ownership and a culture for sustainability.

10.2.3 Bad workmanship

The third emerging theme is bad workmanship. While the colleges feel indebted to PASTEP for these projects, they acknowledge that not all the refurbishment and construction of facilities are completed satisfactorily. The administration of each of the colleges and the Church Agency raise concerns about the bad workmanship evident in the construction of some of the colleges' facilities. As a result, there is resentment among those directly affected because they raised objections to some of the projects and were simply ignored. These examples demonstrate the insensitivity of foreign workers to the local context. When local knowledge is ignored, often the success rate is low. This is an area that developers need to be cognizant of for sustainable development (Burnside & Dollar, 2000; World Bank Group, 1998).

After the departure of PASTEP, the colleges incurred substantial costs to undo the damage left by PASTEP construction companies. These bad constructions illustrate lack of knowledge and skills, and raise further questions about the quality of the workmanship. Moreover, the situations demonstrate a lack of appreciation of the needs of the recipients, which reflect an attitude of arrogance on the part of the foreign workers who thought they had all the answers (Nakata, 2004). Such arrogance can breed resistance and result in unsustainable development.

10.2.4 The importance of sustainable partnerships

The fourth emerging theme is the importance of sustainable partnerships among stakeholders. PNG education prides itself in maintaining strong partnerships with the Churches and the State as part of its history because education was introduced in the country by the churches (P. Smith, 1985). Since then, the churches have continued to be major partners in the PNG education system. It seems that this is an area the foreign donor funding agencies need to be cognizant of, if they want to promote ownership and sustainability in any project in which they want to invest massive funding. This implies the need for sustainable partnerships based on equality (W. Turner & Sharp, 2006). Such partnerships seem lacking.

While the Church Agency acknowledges the important contributions of PASTEP to the development of education, there are areas of concern that need attention. The major one is the lack of consultation with the Agency. It appears that negotiations of the project were conducted exclusively between PASTEP and NDOE. An Agency representative expresses the collective view:

These people seem to come in and act independently of the diocese but forget that the diocese owns the institution. Even though they are there for the good of the institution, we are in need of knowing what is going on and feel that we should be consulted. We have a Catholic institution and we want to have a say in what is happening in our institution. We are not a puppet nor do we want to be manipulated. (CA301)

This process created divisions within the colleges because PASTEP consulted with NDOE but not with the Catholic Church. This seems to be a breach of the partnership between the Churches and NDOE that was forged in 1952 (P. Smith, 1985, p. 52). PASTEP could be excused for not knowing about the importance of the Church Agency's role in these colleges. By the same token, it does reflect a negative image of PASTEP because they should have obtained background knowledge before commencing a large scale project like the one they conducted in the PTCs over a five year period. NDOE should have safeguarded the partnership with the churches and involved the Agency in the process. The lack of consultation with the Church Agency could be interpreted as a serious oversight by PASTEP and NDOE. This oversight reflects a "top-down" approach which is detrimental to sustainable development (Kayrooz et al., 2006).

This situation reflects a major breach of the Education Act which clearly stipulates the involvement of the education secretaries of agencies to represent the interests of the Agency (Department of Education, 2001a, Section 58, (3a-c)). It appears that one of the major reasons for the non-involvement of the Church Agency representative was the control of funds. Not only is this a breach of the Education Act but, as well as that, such practice also raises questions about who is making decisions, in this case for the Catholic colleges, in the absence of their legal representative. This process is difficult to deal with especially when donor funding agencies insist on conducting projects autonomously (World Bank Group, 1999). Consequently,

the exclusion of the Church Agency by PASTEP and NDOE reflects a hegemonic relationship which illustrates control and power over the 'other' (Childs & Williams, 1997, p. 231).

Summary: These discussions have implications for foreign aid and its suitability to the local context. PNG relies heavily on foreign aid for the implementation of its education reform (Department of Education, 2000a, p. 15). PASTEP was AusAID's contribution to improvement in teacher education. While there were substantial contributions made by PASTEP to the teachers' colleges, there were flaws in the manner that the project was conducted. The issue of consultation was a sensitive and controversial issue in the PASTEP project. Consequently, this would imply that, in order for foreign aid to be effective, there needs to be an active participation of all stakeholders in the project decisions, not just the bureaucrats negotiating with the foreign aid donors, which is the "top-down" approach (Kayrooz, Chambers, & Spriggs, 2006, p. 98; World Bank Group, 1998). Such practices help create a sense of ownership and sustainability of the donor funded project. Thus far, there has been little continuity after the departure of PASTEP which supports the perception, that "aid is wasted in countries that do not have technical and administrative ability to absorb and use it properly" (O'Neill, 1997, p. 2). This is an area that needs to be developed more systematically for future development projects.

10.3 Curriculum

The third major area of this chapter discusses the perceptions of the lecturers, students and recent graduates of these colleges regarding the curriculum of the teachers' colleges. Five themes have been identified for discussion because of their relevance to the research purpose. The related literature on teacher education, educational change and higher education policies in Chapter Four guides the discussion.

10.3.1 Changes in teacher education programs

The first emerging theme is the impact of the changes in teacher education programs. Educational change in teacher education has had a considerable impact on the teachers' colleges because there have been a number of key changes implemented within a short span of time. These changes have been recommended by various reports and reviews to accommodate the needs and aspirations of contemporary PNG society, and a vision for future generations (Department of Education, 1998; Matane, 1986; McNamara, 1989). However, it seems PNG is not alone in this development. The trend towards continuous educational change appears to be constant as educational systems endeavour to respond to broader social, economic and technological change (Proudford, 2003). Such changes are having a rippling effect in all areas within teacher education in PNG. In 1995 and 1996 the PTCs were charged with the task of

developing and producing their new curriculum called *Program 2000*. Under the guidelines of this new program, the courses were organized under five strands; a core curriculum with electives and college options established; and 150 credits towards the diploma in teaching primary (Norman, 2003). The colleges worked hard to develop this program only to have more new changes introduced. Arguably, this seems to be the experience of many teachers that their "current work environment is characterized by too much change" (Proudford, 2003, p. 1). With the beginning of the education reform, *Program 2000* under the three-year diploma was superseded by the two-year trimester program. It seems that lecturers have continued to use the programs they developed under *Program 2000* with some difficulty in the trimester system.

As of 2002, all PTCs changed to the two-year trimester program (Department of Education, 2002a). However, there are difficulties in the change process: First, given that the program had been shortened by one academic year, the colleges have had to rework their six semester programs to fit into six trimesters over a two year period. The findings from this study illustrated that this has proven to be a greater challenge than anticipated. Second, while this change appears to meet the expectations of NDOE by reducing the shortfall of primary teachers throughout the country, the issue of quality remains the greatest challenge (Department of Education, 2000b, p. 16). It appears that while the trimester system is producing an outcome which is in accordance with the goals of NDOE, the quality of recent graduates has been questionable (Clarkson, 2003). Third, constant changes are causing frustrations among teacher educators because these changes have been externally imposed with little consultation with stakeholders. In addition, these changes have occurred over a short period of time.

Changes of this magnitude and complexity represent a "shift from a set of assumptions, beliefs, norms, behaviours and practices to another" which in turn create a new culture of teaching (Miller, 1998, p. 530). The ability to make the appropriate paradigm shifts requires focused organizational and academic leadership. However, the fact that the lecturers in these colleges are experiencing difficulties incorporating these new educational changes could be another indication of how weak curriculum leadership is. Leadership is critical in any educational change (Fullan, 2001). Good leadership provides the direction needed to produce the appropriate paradigm shift required to manage change.

10.3.2 Impact of the trimester program

The trimester program was introduced to address the national shortfall of teachers in primary schools. The trimester program has reduced the costs by 33% and increased the output by 50%, which is an achievement of NDOE (Department of Education, 2004, p. 74; Department of Education, 2003c, p. 22). However, the cost-saving measures and the increased number of

graduates come at a cost. The majority of participants strongly opposed the trimester program because it was compromising quality rather than enhancing it.

This problem is illustrated in an inability among the majority of lecturers to identify key teaching concepts in their units rather than trying to teach everything in the modules. This phenomenon is further exacerbated by the issue of "subject overload"- too many subjects in the curriculum which complicates the teaching and learning processes. While this problem is beyond the scope of this study, it does impose structural constraints on the colleges from elements of the education system, such as the fragmented nature of the curriculum of the primary school. This issue was identified by Avalos (1989) but little has been done to address it in the teacher education curriculum. That is why cultivating a reflective practitioner has been ignored because it is difficult to achieve. This issue reiterates one of the key aims of the McNamara report (1989) in recommending for the introduction of the three year diploma program to produce teachers who are reflective learners and practitioners. Under the current trimester program, this goal is not likely to improve substantially, at least in the short term.

There was a general perception that the three-year program was a better program than the current trimester program. This is because there was ample time in the three-year program to cover in-depth content, complete meaningful assessment and conduct the college practicum. The diploma program offered a future of change in teacher education and coincided with the changes taking place in the education reform in the country. As stated in the national curriculum guidelines, the course is intended to "produce responsible, reflective and competent beginning teachers who can serve the current and future needs of pupils from Grades 3 to 8 within the Papua New Guinea primary education system" (Department of Education, 1998, p. 3). However, 3.54% of the research participants stated that the three-year diploma program was too long and there was a lot of repetition. "Three years to me is a long period of time... one semester of twenty weeks is a very long time" (PP101). In the three-year program, lecturers did little to produce quality in the delivery of the programs and students were bored (EP010). In both programs the time frame is an important factor but it is not the sole component for quality. Avalos (1989) argues that: "More time does not necessarily mean quality programs or quality graduates" (p. 110). Good basic understanding of a program by staff and students is essential combined with good leadership to provide direction for change and must be supported by quality lecturing and adequate resources. With these characteristics in place in the colleges, there is reason to anticipate some improvement in the quality of the program and its graduates. Nevertheless, the results of this study indicate that the current trimester system may not be the appropriate model for training teachers in PNG.

Under the current situation, teacher education institutions need to make the trimester system produce the quality teachers required. This requires making some adjustments to the trimester program to suit their needs in the training of teachers. Adjustments to the trimester program need to be done in collaboration with the Curriculum division. Creating partnerships with NDOE and CDD may need close scrutiny in achieving the quality that everyone talks and writes about in policies and objectives, but as yet has not been achievable. This does not mean that quality is not going to be achieved. On the contrary, what it means is that quality can be achieved if there is better collaboration among all stakeholders. Quality is one of the goals of the education reform that must form the basis of education programs (Department of Education, 2004, p. 3). However, this and the other goals of the reform can be achieved only if education is promoted as a collaborative endeavour rather than a government agenda.

10.3.3 College practicum

The college practicum is an integral component of teacher training. The practicum together with the core academic units, college options and student electives of the diploma of teaching course are intended to produce beginning primary teachers, who consistently exhibit and apply the professional attributes, attitudes and competencies (Department of Education, 1998). Under these guidelines, the practicum, or school and classroom based teaching practice activities occupy almost one quarter (24%) of the approved course content (Department of Education, 1998). Because of its importance, a practicum coordinator is appointed to oversee the organization of this activity.

The general perception was that the students were not adequately prepared for the practicum. Under the trimester system, there was limited time available for the school visits leading up to the practicum. Because there was little quality time provided, "everything is squeezed up and is too fast for us" (SS301). On examination of this issue, it appears there was poor organization and planning by practicum coordinators in conjunction with the rest of the strand heads. The reasons for this situation are: poor organization, complicated administrative procedures and budget constraints. These findings are consistent with current literature on the subject (Avalos, 1989; Clarkson, 2003; Zeegers, 2000). It is ironical that such an integral component of teacher education is under-funded by teacher education. Moreover, the organizational demands of the practicum require competent leadership qualities. The results of this study indicate that leadership at this level was disappointing. Practicum coordinators require assistance in the planning and organization of the practicum to improve the current situation where practicum activities are organized on an ad-hoc basis.

Examination of the lesson observations demonstrated little evidence of the teaching of concepts and engaging students at that level. The structured lessons covered subject matter in purely factual terms with little variation in the learning outcomes from the envisaged path the lesson was to take. In addition, there was very little content taught to the class before class activity. There was considerable time allocated to seated work while student teachers went around the room checking students' work. The marking of students' work was a general activity in the conclusion phase of the lessons. Group activity was a common strategy employed. However, in those groups, there were limited opportunities for creativity and student interactions observed in the lessons. These findings are confirmed in a more recent study which concluded that the heavily prescribed teachers' guides are too controlling leaving little room for flexibility (Zeegers, 2005). Most lessons observed followed a similar pattern of little content given followed almost immediately by activity - seated work followed by correction of work. The majority of lessons exhibited subtle aspects of the cultural practices expected of the young, where they are expected to learn by listening and observing but without questioning (Lindstrom, 1990). The results of this study reflect similar behaviour noted in research conducted in the 1980s and 1990s (Avalos, 1991; McNamara, 1989) which indicates that little has changed with regard to quality teaching and learning.

It is probably not unreasonable to expect these teaching approaches of student teachers when the lecturers themselves experience difficulties identifying key concepts in the units taught. These findings seem to be consistent with Zeegers (2000) who concluded that, for the most part, "procedure is all; process is naught" (p. 157). These findings also reinforce the theory that teaching and lecturing at the college level has not drastically changed even though this is what the education reform emphasizes, in order to make education more relevant to the needs of the students when they leave school. Concurring with Zeegers (2000), there was no attempt at all to make the mathematics, religion or language lessons relevant to the context of the children except for that one lesson on the "food chain/web". The outcomes based education (OBE) that is expected to drive the curriculum seemed fragmented in the lessons observed. One member of staff asserted: "They [students] are really 'learning on the job, hands on experience'. We can't be too critical of them because they are trying their best" (PS201). Furthermore, English as the medium of instruction in schools continues to pose problems for teachers and pupils. The expressed need for a "more reflective teacher" seemed lost in the practicum because the theory and practice did not mesh. These observations were congruent with a more recent study which concluded that, "there was not a single attempt to integrate the material covered in any way with the curriculum as a whole" (Zeegers, 2005, p. 145).

Comparisons were drawn to the three year diploma, "there was quality preparation for trainees..." (ST201) because the semesters were longer in duration compared to those in the trimesters. However, it can be argued that having more time and more practice do not necessarily train better teachers, as research in other contexts is beginning to indicate. Avalos (1989) explains; "if practice means repetition of skills which may be inadequate, or induction of the student teachers into malpractices dominant in some schools, then it can be counterproductive" (p. 110). There was evidence of a mismatch between what was actually taught at the colleges to what students found in the schools during their practicum. "When we went there, some of us expected to find some things that we learnt at the college but we found that some of the things we learnt were not practiced out there in the schools" (SS301). This situation seems to suggest a narrow approach to what is taught in the colleges, where the focus is on the "correct practice of skills and less on the ability of teachers to judge situations, apply principles and teach with knowledge of their subject matter" (Avalos, 1989, p. 110). These findings reflect Zeegers research, which concluded that "there is a distinct lack of opportunity for PNG teachers themselves to implement their own government policy, given the constraint of formal/behaviourist procedures and protocols imposed by national teacher education authorities through their own college" (Zeegers, 2005, p. 145). These practices further demonstrate an inability of teacher educators to implement government policy to produce responsible, reflective and competent novice teachers (Department of Education, 1998). This is an area that needs to be addressed by policy makers and teacher education.

These findings on the college practicum revealed little that is new from that offered in other studies (Avalos, 1989; Zeegers, 2000, 2005). What is of concern though is that, in 2007, the areas of teaching identified by Avalos and Zeegers as needing improvement have not drastically improved or changed for the better.

10.3.4 Student Assessments

The purpose of assessment is to critique learning in students. The new curriculum in PNG is underpinned by an OBE framework which supposedly focuses on a learner-centred design where learning is regarded as "the active construction of meaning, and teaching as the act of guiding and facilitating learning". This approach views knowledge "as being ever-changing and built on prior experience" (Queensland School Curriculum Council, 1999, p. 7). These changes stand in contrast to the subject-centred and content-driven nature of earlier curriculum developments. The major challenges for teachers require them to plan differently, to teach differently and to assess differently. This is because the role of the teacher needs to change from the transmitter of information to a facilitator of learning and assessment needs to focus on progress along predetermined continua of learning and changes in the learner (Proudford, 2003,

p. 1). The actual assessment procedures in the colleges are at variance with the views advocated by Proudford. The tasks provided by each lecturer for assessment of their units of work were too many. For instance, in the first trimester of 2005, each student was required to complete 12-14 pieces of work within a 12 -14 week trimester. Some of the assigned tasks set did not reflect the unit of work while, in other cases, the marks awarded did not correspond to the tasks assigned and there were few justifications for some of the marks awarded. Lessons could be learnt from the English Basic Skills (EBS) examination administered by the Ministry of Education's Division of Teacher Education to identify the common errors and then design objectives to remedy the difficulties (D. McLaughlin & McLaughlin, 1995). Moreover, the examination appeared to concentrate on language skills out of context (Wingfield, 1987) and serious inadequacies were identified in the setting and marking of the examinations (Yeoman, 1988). The over-emphasis on the EBS examination defeated the purpose of the EBS. Students found it difficult to concentrate on anything other than preparation for examination and subsequently the rest of their studies was neglected until the examination was over (McNamara, 1989). With high assessment work loads and each lecturer setting a minimum of three pieces of work, it is understandable when students say: "I just want to pass" (SS201). Under such pressure, the quality of the work submitted by students for assessments can be questionable. This was exacerbated by the discrepancies observed in the way the marking and grading of students' work was conducted.

One of the delicate issues identified in this study was a "culture that everybody has to pass" the course (PA301). The study revealed that there was the inability of some lecturers to fail students. There were whole classes where there were no failures while in other departments, half of the class failed a unit. In some cases, where the majority of students failed, assessment coordinators were requested to rework the marks and pass students. Even if students were not performing, some lecturers did not want to fail them. This practice is detrimental in the pursuit of quality education and quality graduates. Alternatively, it also reflects a dilemma that some teacher educators have in distinguishing between good educational practices in a western formal education and Melanesian cultural values. Failing a student can be difficult, but failing someone who is a relative, friend or *wantok* can be extremely difficult (Whiteman, 1995; MacDonald, 1995). In such circumstances, it is very difficult to be impartial. It is important to note that this issue is not representative of the majority who are professional and impartial when assessing their students.

The time factor is an issue with which lecturers have to compete. Because of the short duration of the trimester, lecturers do not have quality time to appropriately assess students' work. There were some academic staff members who had to mark 300 papers in a week. Consequently, such

high work loads intensify the pressure on staff and this pressure affects the quality of assessment.

10.3.5 DEPI program

The DEPI program is a new program introduced in these PTCs in addition to the pre-service program. The DEPI program was introduced as part of the education reform for primary school teachers. With the reform restructure, primary teachers with certificates are encouraged to upgrade to diploma level, to teach the new curriculum and cope with the structural change at the upper primary school level or multigrade (Department of Education, 2000b, p. 46). The structural change means grades seven and eight, which were part of the high school (Grades 7-10) under the old education structure, were now pushed back to the primary school and subsequently referred to as the upper primary level in the restructure (Grades 6-8) (Department of Education, 2000b).

The DEPI program was initially conducted by PNGEI on behalf of NDOE completing three stages: a 16-week residential; an internship; and the completion of four matriculation courses through Institute of Distance College Education. High costs in travel, tuition fees, and board and lodging discouraged teachers undertaking the DEPI program since the majority of teachers could not meet all these expenses (Department of Education, 2000b; Guy, Bai, & Kombra, 2000, p. 65). This had an adverse impact on the program, resulting in a decline in the enrolments and completion rates of the program. Given the need for qualified teachers for the upper primary level and the reported loss of quality in these teaching areas, it was appropriate for NDOE to develop a suitable incentive scheme for teachers in order to encourage them to undertake such courses (Guy et al., 2000, p. 66). Therefore, with the high demand, this program was transferred to PTCs.

The DEPI program was not a compulsory program for all PTCs to conduct. Two of the three Catholic PTCs are conducting the DEPI program in addition to their pre-service programs. The third college declined the offer because of the unavailability of personnel, resources and facilities on campus. Regionally, for the two colleges conducting the program, this is a positive undertaking because it has provided greater access for teachers in the field to upgrade their competence and qualification. The responses from the students have been affirmative. "The lecturers are qualified and they had helped a lot in all the subjects in the course" (DEPI students). Moreover, the program is cost-saving for teachers within the locality and region, which has resulted in an increase in the number of teachers undertaking the course. This result is consistent with a recent report which concluded that access to DEPI has been increased by

decentralizing to PTCs and conducting additional field workshops in other provinces (Department of Education, 2004, p. 74). This is an important achievement for NDOE.

While acknowledging the positive achievements of NDOE regarding the program, there were contradictory views among the research participants about the value of the program. Students applauded the program, however the staff members were divided in their views. In both colleges, the majority of staff did not want to participate in the program for a number of reasons: First, there was a general view among staff that the DEPI program was an extra burden and they did not want to get involved. Second, there was some argument about their commitment to a pre-service and not an in-service program. Some of the staff resented the way the college accepted the program when the infrastructures and facilities were not in place to support it. Third, there was the issue of remuneration of staff involved in the teaching of the program. However, this was resolved easily with the colleges' administration providing financial incentives for those involved. These comments illustrated some form of resistance from the staff about taking on this program without proper consultations having been held with them.

The course duration was another key issue that emerged. The course duration for the program was different from one college to another. In the first college, the course duration of the program was twenty-four weeks, while in the second college it was sixteen weeks. The students complained that: "The program could be conducted for a full year instead of half or a quarter which results in squeezing everything and leaving some activities untouched" (DEPI student). The general feeling among the students undertaking the program for sixteen weeks was that the course duration was too short and they were pressured to get everything completed. The issue of time/course duration was identified in an earlier study on DEPI which concluded that "there is insufficient time or imagination in these courses to take students into new skills areas" (Guy et al., 2000, p. 65). Unless this issue is addressed adequately, it will continue to affect the program and the students undertaking the program.

Nevertheless, this reflects a concern about research not being effectively implemented as highlighted in a UNDP/ILO report in 1993 which stated in part that the education sector has been well researched and there is a "high degree of awareness of the problems and constraints, but these suggestions do not appear to get translated into meaningful actions" (UNDP/ILO, 1993, p. 132). The lack of implementation is sometimes because of the "inherent inadequacy of the policy, resource constraints, or the lack of institutional capacity of the implementing agency" (Commission for Higher Education, 2000b, p. 84).

Learning takes time and it is more pertinent for teachers who have been out in the field for more than ten years, to gradually familiarize themselves as students with formal studies. This is a challenge for them and therefore the course duration needs to correspond to their needs. Under the current practice, with such a difference in the course duration, quality could be suspect. This situation is exacerbated by the large range of abilities within students who enrol in the DEPI program. One DEPI student commented: "I have been teaching for thirty years and this is my first time again in the classroom as a student. It is not easy to be on the other side of the desk" (DEPI student). Arguably, with a wide range of these in-service teachers returning to upgrade, the DEPI program needs to be adjusted to ensure an appropriate package is developed for teachers who have had a low level of general education. In such situations, the quality of the current DEPI program is questionable because the colleges have failed to take into account the level of general education of the students and the type of professional training that they require, given their long absences from any formal studies, since their graduation from college (Beeby, 1966). This invites critical scrutiny of the current DEPI curriculum. The curriculum needs to be seriously addressed by the colleges so they can claim ownership of their DEPI program. The evidence indicates that colleges are offering the same units as offered by PNGEI with minimal adjustments made to accommodate students' needs.

10.3.6 Special education program

Special education is another program introduced in these colleges since 1994. The introduction of the program fulfils the national constitution, that children with disabilities have a right to educational programs suitable to their needs, so that they can be self-reliant and live full and happy lives within the community. This is consistent with the nation's philosophy of education which stipulates that "every person should be dynamically involved in the process of freeing himself or herself from every form of oppression" (Matane, 1986, p. 6). Until the 1990s, children with special learning needs had largely been ignored by the national education system. Children with special needs are those with hearing, vision, physical, intellectual (mild) and emotional, behavioural and learning disabilities (Department of Education Special Education Unit, 2003, p. 2). It is estimated that about 4,500 children have benefited from special education programs (Department of Education, 2003b, p. 46). Special education became a government mandated policy in 1993 and was introduced into the PTCs in 1994 (Department of Education, 2003b). Prior to that occurring, it was the mission agencies that provided the initiatives for these children to be included in the regular school system (Department of Education, 2003b, p. 46). Special education recognizes the needs and rights of people with special needs or disabilities to a good education. Since its inception, the program has continued to develop not just within colleges but it has ventured out to involve other institutions in partnership with the mission agencies to provide this service to the disabled population in the country. The goal of special education is the inclusion of children with special needs into the regular school system and into the community (Department of Education Special Education Unit, 2003, p. 2). That goal is still a long way away from becoming a reality. However, the fact that special education is now a government mandated policy is a positive development. Therefore it makes sense that the most appropriate place to start is in the PTCs with the education and professional training of the teachers needed to work with these children.

Special education seems to be a vibrant program in the Catholic PTCs probably because this program is closely aligned with the mission of the Catholic Church in the ministry for the underprivileged and most vulnerable members of society, namely children. Traditional Melanesian values reinforce this message (Narokobi, 1980). Drawing on human rights theory, international organizations such as the United Nations argue that all children possess basic entitlements, including the right to an education, which must be defended and protected (Abercrombie, Hill, & Turner, 2000, pp. 299-300). While these positions have emerged from various cultural and philosophical traditions, they provide the ethical foundation for special education.

The emphasis placed on the education and professional training of staff members is insightful. This is illustrated in the workshops and in-services conducted for its staff both at the college and resource centre levels. PASTEP supported with the provision of resources and conducted workshops including the in-Australia training component for the special education staff members, which proved invaluable (PASTEP, 2002). Furthermore, there is a staff development plan to train nationals overseas in the Masters Degree level in particular areas of specialization. So far, two staff members have successfully completed the course and returned. There is a third staff member currently overseas completing his Masters degree in special education. For the majority, there is a Bachelor degree program in special education offered under the Callan Institute in Wewak for special education lecturers and resource centre staff. Since there is a lack of specialized and highly trained personnel available in-country to conduct the program, overseas lecturers are being recruited to teach the different units. There is a national counterpart assigned to work alongside these expatriate lecturers in that area of specialization. This provides for the sustainability of the program. There is high interest in the program from government and non-government organizations. Currently there are two cohorts. The first cohort is deemed to be graduating as early as 2007. In addition some resource centre staff deemed suitable as possible PTC lecturers in special education have undertaken degree studies at UOG. However, it seems the degree program in UOG lacks the practical component that the PTCs offer in their diploma program such as the home contact program, the screening sessions and the sign language training. As a result, some of the staff who have undertaken the degree program at UOG are required to attend and participate in the BEd program that is currently being conducted by the Callan Institute in Wewak. These training opportunities are closely aligned with the new policy guidelines for special education in the expansion of special education services (Department of Education Special Education Unit, 2003, p. 7). The major concern is how these teachers with their qualifications translate what they have achieved into meaningful action.

Collaborative partnerships have to be created for sustainability of the special education programs. Since the introduction of special education, all three colleges had been closely linked to a Callan Resource Centre, conveniently situated near each of the colleges, to enable the program to be conducted and supported, particularly its "outreach" or "home contact" program. There have been positive contributions from NDOE towards the program. Initially, lecturer positions as well as staffing positions for the Callan Resource Centres have been funded by NDOE. Since 2002, there have been 47 TSC positions created and allocated to thirteen special education resource centres around the country (Department of Education, 2003b, p. 46). Despite all the positive contributions from NDOE towards the program, provisions made about the linkages and collaboration of government and non-government organizations, what appears to be missing is the formal recognition of formal qualifications of special education teachers (Department of Education Special Education Unit, 2003, pp. 8-9). There is also lack of support from principals and the staff in schools. "A lot of the graduates see special education as a burden or an extra responsibility for them" (PS202). Even inspectors are not supportive: "Perhaps if inspectors emphasize special education, teachers will take it seriously" (PS202). Such practices contradict the whole purpose of special education as a government mandated policy, when education officials like inspectors, do not support and reinforce it in schools. One of the reasons for the lack of support seems to be lack of understanding. That is why, in the implementation of inclusive education by mainstream schools, it is stated that awareness of inclusive education needs to be understood and actioned by mainstream administrators and the inspectorate. This requires in-service and awareness programs targeting these key personnel to be mounted by NDOE (Department of Education, 2003b, p. 8).

Lack of support and recognition could be blamed for teachers losing confidence and interest, which has subsequently led to students with disabilities being ignored and forgotten in the classroom. Parents have to be part of the education process of their children (Department of Education Special Education Unit, 2003, p. 8). The situation is challenging when the teacher/student ratio is 1:45 which is not uncommon in many schools. Though small, there are positive changes occurring among recent graduates but they need to be supported. In the teachers' colleges, the implication is for training student teachers with the skills of collaboration

and building good relationships with other stakeholders because special education requires teamwork. Without teamwork special education is not likely to succeed because fragmented organizations hinder the development of innovative practice (Hargreaves, 1994, pp. 212-240). Given that the number of children needing special education programs is increasing, more needs to be done by NDOE and its provincial counterparts to support the program and the teachers in the field.

Summary: The discussions of the emerging themes generated from Research Question Three have demonstrated that the issue of curriculum relevance is a significant factor in the professional education and training of primary school teachers in PNG. The curriculum has to be realistic in its content and delivery if what is taught in the PTCs is to have impact in the classrooms of recent graduates. The content of the PTC curriculum is unquestionably less advanced and poorly resourced in comparison to what is offered in more developed countries like Australia (J. McLaughlin, 2003). The college practicum remains an area of concern and needs to be improved because it is the key catalyst that links college experience to teaching realities. As portrayed through the subjective experiences of the research participants, there was a mismatch between the curriculum of the colleges and the reality of the school system. Evidence to sustain the above assertion is demonstrated by a lack of knowledge and appreciation of the reality of the school system on the part of some teacher educators. This is an issue that needs to be addressed by teacher educators. Consequently, the results of this study has demonstrated that the implementation of educational change in the teacher education curriculum can start to improve when there is strong curriculum leadership to provide clear directions and qualified personnel to work collaboratively and develop the curriculum to make it relevant to the needs of stakeholders. To enable such a process, these institutions need ample time, appropriate funding and resources to support them. Thus far, the results of this study revealed that these are some of the gaps that need to be addressed if the quality of the PTC curriculum is to improve and have an impact in the classrooms of recent graduates.

10.4 Leadership

The fourth major area of this chapter discusses the theme of leadership. The discussion focuses on the demonstration of leadership in the three colleges. In the cross-case analysis, a number of themes emerged which connect leadership to educational change. However, five major themes have been identified for discussion. This study is framed on the assumption that good leadership is pivotal in any successful implementation of educational change. This assumption is confirmed as the importance and relevance of good leadership is emphasized in each of the participant's own terms and collectively.

10.4.1 Good leadership and its importance

The first emerging theme is the importance of good leadership in leading change. As the colleges embarked on structural and curriculum change, it was expected that staff and students would turn to their leadership teams for directions. Examination of the results indicated that these expectations were inconsistent with the way leaders demonstrated their leadership. "The principal is not involved in any educational change that happens in the college. There are no decisions, dedication, vision and we don't know where we have come from, where we are going, and how to get there is bleak" (PA202). Principals are expected to lead because, ... "we are coming to believe that leaders are those people who 'walk ahead', people who are genuinely committed to deep change in themselves and in their organizations. They lead through developing new skills, capabilities, and understandings. And they come from many places within the organization" (Senge cited by Leithwood & Duke, 1999, p. 3). Senge aptly describes the expectations of all stakeholders of their leaders. This is reinforced by one participant who emphasized that "the most important person is the principal and we need to help them in training and developing programs to build up the capacity so that they are able to provide the leadership" (EP001). It can be risky when leaders are expected to provide solutions (Fullan, 2001). Charismatic and superhuman leaders do the organization a disservice, because they are "role models who can never be emulated by large numbers". Instead, "[d]eep and sustained reform depends on many of us, not just on the few who are destined to be extraordinary" (Fullan, 2001, pp. 1-2). The arguments are exciting because they fail to eliminate the importance of the leadership role within an organization. Instead, these arguments highlight the critical role leaders ought to employ to invite and establish partnerships with all stakeholders to implement reform and change. The findings of the study identified a general lack of direction by leaders to provide the knowledge and skills required to respond to the complexity of the challenges currently faced by the staff and students in the process of change. These results reinforce the view that leadership is critical in leading educational change (Fullan, 1993, 2001).

In contrast, some leaders expected that staff and students implement change as directed. As expressed by one participant: "We just tell them, do it" (PA101). This leadership style is "coercive" because the "leader demands compliance" (Goleman, 2000, p. 82). "Coercive" leadership style has a negative impact on the climate and performance and it encourages resentment and resistance (Fullan, 2001). Evidence from the study suggests that some of the college leaders employed coercive and authoritative leadership styles. This was illustrated by members of a strand who stated: "The leadership is authoritative in its decisions... Delay tactics have become a habit for the administration" (PS102). Authoritative leadership is demonstrated when the leader mobilizes people toward a vision (Goleman, 2000, pp. 82-83). However, the

evidence suggests that there was little vision provided by leaders, which explains why delay tactics were employed to pacify stakeholders and keep them guessing about decisions. Moreover, the delay tactics illustrated a lack of respect for the subordinates by the college administration. Pagelio (2002) makes a similar observation in his study that leaders in NDOE treated poorly those subordinates who were critical of them, and treated well those who were friendly with them. Such unprofessional practices are counter-productive for organizations because they stifle partnerships among stakeholders (Lewin & Regine, 2000; Pagelio, 2002). There was evidence of such relationships present in these colleges.

10.4.2 Leaders - agents of change

The second emerging theme is the importance of the leader as an agent of change. The study concluded that, while the leadership structures in the colleges were in place, the impact of leadership in leading change was ineffective. It appears that there were some leaders in that structure who did not know their role. This is where the links in that structure were weakened.

Examination of the data indicated a variety of meaning and understanding of the principal's role. Each principal defined his leadership role according to his context and based on tasks required of him. The first principal said: "I look after my two deputies... For major projects the GC has to endorse them but the overall day to day financial control is mine...I make the decisions according to the nature of the project (PP101). His position reflects being in "control" and "authoritative". The authoritative style of leadership seems to mimic the persistent myth in different cultures, including PNG, that connects leadership with rank or position (Kouzes, 1999). The staff and students found that the leadership approach adopted by their Principal was disempowering. Their experiences appear to be consistent with those described by Kotter (1995) who argued that leaders fail in leading change when there is no vision to help direct the change, and there are no strategies established for achieving that vision. As a result, there was a gradual decline in the morale among staff and students.

Alternatively, the second principal asserts: "I see myself leading as a role model. I used to play the facilitative role, in terms of making sure the academic staff accepted the decision for change. Not for me to force it, but to make them feel that change would come when everybody wanted that change" (PP201). His leadership approach is described as 'laissez-faire'. The "laissez-faire" style of leadership is more "laid-back" and free, with little restrictions. In the current change process, this leadership approach seems ineffective because "[t]imes change" and "productive leadership depends heavily on its fit with the social and organizational context in which it is exercised. So as times change, what works for leaders changes also" (Leithwood & Duke, 1999, p. 3). With the current educational change process, this leadership approach proves to be

ineffective because stakeholders need vision and direction from the principal. In such cases, one's leadership credibility appears questionable since it is inconsistent with the view that leaders are agents of change (Bass & Stogdill, 1990).

In contrast, the third principal reflects: "Relationships are a big factor for an effective and good working environment. So, in providing a vision for a place, you've got to be conscious of the task and ...the people who are going to perform the task. I do it by listening to them; I do it by being more present" (PP301). His leadership approach emphasizes the importance of relationships with stakeholders and of offering a vision. These themes have been consistent with other related literature on leadership (Fullan, 2001; Goleman, 2000). The third principal adopted a different leadership approach from the other two principals because he was able to identify and integrate the needs of the organization and the stakeholders. His leadership approach could be described as "transformational". Transformational leadership assumes that the central focus of leadership ought to be the "commitments and capacities of organizational members" (Leithwood, Jantzi, & Steinback, 1999, p. 9). His understanding of his role as leader seemed to focus not just on the organization's agenda but also on the people who make the organization function. Participants asserted: "He has a good vision for this place. He has been here only for five months and a lot of people on campus feel that their spirits have been revived. In the past the place was run down and when he came in, he had a more humane approach to people and talked to everybody. He was there to listen to people" (PA302). This principal offered a vision for the college. He did this by "getting the people enthused, thanked people and did all those things that keep people on side, keep the place running and keep the spirit going" (PA301). The principal possessed the knowledge to "read" the situation well, listened to the people and then adopted the appropriate form of leadership needed for the situation. The form of leadership employed was transformational. There was a common purpose and a shared vision to work towards achievement in the institution.

The understanding and meaning of leadership as presented by the three principals are varied. There seems to be three distinct leadership approaches evident among the principals – authoritarian, laissez-faire and transformational. The descriptions presented are consistent with the view that there is no universally accepted meaning and understanding of the word "leadership" and this creates confusion over its usage (Richmon & Allison, 2003). Although there is a lack of consensus about the precise meaning of "leadership", Yukl claimed that "most definitions of leadership reflect the assumption that it involves a social influence process whereby intentional influence is exerted by one person [or group] over other people [or groups] to structure the activities and relationships in a group or organization" (Yukl cited by Leithwood

& Duke, 1999, p. 6). Influence seems to be a necessary component of most conceptions of leadership.

The major reason for the differences appears to be the education and professional training of these principals prior to their assuming of the leadership roles in their institutions. Of the three principals, the two principals of Case Studies 1 & 2 have assumed their leadership roles without leadership training and mentoring, while the third principal is professionally trained. This principal's doctoral research could have sensitized him to the complex issues facing leaders in educational institutions (Tivinarlik, 2000). He leads with *moral purpose* intent on making a positive difference in the lives of employees, customers, and society as a whole in the field of education (Fullan 2001, p, 3). In such a process, it can be argued that "leadership isn't a position; it is a process" which is observable, understandable, with a learnable set of skills and practices available to everyone, anywhere in the organization (Kouzes, 1999, p. 37). The results corroborate the assumption that relevant qualifications and training in leadership are important and need to be a priority if NDOE especially teacher education is serious about making a change in the quality of education. Educational institutions can progress and manage any educational change if there is quality leadership provided by the head of the institution.

Deputy Principals perform a major role in educational institutions because they are responsible for the administration and/or academic programs of the institutions. Implementation of educational change requires deputy principals to establish and coordinate working partnerships with Heads of Strands (HOS) and academic staff. This means negotiating with HOS to organize the academic programs, assessments and examination schedules. Other responsibilities include the organization of staff meetings, professional development workshops/in-services, and student discipline. The position requires facilitating collaborative partnerships with all stakeholders.

Results from this study revealed that leadership at the deputy principal level was disappointing. The major weaknesses appear to be poor communication skills and an inability to create collaborative partnerships with stakeholders. In a climate of change, Wheatley stresses the importance of getting all stakeholders involved. Participation is not an option because "if we want their support, we must welcome them as co-creators. People only support what they create" (Wheatley, 1999, p. 8). This quality was lacking in the deputy principals and this subsequently affected the academic programs. What was observed was: inflexibility, rigid control and a lack of consultation. In terms of the academic programs, they were lagging behind because "when we talk about academic programs we need people who understand the academic programs and the necessary funding needed to run programs in the different strands. We have money to get the resources but without the academic leadership nothing is happening" (HS102).

Such practices are counter-productive because there are no partnerships established with stakeholders to work collaboratively to understand the change prior to its implementation. It seems that the leaders and stakeholders are working in isolation. The task of getting everyone involved in the change process is fundamental because "[a]s organizational change facilitators and leaders, we have no choice but to figure out how to invite in everybody to be affected by this change" (Wheatley, 1999, p. 8). Change, to be authentic, must be a collective endeavour.

In order to establish collaborative partnerships with all stakeholders, leaders are expected to communicate their visions. This quality is critical and requires good "people skills" because of the interactions that occur daily within educational institutions. The involvement of stakeholders can be dynamic for the organization, especially during a change process because of the collective contribution of each stakeholder. This is supported by Wheatley (1999), when she states that "the complexity and density of the systems require that we engage the whole system just so we can harvest the invisible intelligence that exists throughout the organization" (p. 8).

Relationships within organizations must be based on respect for people. Deep regard for subordinates is critical for organizational success not just in bureaucratic organizations but also within Melanesian societies (Lewin & Regine, 2000). Deep regard for subordinates was also highlighted as an important attribute of good leadership in PNG (Pagelio, 2002). Transformational leadership was the appropriate leadership approach for the organization because it focused on accommodating the needs and interests of subordinates serving the organization (Pagelio, 2002). However, these deputy principals failed to incorporate this important Melanesian value (relationships) in their bureaucratic organization (Mantovani, 1995). The issue of 'power' and 'control' proved counter-productive because it created animosity among stakeholders. The findings from this study were inconsistent with a recent study which concluded that administrators incorporated their Melanesian values such as the wantok system and reciprocity in their leadership roles (Tivinarlik, 2000). In that study Tivinarlik concluded that administrators valued the relationships they established with each other and the surrounding communities. These relationships worked in their favour and assisted them to fulfil their administrative roles within a Western bureaucratic system.

10.4.3 Curriculum leadership

The third theme discusses the importance of curriculum leadership. Heads of Strands (HOS) are the leaders responsible for driving the curriculum and the academic programs at the strand level. They are expected to collaborate with the deputy principals and the staff in their respective strands. Examination of the data revealed that the academic leadership at the strand level is notably weak. As one HOS explains: "I provide the leadership but, at the moment, I am not

really giving 100% to the strand duties. There is a lot to do in the strand and there is another program that has been in place, that is taking my attention away from the strand duties" (HS201). These perceptions highlight a common problem that leaders in educational institutions encounter and that is being given extra administrative duties. As a result, more time is dedicated to doing other administrative duties and less time to strand duties. Similar results were highlighted in a study which concluded that secondary school principals dedicated more time to performing administrative roles than negotiating and working with teachers, a process necessary for authentic instructional leadership (Lahui, 1997). Although these perceptions were those of one HOS, they reflected the dilemmas that many educational leaders experience in their roles.

The other aspect is the building relationships. Building relationships is a key factor in Fullan's (2001) leadership framework (p. 4). In elaborating on the issue, Fullan argues: "[L]eaders must be consummate relationship builders with diverse people and groups – especially with people different from themselves" (2001, p. 5). Relationship building is a weak feature among a majority of HOS. The implementation of change in the curriculum cannot be forced on stakeholders. Therefore, it is critical that HOS provide the appropriate strategies and invite strand staff to be involved and work collaboratively with them through meetings, workshops and in-services. Wheatley (1999) elaborates on this issue: "These relationships of mutual benefit lead to the creation of systems that are more supportive and protective of individuals than if they had tried to live alone" (p. 2). Establishing relationships that are more supportive when leading in a culture of change did not feature strongly in the study. This could explain why the educational change, especially the trimester program, has not had the success it could have had there been a collective endeavour from all leaders and stakeholders.

The lecturer is the leader in the lecture room because she/he has the biggest influence on what transpires in that given lecture session. In this form of leadership, "authority and influence are available potentially to any legitimate stakeholder in the school based on their expert knowledge, their democratic right to choose and/or their critical role in implementing decisions" (Leithwood & Duke, 1999, p. 12). Indeed, the leadership demonstrated by lecturers was weak because of the lack of leadership at the strand level. The majority of lecturers are not actively engaged in conducting research relating to improving their own practice. Most seem comfortable in the daily routine of preparing their lectures, teaching, marking students' work, setting and marking exams. "Some of the academic staff just come to class in the morning, knock off and go back to their houses. This culture needs to change" (CB301).

Such practices reflect unprofessionalism by lecturers. The descriptions aptly depict the quality of staff and their current level of performance. This situation creates tension: "I am working

with a group of people who are not as well qualified as the people that I've worked with and I definitely feel frustrated. Their presentation is not at a high level. ... I am challenged to run with them, hold their hands and work together with them. Sometimes it's frustrating" (PP301). That reality amplifies the importance of collaboration and interdependency within an organization. However, collaboration and interdependency will not occur in a vacuum, this has to be a collective effort from all stakeholders to achieve those goals. Wheatley (1999, p. 3) emphasizes that: "The recognition that individuals need each other lies at the heart of every system. From that realization, individuals reach out, and seemingly, divergent self-interests develop into a system of interdependency". Interdependency was not a strong value featured in this study. There were a considerable number of staff members who were operating individualistically.

Teacher leadership is a participatory form of leadership because it is more consultative, open and democratic, involving teachers in decision making (Murphy & Hallinger cited by Leithwood & Duke, 1999, p. 12). While NDOE advocates new teachers to be self-reliant, creative and investigative, the colleges struggle to comply because of the lack of leadership at the strand level (EP001). These processes invite participation that honours the creativity and commitment of stakeholders to the organization (Wheatley, 1999, p. 3). However, creativity and commitment need to be sustained professionally and financially.

10.4.4 Implications for PNG Leadership

The fourth emerging theme discusses the implications for "PNG leadership". Since all the leadership personnel involved in this study are Papua New Guineans, it is appropriate to discuss the findings relating to the demonstration of leadership within a PNG context, using Melanesian leadership qualities. The most common form of political leadership of traditional Melanesia is the 'Big-Man' system (Chao, 1995). Evidence of this leadership approach was adopted by some college leaders. In Melanesia, cultural diversity is vast and each linguistic group consists of many relatively small and autonomous groups. Leaders emerge largely through personal success of hard work in gardening, pig-raising, through successful exchanges and generous distribution of wealth and placing people in debt (Chao, 1995, p. 134). The 'Big-Man' leadership is collegial leadership because he is supported by the family, extended families and clan members. There is sustainability of leadership in the clan. In contrast, the progression to educational leadership is underpinned by a western value system (Maha, 1993). Promotion to leadership position in educational institutions is based on educational qualifications, experiences and charisma.

One of the salient aspects of PNG leadership is the building and maintenance of good relationships among all stakeholders (Tivinarlik & Nongkas, 2002b). The "Big-Man" system is based on relationships. Strong relationships provide the bases for exchange, land rights, wealth

and community building. This leadership approach encourages sharing and active participation of all stakeholders. The emphasis on building strong relationships is not confined to PNG leadership alone. Fullan (2001) argues that relationships are also fundamental in successful business and educational organizations. Lewin and Regine (2000) expanded on the same subject in their book The Soul at Work. In the first chapter, "Relationships: The New Bottom Line in Business," Lewin and Regine (2000) talk about complexity science, which leads to a new theory of business that places people and relationships - how they interact with each other and the kinds of relationships they form. In a linear world there is existence of independence while in a non-linear world everything exists in relationship to everything else and the interactions among agents in the system lead to complex unpredictable outcomes. "In this world, interactions or relationships, among its agents are the organizing principle" (pp. 18-19). These descriptions seem to be closely aligned with the Melanesian culture which thrives on community values such as the wantok system and reciprocity (Tivinarlik, 2000). While these values are not promoted in a special way in the college programs, they have great significance in maintaining harmonious relationships within the community. The success of Melanesian societies has been underpinned by a deep regard and respect for people inside and outside the community (Mantovani, 1995). Lewin and Regine (2000) argue that "relationships are not just a product of networking but genuine relationships based on authenticity and care" (p. 27). This is the essence of Melanesian societies (Narokobi, 2005). The practice of this quality was not observable in the colleges.

Leaders struggled to lead effectively using a western bureaucratic system. The majority of leaders had minimal quality leadership training. The evidence revealed that only one leader incorporated his Melanesian leadership qualities to make the organization he is leading function with successful results. Furthermore, there was an underlying assumption among some of the deputy principals, HOS and even lecturers who, when exercising their leadership role in a Western bureaucratic system, found no place for their Melanesian values systems and leadership qualities. This assumption is flawed because evidence in this study has illustrated that Melanesian value systems and leadership approaches can be incorporated to make a Western bureaucratic machinery function (Tivinarlik, 2000). The evidence is supported by current literature on leadership which advocates that:

Leadership studies are needed that identify the particularity and diversity of cultural and contextual conditions within which leadership takes place. While acknowledging the importance of generic and universal leadership characteristics, it argues that previous studies have ignored the particularities and contextual diversity of leadership and it is this aspect that needs redressing. (Dimmock & Walker, 2005, p. 2)

As highlighted by one participant: "It is a different culture that people have to get used to. The administrator is very good. He has gone out of his way and his style of management is the thing

that will get us through. People have expressed openly that they like working with him and that is an advantage we have. There has been a lot of change and people are giving us positive feedback on what has been done so far" (CB301). In support, the research participants asserted: "It is the person" (HS301), "the support he provides" (PA302&3) and "the decisions he makes" (HS302) that they believe have made the difference for them. Fullan (2001) argues that "that's only partially true; it is actually the relationships that make the difference" (p. 51). These perceptions illustrate the successful integration of Melanesian and Western leadership values within a bureaucratic organization. In exploring the relationships between school leadership and culture, Dimmock and Walker (2005) emphasized the contextual conditions of any leadership studies undertaken:

It challenges the universalistic nature of much that is written about leadership from a 'Western' perspective. It is highly suspicious of Western ideas, theories and frameworks applied to non-Western settings as means of understanding leadership. Rather, it champions the cause of developing authentic leadership studies grounded empirically in the distinct societal and cultural conditions of particular societies and their organizations. (p. 2)

The majority of PNG leaders need to recognize the importance of their own societal and cultural values, because "Recognition of the influence of societal culture and cross-cultural similarities and differences becomes more, rather than less, important" (Dimmock & Walker, 2005, p. 13) in leadership studies. For change to occur in leadership, PNG leaders because of their local knowledge, must be professionally trained and challenged to initiate the integration process (Kinjap, 2007).

10.4.5 Politics of location

The final emerging theme is the politics of location. PNG has more than 1,000 tribes and over 800 distinct languages (McLaughlin, 1996). While the nation is thirty years old, the many cultures still have strong influences over what people do, their beliefs/values and the way they think and relate to other people (Tivinarlik, 2000). Results from this study revealed that culture has an impact on education. Cultural issues such as "land disputes, *wantok* system, family ties, reciprocity, and compensation demands," still have power. Some of these cultural issues have had a negative impact on the provision of teacher education in the country. These issues have been powerful enough to shut down the operations of educational institutions. For instance, in March 2006, SBC was closed for one day to address the land compensation issues raised by traditional owners (Dowa, 2006, p. 6).

To appreciate the politics of location, it is important to reiterate that the three PTCs involved in this study, are situated in three different regions of PNG. OLSHTC Kabaleo is in the New

Guinea Islands, HTTC Mt Hagen is in the Highlands, and SBC Kaindi is in the Momase region. Culturally, each of the three colleges has faced problems relating to the demands of the tribal groups where the college is located. HTTC and SBC have consistently been disrupted because of land disputes. The tribal groups in the areas where the two colleges are situated have demanded compensation for the land that the colleges occupy. Sporadically, there are threats to shut down the colleges and this affects the staff and students. Consequently, the college administration, staff and students cannot fully engage in their educational programs. This is an issue that is beyond the control of the college administration but it impedes the development of the institutions.

There is an added issue with HTTC Mt Hagen. The study identified that parents were bargaining to enrol their children in the college. There was evidence of bribes paid to relatives who lived in the vicinity of the college to enrol their children. The college administration was offered gifts if members accepted and enrolled these children. Thus, the administration, staff and students are adversely affected by such cultural practices.

In contrast, OLSHTC Kabaleo did not have any problems regarding land disputes. By comparison, OLSHTC enjoys a good relationship with the community. The main problem relates to the college administration over-enrolling students without considering the conditions of the students' facilities. The over-enrolment of students into the college adversely affected the quality of education offered by the college. The politics of location reiterates the importance of developing sensitivity to the distinct societal and cultural conditions of particular societies and their organizations (Dimmock & Walker, 2005, p. 2). In this study, each college administration has tried to address the situation as best they can. The process of negotiation has involved other stakeholders. This is why participatory leadership needs to be encouraged. "Participative leadership assumes mutual influence to flow from structured opportunities for members to interact around issues important to the organization" (Leithwood & Duke, 1999, p. 17).

The study concluded that the leaders of these colleges are expected to lead and perform. However, the majority have not been provided with the level of training necessary to competently do the job. One participant agrees: "We have to be prepared to invest our resources and spend money on training people. Securing qualified leaders is a big investment, because the job needs to be more attractive not just in terms of money but also in terms of conditions and advancement opportunities" (CA201).

This study has questioned the use of western leadership approaches without cultural respect in leading educational change in these teaching institutions. It has questioned why these PNG educational leaders have not incorporated some of their own Melanesian leadership qualities. While the researcher is in no way unsympathetic towards the generosity and well intentioned majority support from NDOE and the Church agency, she remains concerned about how the often-used "logical" western approach fits within teacher education in PNG. While she is aware of highly qualified staff in these institutions, she questions the understanding of western leadership approaches and their applicability to the PNG context. There is low sensitivity to the local context in that a western leadership approach may not always be relevant to the educational institution. There seems to be some reluctance on the part of educational leaders to look within their Melanesian culture to find alternative leadership approaches. Instead, there is a tendency to look for outside expertise as an answer. This is becoming a common phenomenon in PNG whereby problems are not being resolved employing local Melanesian strategies but instead PNG is continuing to depend on external consultants to solve their problems using a "logical" western approach. The result seems to be a waste of financial and personnel resources with little impact. This approach would require a major shift in values and focus, by marrying the Western and Melanesian leadership approaches to find a suitable model for the PNG educational context. This process can be adopted only by PNG leaders with external assistance if necessary (Kinjap, 2007).

10.5.6 Conclusion

This chapter has discussed the results of the study through the lens of the literature and the context of the research. The discussions focussed on four major concepts: Quality of education, PASTEP innovations, curriculum and leadership. The results of this study demonstrated that leadership is pivotal in leading educational change in educational institutions. However, the quality of leadership demonstrated was considerably inadequate as it has not offered the vision and strategies necessary, to lead the current educational change in teacher education. Leadership is about influence (Elliot, 2002). However, "most of the variation in leadership concepts, types or models can be accounted for by the differences in who exerts influence, the nature of that influence and the purpose for the exercise of influence and its outcomes" (Leithwood & Duke, 1999, p. 6). In emphasizing the important role leaders perform in educational organizations, Hoy and Miskel (2001) proposed the need to select and develop useful theoretical perspectives for forming such leaders. This study has identified the lack of training in leadership as one of the major deficiencies that needs to be addressed. The college leadership structure is a Western bureaucratic construct. If it is to be successful in PNG, it needs to be supported by Melanesian cultural and philosophical traditions in leadership. Some of these qualities are: good relationships, consensus, consultation, care and respect for all stakeholders (Fullan, 2001; Lewin & Regine, 2000; Mantovani, 1995, Narokobi, 2005). These qualities provide the ethical

foundation for reflective, relational and transformational leadership. Though insignificant, because of the paucity of the data analysed, these qualities were employed by a small minority of leaders and proved to be successful with observable change. This indicates that with quality training, it is possible to incorporate Melanesian leadership qualities using a Western bureaucratic construct.

CHAPTER ELEVEN

DISCUSSIONS OF FINDINGS THROUGH THE LENS OF THE THEORETICAL FRAMEWORK

The purpose of this research is to explore how educational change is being led in primary teacher education in PNG. The study revealed the complexities embedded within the actual implementation of educational change, the role of foreign aid, and the demonstration of leadership in the process. The purpose of this chapter is to discuss the findings through the four theoretical lenses presented in Chapter Four. The four theoretical lenses are: Beeby's theory of improving the quality of education in developing countries; postcolonial theory; dependency theory; and globalization. The following major themes comprise this chapter:

- 11.1 Educational change within a postcolonial context;
- 11.2 Implications for quality education using Beeby's theory;
- 11.3 Foreign aid for PNG education;
- 11.4 Educational change and globalization;
- 11.5 Leadership challenges within a postcolonial society.

11.1 Educational change within a postcolonial context

PNG is a colonial construct and its formal education system is a legacy of colonization (Kulwaum, 1995; Pagelio, 2002; Premdas, 1989). This colonial legacy was demonstrated in the education system that PNG inherited which had a pyramid structure with a narrow primary base, a narrowing secondary middle, and an even narrower university peak (Ngugi, 1986, p. 3). Such a system helped to perpetuate the consolidation of foreign rule and provided for a minority educated elite (G. Kelly & Altbach, 1984, p. 1). In early colonial days, the development of the PNG's education system was limited and displayed obvious racism. Evidence of racism was demonstrated in 1912 when Governor Murray launched his view of education for Papuans:

I do not think that we should attempt to give the Papuan anything in the nature of higher education, nor do I think that we should ever dream of conferring upon him any political rights. He is inferior to the European, and, if we wish to avoid trouble, we should never forget this, and should never look upon him as a social or political equal. (Dickson, 1976, p. 23)

These statements by Governor Murray demonstrated the negative view the colonial administration had of Papuans and their potential for education. Similar discourses were deduced from a speech made by Lord Macauley, on Indian education, which illustrated a lack of respect for the existing systems of the colonized (Childs & Williams, 1997, p. 130). Such

practices and attitudes were employed by colonizers to justify their control and power over the colonized. The colonial education process attempted to strip the colonized away from their indigenous learning structures and draw them toward the structure of the colonizers (Southard, 1997). The analysis of these colonial discourses continues to underscore how colonial education was the mechanism used by the colonizer, to create the image of the colonized as "second class citizens" with labels such as "black skin/white masks" (Fanon, 1986). Against such a context, postcolonial theory provides a framework to discuss residues of colonial education and its legacies and how these can be dismantled in PNG education.

11.2 Implications for quality education using Beeby's theory

Unlike the colonizers who established schools to reinforce their colonial rule, Beeby, a highly influential educationist, proposed four premises that he believed are essential if developing countries are to genuinely improve the quality of their education systems. Beeby's theory was the result of his administrative experience of working in developing countries (1966, p. 50). Nevertheless, scores of scholars have accepted this theoretical framework for education (D. McLaughlin, 1990) and "commended the apparent validity of the stages" (Guthrie, 1980, p. 416).

Throughout this thesis the researcher has used Beeby's definition of the term "quality" because its origin is from educational challenges facing developing countries like PNG. Beeby (1979) defined quality in terms of the teaching and learning processes: "Qualitative changes in classroom practice will occur only when the teachers understand them, feel secure with them, and accept them as their own" (p. 291). In this definition, Beeby emphasized the importance of teachers' understanding of the education process. Hence, this concept of quality is relevant to this study because the focus is on the quality teaching experiences and its relationship to students' learning.

In contrast, NDOE has defined quality education in terms of their expectations of what education should provide and the intended outcomes: "Quality education strengthens children's identification with, not alienation from their communities; gives value and status back to appropriate attitudes, knowledge and skills relevant to community development; and supplements the above with a degree of competence in English, Mathematics and Science" (Department of Education, 2000b, p. 14).

While these two definitions of "quality" differ, it is essential that the differences are articulated. In pursuit of improving the quality of education, it is envisaged some tangible strategies for bridging the two definitions in the education and professional training of teachers are offered.

The assumption in this study is based on Beeby's theory (1966) that, if teachers are professionally educated and understand the content and the pedagogy, they will be able to provide the quality education that NDOE expects. Without that understanding of the content and pedagogy, quality education may not be achievable. It is within this theoretical framework that the major themes generated in Research Question One are discussed.

11.2.1 Quality of staff and students

The first theme relates to the quality of the current staff and students. In the discussions on these findings, Beeby's theory of educational development for improving the quality of teaching and learning in developing countries is employed to provide a conceptual as well as a concrete understanding of the term "quality". Beeby preferred to use the term "qualitative change" in terms of *what* is taught and *how* it is taught (Beeby, 1979, p. 17). Beeby emphasized the importance of teachers' understanding of the education process, rather than advocating certain teaching approaches as superior in themselves irrespective of the context (D. McLaughlin, 1990). The exploration of the concept of quality is relevant to this thesis because the focus is on the quality teaching experiences deliberately aiming to enhance students' learning. Earlier research has demonstrated that this has rarely occurred in PNG (O'Donoghue, 1994).

In drawing on Beeby's theory, two interrelated factors of teacher education are particularly relevant (Beeby, 1966). The first is the general level of education of teachers which focuses on the length of formal education that teachers have had before they began professional education. The second focuses on the number of years and the type of professional training teachers have had in their pre-service programs. The majority of research participants concurred that the changes made to accommodate these two interrelated factors appeared to be weak in generating the intended outcome, which is the improvement of the quality of education and subsequently, the quality of graduates, from these colleges. Without understanding the importance of these two factors, it may be expected that further planning and reforms of the education system may incorporate elements that contribute to the maintenance of poor quality of education in primary teacher education.

The study closely examined the quality of the two factors – the current teacher educators and the student trainees. Both groups are vital components to improving the quality of education. Firstly, the entry level for students going into primary teacher education has been upgraded from grade 10 to grade 12. With 80% of students being grade 12 graduates, it would be expected that the quality of education will improve (Department of Education, 2002d). Secondly, teacher educators are better qualified at BEd degree level, and there is an increase in teacher educators pursuing MEd degrees. This is positive improvement not only for the

individuals but also for the institutions. Such improvements are consistent with Maraj's assertions that the quality of teachers is closely aligned with highly qualified teacher educators from quality institutions (Maraj, 1974, p. 147). The recent improvements in the lecturers' and students' qualifications are critiqued in the light of Beeby's stages of teaching and learning, to assess the quality of education in the teaching and learning processes in these colleges (1966, p. 72). The four stages (Table 4.1) are:

Stage I Dame School; Stage II Formalism; Stage III Transition; Stage IV Meaning.

Stage I "Dame school": The study revealed that the teaching staff of these colleges are better educated and professionally trained. Furthermore, there is improvement in the teaching characteristics. Organization of the program has improved with standards set by NDOE as indicated: "What PASTEP has done is very good, provided resources and all the ideas are there. There is quality and better standards" (DP102). Staff and students have access to library resources to assist them in the teaching and learning processes. The teaching methodologies employed by lecturers have improved (Clarkson, 2003). The study concluded that, in light of these improvements, teacher educators have clearly progressed from Stage I "Dame School" to Stage II "Formalism".

Stage II "Formalism": The findings from the study revealed that the current teaching staff are better-educated and trained. With the current staff's qualifications, it would be expected that they would progress to the next stage. The evidence seems incongruous with this progress. Although these teacher educators are better educated and trained, they continue to demonstrate characteristics which are reflective of the teaching and learning characteristics at the stage of "formalism". While there is improvement in their organization, they continue to rely heavily on the "one text book" - the modules produced by PASTEP. As disclosed by one of the participants of a focus group:

Content provided is shallow because there is inadequate time for reflective teaching and learning... Often we don't complete the work and the trimester is over. For example, we may be half way through a book and the trimester is over so, we do not complete the work. (SS202)

These comments illustrate that many teacher educators are still at the stage of "formalism" (Avalos, 1991; D. McLaughlin & O'Donoghue, 1996). They have not progressed beyond the "one text book". There were some lecturers who were using the PASTEP modules as "the bible" without making any effort to make the content and teaching relevant to the needs

of the students (PS105). Moreover, little adjustment is made in the teaching and learning processes to include the emotional life of the students, as reflected: "At the present time we don't have enough time for us to think through what we are doing. We are just being pressured to pass the course and move on to another one. There are some things that we really don't understand" (SS301). This evidence further demonstrates the inflexibility of the teaching staff to make the necessary adjustments needed to accommodate the needs and interests of the students: "The students complain about this but they are told nothing can be done about it because that is the system" (PS104). The inflexibility of teaching staff to initiate changes is another illustration of the lack of confidence to be creative in their work and to challenge the status quo. The puzzling fact is that, although better educated and trained, the teaching characteristics of staff members have remained at the stage of "formalism".

Stage III "Transition": The study revealed that the qualifications of the current teaching staff were in accordance with the criteria for teachers at the stage of "transition". However, the majority failed to demonstrate the teaching characteristics distinctive of this stage. There is more emphasis on meaning but it is still rather "thin" and formal. The study concluded that there is a very small minority who display the teaching characteristics of this stage while the majority remain at the stage of "formalism". As alluded to in stage II, there are other issues that this study has identified that have contributed to these inconsistencies.

One issue relates to subject specialization. Subject specialization was identified to be lacking in previous staff development programs but little has been done to address the issue (O'Donoghue & Austin, 1995). The current post-graduate programs offered by PNG universities in particular, UOG and DWU have different foci, and are not concerned with enhancing the teaching and learning processes in the subject areas. One of the academic staff reflects on the practice: "I see it detracting from their work because a lot of them are so caught up in doing their study that lecturing is being left behind. So what is happening in the classroom here is neglecting lecturing and focusing on their study as the number 'one' priority' (PA301).

These comments suggest an inability of many teaching staff to critique and appropriately apply the knowledge and skills acquired through post-graduate studies and staff professional development programs to their work environment. One of the academic staff explains: "I don't think they [staff] understand. The problem is that with these PASTEP workshops, they get quick high-powered input but they don't have time to process it and ask questions (PA301). Drawing on Beeby's theory (1966), understanding is the prerequisite to teaching with meaning and subsequently improving the "quality" of education. Consequently, this could explain why the teaching and learning processes have remained at the stage of "formalism". Beeby offers

another challenge: "... who is to retrain the teacher trainers?" His [sic] success depends on divining where best to break into the circle" (1980b, pp. 465-466). Attempting to break into this circle is difficult and almost impossible, because the very people who are to effect change are the products of that same system that is to be changed (Beeby, 1979). Hence, Beeby's stage of formalism is reinforced in teacher education.

Stage IV "Meaning": The stage of "meaning" is a higher stage where teaching staff could exercise greater freedom in the "what" and "how" of teaching and learning. While Beeby's (1966) theory does not specifically address the issue of subject specialization, the emphasis on the meaning and understanding of the content is crucial. Subject specialization determines whether one is knowledgeable in a particular subject, area since it impacts on the "what" and "how" of the teaching and learning processes. Furthermore, the learning is more student-centred where students are encouraged to be active participants in the learning. However, this study concluded that this type of learning rarely occurs within the setting of the lecture room. This finding is consistent with earlier research (O'Donoghue, 1994; D. McLaughlin & O'Donoghue, 1996).

There were a number of factors that the study identified that have influenced the movements through these four stages. First, the teaching staff hesitated to exercise greater freedom because they were restricted by the trimester program. Second, large class sizes limited creativity. Third, inadequate resources, equipment and poor teaching facilities also contributed to the poor teaching and learning processes. These factors were exacerbated by a lack of adequate funding for the colleges. Beeby warned that good education always costs more than bad. A different paradigm as well as more expenditure is required to effect the planned qualitative change for all learners in an education system (Beeby, 1966).

11.2.2 Transferability of knowledge and skills

Transferability of knowledge and skills has not been directly addressed by Beeby's theory in his four stages of the teaching and learning processes. What Beeby (1966) stresses is the importance of proper education and professional training of teachers. This study found that there is professional training of teacher educators occurring at various levels through professional workshops and postgraduate studies. However, how this finding is inconsistent with Beeby's (1966) theory is that these theoretical achievements are not being transferred readily into the workplace environment, which raises concerns among college administration and the education policy makers. This finding seems to suggest that despite the professional training and current postgraduate studies of teacher educators, there is an inability among most teacher educators to

make the transition from Stage II "Formalism" to Stage III "Transition" and then Stage IV "Meaning".

The evidence suggests that those who participated in these professional development workshops found them helpful and relevant to their work: "Since I have been involved in the writing of modules, I see that as a very big help" (HS302). With the demonstration of different pedagogical approaches provided in these workshops, it was expected that these lecturers would have some influence in their teaching and learning strategies. However, exposure to quality pedagogical processes did not automatically translate into the workplace environment. One of the participants explained: "Because of my previous experiences, I was able to fit in, but some of my colleagues could not, so they left" (HS302). A small minority of these lecturers demonstrated some initiative to change teaching and learning processes, from teacher-centred learning to more dynamic student-oriented style learning. However, the impact was muted. The research findings revealed inconsistencies in the application of skills and knowledge between the workshops/courses attended and the experiences in the lecture rooms. The study identified two possible reasons for this occurrence.

One of the possible reasons for this inability is the use of the English language. Most of the teacher educators have an inadequate grasp of the English language and therefore experience considerable difficulty in communicating their ideas or concepts orally and also in written form (Avalos, 1991; D. McLaughlin, 1997b; Kenehe, 1981a, Markwell, 1975). Understandably, the student's capacity to learn is adversely affected, given the poor modelling that they have had from the teachers. The study argues that while English is a global language for communication, it can also be an obstacle to the teaching and learning processes, if poorly understood and taught.

The other possible cause is the "content overload". As disclosed by one of the research participants: "I don't think they understand the content so the problem is that with these PASTEP workshops they get quick high-powered input and they don't have time to process it and ask questions" (PA301). This would suggest that these curriculum leaders lacked understanding of these pedagogical strategies and concepts that were important for future aspiring teachers. Some of these teacher educators were incapable of sharing and disseminating the knowledge and skills acquired in these PASTEP workshops even though it was a college requirement for staff members' attendance and participation in conferences and workshops. These results revealed that theory and practice do not mesh in the work environment. Clearly, for in-service experiences to be effectively disseminated, the importance of content knowledge is a prerequisite for the promotion of deeper learning of lecturers and students (Biggs, 1979).

11.2.3 Language of educational instruction

Part of the colonial legacy of the PNG education system is the maintenance and legislation of the English language as the medium of educational instruction. This legislation of the English language policy was initiated by the colonizers. However, prior to independence, PNG endorsed the use of English in education. While PNG is home to more than 800 languages, English has been legislated as the language for education and commerce in PNG. English is internationally recognized as an important language for education, business and communication technology. Nevertheless, it still has a colonial "tag" attached to it because it represents "power" and status.

The quality of education depends on the competency and the fluency of the English language for teachers and students. Previous studies in PNG have demonstrated that teachers' grasp of the English language is tenuously weak. In these studies, researchers found that the poor grasp of the language had a negative impact on the students and therefore affected the quality of teaching and learning (D. McLaughlin, 1997b; D. McLaughlin & McLaughlin, 1995; Kenehe, 1981a; O'Donoghue, 1994). This study concludes that little has changed in the teachers' grasp of the English language. What is alarming is that the current students enrolling in teacher education programs have graduated from grade 12 with a poor grasp of the English language.

Student incompetency in the English language has an important impact on the teaching and learning processes, thus exacerbating pedagogical concerns. Indeed, the quality of spoken and written English remains a challenge for the colleges: "I have been alarmed at the incapability of a few of the students, who have come up to see me to hold a conversation in English. They've always reported back and excused themselves by holding a conversation in Pidgin and to me, that is very alarming" (PP301). Lecturers expressed concern about the students' poor literacy skills (PA301 & 302) because of its negative impact on the quality of teaching and learning (HS101). "Some students are very good, some have enough and they will improve. Some can't communicate in English so when you talk to them, they can't reply because they don't know what you are talking about" (PA301). Furthermore, lecturers also questioned the quality of English of the grade 12 students: "These students will be teachers in the community where it's bilingual and English is the medium of educational instruction and that really concerns me. As head of the institution and also as a colleague to all the academic staff, I am really concerned about that" (PP301). With teachers and students exhibiting a tenuous grasp of the English language, it can be concluded that the quality of teaching and learning will be weak.

These findings were consistent with recent research which demonstrates this decline (Clarkson, 2003; Zeegers, 2005). This may explain why the majority of PNG teachers continue to teach at the stage of "formalism". At that stage, there is emphasis on the "one best way" to teach a

centrally prescribed curriculum to a fixed timetable (Musgrave, 1974), using rigid methods and memorizing is heavily stressed (Beeby, 1966, p. 72). The lack of progress to the "transition" stage and finally to the stage of "meaning" are complex. This complexity is exacerbated by the fact that the teachers who are called upon to effect change are part of and have gone through that very system (D. McLaughlin & O'Donoghue, 1996).

Summary: Drawing upon Beeby's theory, the issue of having qualified staff in teacher education is important to ensure there is a progressive paradigm shift in the teaching and learning process from the stages of "formalism" to "transition" and finally to the stage of "meaning" (Beeby, 1966, p. 72). The stages are evolutionary and the ability to make qualitative change will occur only when there is understanding and ownership of the subject content at hand. Pragmatically, this implies that the integration of theory and practice needs to be bridged with solid pedagogy. The results of this study demonstrate that movement through the four stages did not automatically occur because teacher educators were highly qualified. This research identified some discrepancies in the movement through the four stages. These discrepancies have led this study to conclude that contextual factors play a decisive role in the application of any theory, in this case, Beeby's (1966) theory of improving the quality of education in developing countries.

11.3 Foreign aid for Papua New Guinea education

The implementation of educational change in primary teacher education has revealed the importance of foreign assistance for PNG education. PNG has continued to depend on foreign aid to help develop its vision and goals for education (Department of Education, 2000b, p. 15). The PASTEP innovations in primary teacher education were particularly relevant. As discussed in Sections 6.3.1, 7.3.1, 8.3.1, and 9.2.1, the study identified that PASTEP was a considerable undertaking by Australia to assist the PNG teacher education sector.

To critique the role of foreign aid and its impact in PNG, dependency theory is employed. Dependency theory is appropriate because it "attempts to explain the present underdeveloped state of many nations in the world by examining the patterns of interactions among nations and by arguing that inequality among nations is an intrinsic part of these interactions" (Ferraro, 1996, p. 2). Moreover, the theory posits that the low levels of development in LEDC are caused by their reliance and dependence on MEDC.

11.3.1 Role of the donor funding agencies

The role of donor funding agencies has been pivotal in the implementation of the education reform in PNG. These agencies provide considerable assistance to developing countries. A senior bureaucrat confirmed: "We would not have been successful without the help of the donor agencies" (EP001). However, they have considerable influence also over the decision-making processes of their projects. During the recent PASTEP innovations, this influence was demonstrated by the manner in which the project was executed. The evidence suggests that there is a relationship between financial contributions and control exercised by donor funding agencies. While this relationship demonstrates the importance of financial accountability, it identifies also a power relation which is unequal, because donor funding agencies assume the role of being in control to make decisions regarding what is beneficial for the aid recipients (World Bank Group, 1998). This practice appears synonymous with the way the colonized were treated by the colonizer.

The contradictions and ambiguities identified in the execution of PASTEP have raised questions about the usefulness of the project and its sustainability over time. PASTEP set out to assist in the implementation of the reform in teacher education and seemed to have achieved their goals (PASTEP, 2002). However, many things that have transpired in the process seem to suggest that PASTEP fulfilled its own agenda with minimal engagement with other stakeholders. As disclosed by a NDOE bureaucrat: "We could have worked side by side with PASTEP but the Australian Team Leader was not open to us and others. Under his leadership, there were no negotiations. For example, in our first meeting he lay down the rules and we just sat and listened to him" (EP007).

These comments demonstrate clearly the unequal relationships that exist between developed countries with their aid packages and developing countries as recipients of that aid (Hawksley, 2006). Donor funding agencies exert "power" because they have the financial control while the recipient country experience a feeling of being "powerless" in the process. The feeling of "powerlessness" was expressed by another research participant: "With AusAID, I was not involved because the money goes through the government and the government wants to decide on everything themselves" (EP006). These "power plays" by funding agencies encourage dependency relations among developing nations (Ferraro, 1996). Thus, these "power plays" should be challenged because of their exploitive character. The consultative process employed by PASTEP and NDOE was limited. This was exemplified by the involvement of the administration teams of the colleges in the meetings with PASTEP and NDOE. However, the non-involvement of the Agency's representative in these meetings raised questions about the

church and government partnerships in the provision of educational services. Such partnerships are unsustainable because there is inequality among stakeholders (W. Turner & Sharp, 2006).

The deliberate exclusions of key people during consultations and meetings can be interpreted as hegemonic "power plays". From postcolonial theory, hegemony is defined as "domination by consent" so that the lower classes are kept in their place (Childs & Williams, 1997, p. 231). These "power plays" are disempowering because they tend to generate a new form of neocolonialism. Neo-colonialism is defined as the "continued hegemonic influence of colonial powers after independence through the application of economic, cultural and political pressures" (Childs & Williams, 1997, p. 232). Within postcolonial societies, the term has also been widely used to denote the replication of colonial authorities and institution in the rule and administration of independent, self-governing nations (Childs & Williams, 1997). One of the Agency representatives asserted: "We would not walk into their property without asking them first. So why do they do that to us?" (CA301). This is a sensitive issue which has subsequently left feelings of resentment and frustration among the various stakeholders. Withholding of pertinent information from key players is an instrument of power and control, and a barrier to sustainable development (World Bank Group, 1998).

As a strategy to deconstruct such "power plays", a more "participatory" approach is appropriate. The "participatory" approach may include different processes depending on the nature of the project and the context (Kayrooz et al., 2006, p. 98). In this case, a consultative process between the aid agencies and the "target beneficiaries" seems appropriate in the problem identification and decision-making processes, rather than an imposition of externally-developed interventions on them (Kayrooz et al., 2006, p.101).

11.3.2 Appropriateness of foreign aid for educational change

One of the salient features of the recent PASTEP innovations was the appropriateness of foreign influence on the local context. When PASTEP initiated their program, they had their own set of criteria under which they were operating. This was confirmed by a college financial staff member: "PASTEP came into the college and did their own 'thing' and left. They had nothing to do with us" (CB301). This would suggest that PASTEP in reality had exclusive control and power of the project. While these projects were valuable, the manner of execution remains problematic. In support, a representative of the Agency stated: "I believe that the staff and principal tried to intervene to say this was not practical, they were ignored, even with the PASTEP people who were there" (CA201). Authentic consultation with all appropriate stakeholders is a fundamental component in any project. In the PASTEP innovations, there were little or perfunctory negotiations with the Church Agency in the refurbishment and construction

processes. According to the Church Agency representatives (CA301 & CA201), PASTEP and NDOE should have consulted them prior to these constructions because they are responsible for their colleges' infrastructures.

The "attitudes" of PASTEP and NDOE could be interpreted as arrogant. The demonstration of such attitudes was evident when PASTEP bypassed consulting the local people in the tendering and identification process of the construction companies to carry out the construction and refurbishment projects. Agencies often engage their own construction teams or other reliable local teams because of their first-hand knowledge. While PASTEP had the prerogative to adopt whatever process they wanted for the construction projects, it would have been appropriate and culturally sensitive to check local knowledge. By checking with the colleges and the Agencies, a partnership may have been nurtured. A participant reflected: "I cannot just walk in, put up a building without consultation with the people there... But this has happened a lot" (PP301). However, PASTEP completed the process irrespective of the views of the colleges and the Agencies and engaged their own construction company. Such attitudes reflect a disregard for local knowledge which can be detrimental to sustainable development (Nakata, 2004).

These attitudes exhibit the colonial legacy of hegemony (Gramsci, 1971; Childs & Williams, 1997). They reflect the lack of respect that the colonial administration had for the colonized. PASTEP and its project people ignored local knowledge; they thought they knew what was best for the colleges. As a result, some of these projects failed to achieve their goals (Nakata, 2004). This was affirmed by a senior member of the Agency: "This was our fear when we saw it going on. We were afraid that the fixing up will end up costing us money. It really raised questions about the whole program" (CA201). Consequently, the colleges have had to build "bridges" with local people who were offended by the arrogance of the construction companies. Foreign aid decisions should be based on cultural sensitivity and local contributions. Nakata (2004) emphasizes the importance of recognizing local indigenous knowledge for sustainable development.

PNG began the implementation of its national education reform agenda in 1993 with international donor assistance (PASTEP, 2002). More than a decade later, the reform process is incomplete, even with the assistance of donor agencies such as PASTEP. The study concludes that development through donor funding agencies does not necessarily lead to sustainable development. The approach employed by PASTEP and NDOE was "top-down". Research has concluded that the "top-down" approach to project design and service delivery has not worked in areas critical for development (World Bank Group, 1998).

11.3.3 Representation and Resistance of foreign aid package

PASTEP provided considerable assistance to the colleges with the initiation of a core curriculum and assisted in the development of curriculum support materials. In critiquing these materials, the concept of 'representation' from postcolonial theory is employed. The dynamics involved in 'representation' are important. The emphasis is on the position of the stakeholders involved in foreign aid projects: the place from which someone addresses or conceives of an issue and formulates its area of importance (Spivak 1996, pp. 309-323). In other words, who is representing "whom" and "how". The study concluded that the two modules, one on "Melanesian Spirituality" and the other on "Morality" produced for the RE curriculum were not being taught by the lecturers because the material was perceived to be foreign and not representative of authentic Melanesian spirituality and values. The head of the RE department commented:

... [t]he two modules that they wrote ended up being written mainly by expatriates and the national staff here don't use them because they don't fit with the context. The 'Melanesian spirituality' module is not used by the staff because they don't like how it is written and some of the things in it. Also the 'Morality' one doesn't fit within the Melanesian thinking about reality. It is very Western so they don't use it either. (PA301)7

These statements emphasized the importance of representation of the "Other" who is representing "whom" and "how" (Spivak, 1996). In this case, the materials produced under PASTEP did not accurately represent the PNG context. Moreover, they were written by expatriates who thought they "knew" Melanesian values and therefore decided what should be included in these curriculum materials. The outcome was not accepted by lecturers. The nature of resistance is influenced by the historical context and culture. Ngugi (1986) argues that to control a people's culture means to take control of their identity. The resistance by the lecturers indicates that the written text is a misrepresentation of them as a people and how they define that identity. This is an important statement made by these lecturers in the RE department. To agree to teach the material even with the knowledge that it is a misrepresentation of one's culture and identity would be betrayal of oneself (Ngugi, 1986). Furthermore, the RE department did not receive the same assistance in terms of text books and other resources as the other departments and strands. The head of department offered this explanation:

I think it was more to do with AusAID, the Australian government 'thing'. They said that because in Australia RE is not really part of curriculum at schools, they were sort of treating it in the same way. So it was not really part of the curriculum with funding. $(PA301)^8$

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⁷ This particular academic staff member is an expatriate Australian not a Melanesian.

⁸ This academic staff member is an Australian. He has been part of their education system and knows it well. Therefore he is qualified to make these comments.

From these statements, it can be concluded that PASTEP used the same value system used in Australia to make the decisions about not providing the same assistance for the Spiritual component of the curriculum particularly for Church educational institutions. The decisions were hegemonic since they were based on the foreign donor's value system, rather than on the recipient's value systems. These decisions highlight the insensitivity of PASTEP and NDOE to impose decisions on these Catholic institutions that operate from a different value system to them. For these PNG institutions, RE has a prominent place in the curriculum and their overall program.

There is physical evidence to support PASTEP's achievements. However, the psychological impact of the project is muted because there is minimal evidence to demonstrate the change in the professional capabilities and the attitudes of the research participants involved in the project. Furthermore, the impact of the project on the new stakeholders who have joined teacher education since the closure of PASTEP seems mixed. There appears to be little continuity with the work that PASTEP initiated because of the high turn-over of staff in these colleges and the lack of planning.

Foreign funded projects such as PASTEP can be a waste of financial and technical assistance, if it is not sustainable after the lifetime of the project. Since the closure of PASTEP, there has been a respite period where it seems little is occurring in terms of infrastructure, refurbishments and staff professional development programs because financial and technical assistance are no longer available. Foreign aid seems to perpetuate the "handout" mentality which is a condition of dependency relationship. Dependency theory and postcolonial theory provide frameworks which are pivotal in challenging the unequal structures and relationships in postcolonial societies. Therefore, the challenge for postcolonial education is to recognize the contradictions of colonial legacies in current ideologies and practices and strive towards displacing the negative features in more just and equitable ways (Hickling-Hudson, 1999, p. 83).

Summary: The discussions generated under Research Question Two have implications for foreign aid and its appropriateness to the local contexts. While there were valuable contributions made by PASTEP to the teachers' colleges, the study concluded that there were residues of colonial legacies still present in the way PASTEP innovations were conducted. What is unique in this study is that the findings illustrated that the colonial legacies present are not entirely the work of foreign aid donors. This study revealed that the colonial legacies are promoted by elite Papua New Guineans in positions of authority within NDOE which means these practices are no longer colonial but rather neo-colonial. It appears that elite Papua New Guineans agree to

comply with an agenda even if that seems inappropriate to the local context. This illustrates a new form of dependency which is "voluntary", because some Papua New Guineans tend to give the impression that the country is poor and needs the donor funding agencies and therefore they are prepared to comply with the foreign agenda. From a postcolonial perspective, such an undertaking presents an element of ambivalence. If the elite Papua New Guineans promote "voluntary" dependency on foreign aid donors and neo-colonialism because they share similar ideologies, the deconstruction of negative features of neo-colonialism is not likely to occur. The implication is that deconstructing such negative features of "voluntary" dependency and neo-colonialism is a complex and difficult endeavour for all stakeholders.

11.4 Educational change and globalization

The theoretical lens adopted to discuss the major themes relating to educational change is globalization. Globalization theory is employed because a particular feature of globalization is the momentum and power of the change involved. Hutton and Giddens (2001) argue that: "It is the interaction of extraordinary technological innovation combined with world-wide reach that gives today's change its particular complexion" (p. vii). Educational change is multi-causal and therefore cannot be interpreted from one factor alone (Tikly, 2004, p. 112). There are five themes that are discussed in this section.

11.4.1 Forces of educational change

Globalization has become a major driving force in influencing educational change and its processes. Globalization has generated immense social, political, cultural, economic, and technological change, which has already encroached on the lives of peoples around the world. For developing countries like PNG, this trend continues to present challenges. The national education reform is perceived to have been influenced by world agenda such as the 1990 Jomtien and the 2000 Dakar conferences on *Education for all* (EFA) and the "*Charter on the rights of the Child*" (Department of Education, 2000a). Both conferences called upon governments to ensure EFA goals were reached and sustained with strong political support (Department of Education, 2002d). Since PNG is a signatory to that document, the education reform could be perceived as a response to the global agenda of EFA. To implement its education reform, PNG is "highly dependent on foreign aid" (Hawksley, 2006, p. 167). This would suggest that although the current national education reform is internally motivated, it is externally driven by global financial institutions through their multinational corporations. In such a process, it can be argued that the role of the state/nation is being redefined in relation to education provision as a result of the political effects of globalization (Tikly, 2001, p. 162).

Education is becoming rapidly a commercial commodity to be traded in an open global market. This would suggest that any educational change introduced may not necessarily reflect the priority areas of the local context: Altbach argues:

The norms, values, language, scientific innovations, and knowledge products of countries in the 'centre' crowd out other ideas and practices. These countries are home not only to the dominant universities and research facilities but also to the multinational corporations so powerful in the new global knowledge system. (2001, p. 1)

This is one of the disadvantages of globalization, where developing countries like PNG are marginalized and left with few choices, except to assimilate the global trends in educational change (Papoutsaki & Rooney, 2006). The implementation of OBE in PNG is an example of how globalization influences educational change. OBE is designed to teach and apply knowledge to defined outcomes. The outcomes-based curriculum is a major educational change under the education reform. "Outcome-based curriculum makes explicit the learning outcomes that students are to achieve" (Department of Education, 2003a, p. 14). At its most basic level, OBE is where the school and teachers first determine what skills and knowledge students should achieve or demonstrate at particular levels, and then work backwards to develop curriculum strategies and materials to help students achieve those goals (Department of Education, 2002c, p. 5). OBE is not a "home-grown" PNG concept. It is a new concept that has been introduced by foreign consultants. OBE could be perceived as one of the global trends in the globalization of knowledge that has potential for creating problems for academic institutions and systems in smaller and poorer countries. In a world divided into centres and peripheries, the "centres grow stronger and more dominant, and the peripheries become increasingly marginalized" (Altbach, 2001, p. 2). PNG needs to be cognisant of its national needs and priorities, and how these needs are affected by the introduction of educational change.

The evidence suggests that practitioners, including teacher educators, are having difficulties teaching the OBE curriculum. One of the bureaucrats acknowledged: "At the teachers' colleges, I am afraid to say that our student teachers are not made familiar with the material" (EP002). Primary school teachers and their inspectors also revealed that they were experiencing difficulties understanding the concept. The same bureaucrat further elaborated: "The reform curriculum is rehashing what is in the old curriculum in skills, knowledge and attitudes, in a new cover and a lot of ideas of what should be in school. There is far too much for a classroom teacher to cover in a year" (EP002). The study concluded that there is a general lack of understanding of OBE among teacher educators and practitioners.

When referring to the reform curriculum, the term "home-grown" has been a popular term used by bureaucrats and practitioners. However, there is a range of meanings by those who use the term which indicates some ambiguity. For most participants, "home-grown" means produced by Papua New Guineans for PNG. For some, references were made to the fact that the diagrams, designs, images and photos contained in these documents were Papua New Guinean. Others stated that there were Papua New Guineans involved in writing the reform curriculum. Closer examination of this "home-grown" concept appears to be ambiguous and therefore invites debate.

Discrepancies were evident when attempting to assimilate the two concepts (a "home-grown" curriculum and OBE). The study revealed that the in-services and workshops were conducted on an ad-hoc basis, not well coordinated. As a result, few practitioners were receiving professional development training on OBE while the rest were missing out. Further evidence was sighted in a newspaper article where a senior teacher in one of the primary schools claimed that schools were not adequately equipped to properly teach the new curriculum. He observed that many teachers and trainers did not fully understand the contents of the new curriculum and therefore many would not implement the reform effectively (Editorial, 2006, p. 13).

Furthermore, it is ironical that the 'home grown' curriculum has been written by external consultants with minimal contributions from Papua New Guineans. Of the six reasons provided for implementing OBE, the first reads: "An outcomes-based curriculum will give teachers, individually or collaboratively, the flexibility to devise programs and units of work that meet the differing needs of students at all levels of schooling in a broad range of settings in PNG" (Department of Education, 2002c, p. 6). While this rationale for OBE curriculum may be appropriate, the issues of ownership, representation and sustainability of a "home-grown" curriculum are suspect, especially when written by foreign consultants. One is left to ponder how qualified these external foreign consultants are in developing programs that will meet the differing needs of PNG students. Some of these consultants are brought into the country to write these curriculum documents with minimal experience of PNG culture and lifestyle (Editorial, 2007b). From a globalization perspective, the commercialization and provision of knowledge has become just another commercial transaction (Altbach, 2001, p. 2). These are critical issues that need to be addressed by PNG.

The OBE concept has been introduced into PNG education system despite its failure in more developed countries (Schlafly, McKernan, & Glatthorn cited by McNeir, 1993). Confirming this, a senior NDOE bureaucrat elaborated:

This is a concept that has been used in New South Wales and Queensland and has failed because it is too difficult for teachers, and these teachers have English as their first language. And now we introduce the concept to PNG teachers who have English as their third or fourth language, trying to address the same concept and it's difficult. (EP002)

These comments substantiate the difficulties teachers experience with understanding OBE. It is a difficult concept that has failed in more developed countries like Australia and USA (McNeir, 1993). For PNG teachers, there are two issues that they have to grapple with. One is the understanding of OBE and the other is the use of the English language to teach OBE (Editorial, 2007b). Most teacher educators and practitioners have a tenuous grasp of the English language and this problem influences their teaching approaches (D. McLaughlin, 1997b; O'Donoghue, 1994; Zeegers, 2005).

NDOE bureaucrats acknowledged that the concepts and terms used are too difficult for classroom teachers to understand. During the Education Conference in Mt Hagen, the Assistant Secretary for Curriculum Development Division (CDD) acknowledged that the two major constraints were: lack of proper teacher training and in-service courses (Alphonse, 2006, p. 7). When drawing on Beeby's theory, adequate teacher training and in-service courses and/or workshops are essential for all stakeholders involved in the process to ensure adequate understanding of OBE prior to implementation. The OBE curriculum is already being implemented while the training is on-going and in most cases lagging behind.

Within such a context, the question that invites scrutiny is, "Why introduce OBE in PNG?" It seems illogical. From a globalization perspective, OBE seems to be a concrete example of the impact of globalization processes in driving educational reform in developing countries. Developing countries like PNG have accepted educational reforms without rigorous critique and trialling in schools before implementation, because these reforms are driven by the global markets and their multinational corporations. This process has serious implications for improving the quality of education (Papoutsaki & Rooney, 2006). Rigorous critique of OBE and how it has been accepted internationally would have provided a sound base for the implementation of OBE in PNG. In the USA, there has been controversy in its implementation because of the quality of its product (McNeir, 1993).

This study argues that NDOE, especially CDD, needs to seriously learn the lessons of the previous educational innovations of the 1980s (Clements & Lean, 1981; Lancy, 1983; Vulliamy, 1980) and establish strategies to promote OBE systematically at all levels of education. Thus far, it seems there is no established structure for the training needs of the practitioners. Educational institutions have been receiving the curriculum documents but what good are these

in the hands of practitioners who have little understanding of OBE, due to lack of in-service training. This is another critical issue that needs attention and action from NDOE.

11.4.2 Collaborative partnerships

As a strategy to solicit support for these new reforms such as the restructure, OBE, trimester program and DEPI, collaborative partnerships need to be established. This may mean a decentralization of the national education system whereby there is increased participation and on-going dialogue with all stakeholders throughout the implementation process of the reform especially the OBE. The current education system is highly centralized and so the curriculum and the policy directives are developed externally, with minimal consultation with practitioners. Educators and practitioners are expected to adhere to curriculum and policy directives as stipulated by NDOE without the qualified personnel, adequate infrastructure, and financial support needed to assist them with the process.

The other factor is the importance of 'time'. Educators must be allowed ample time for careful planning and implementation so that patience and commitment can be cultivated to allow their efforts to evolve into lasting change (McNeir, 1993). The study concluded that there was insufficient time provided for professional development of teachers. OBE was introduced into the schools in 2000 within a short period of time with inadequate time provided for all stakeholders to prepare for it. In conjunction with professional development, teachers need plenty of resources, small classes, and well resourced libraries. PNG schools do not have libraries, computers and internet, little equipment, dated and inadequate text books, and large classes. Moreover, teachers have limited education and Basic English (Editorial, 2007b).

OBE is a highly complex concept introduced to unsophisticated teachers to implement. Not unexpectedly, the lack of support has contributed to subtle resistance. The line of educational progress would lie somewhere between the opposing forces of reform and resistance. People outside the teaching profession identified resistance to change with one thing, the conservatism of teachers (Beeby, 1966, p. 24). In the case of OBE, the resistance from practitioners is not because they do not want to teach the curriculum, but rather because they are being forced to teach concepts they do not understand with limited assistance and scarcity of resources. Beeby (1966) identified the following reasons for resistance among teachers: poorly-articulated reform goals; teachers who neither understood what was expected of them nor believed in it; the fact that teachers were themselves the product of the system in which they worked, many of them having spent virtually their whole lives in it; and the isolation of teachers working alone in classrooms (Beeby, 1966, pp. 41-47). While these reasons were identified in the 1960s, the

results of this study indicate that these reasons are still applicable in the 21st century in the PNG education system.

These reasons summarize aptly the ambiguities and contradictions experienced by educators and practitioners in the implementation of the OBE curriculum and other educational change. In order to minimize the level of resistance, collaborative partnerships need to be created with all stakeholders involved in the curriculum process (W. Turner & Sharp, 2006; Vick, 2006). This process includes the design, development, implementation and review of any reform curriculum. With a highly centralized system, policy directives are externally imposed using a "top-down" approach. Research has demonstrated that this "top-down" approach has not always succeeded (World Bank Group, 1998). A "participatory" approach seems a better alternative (Kayrooz et al., 2006, p. 98; World Bank Group, 1998). This approach is aligned closely with the Melanesian tradition of consensus whereby all stakeholders are consulted before embarking on important projects (Mantovani, 1995). Wheatley makes the same point arguing that "if we want their support, we must welcome them as co-creators. People only support what they create" (Wheatley, 1999, p. 8). Therefore creating collaborative partnerships with stakeholders in education has to be a prerequisite for embracing educational change authentically.

11.4.3 Impact of the affiliation and/or amalgamation policy

Postcolonial explorations reveal issues that are important to people whose lives have been affected through the course of policy directions. As a strategy to ensure that appropriate academic standards and provision of quality educational services to its citizens are provided, the NEC set a policy direction that all institutions of higher education affiliate with one of the approved universities in PNG (Commission for Higher Education, 1996a, 1996b & 1999). In accordance with this policy, SBC became an amalgamated Campus of DWU in 2003 (Leach, 2004). In contrast, OLSHTC affiliated with DWU on the 24th November 2004 (EP006). The process of affiliation aims at establishing and maintaining standards and quality assurance across all higher education institutions. HTTC was working through a similar process with the view to affiliate with DWU (Alphonse, 2005, p. 18). What this policy means, when fully implemented, is that DWU takes on increased responsibility for the training of teachers, ensuring that quality programs are delivered.

The study identified that the impact of this policy was substantial. On the positive side, the policy would improve the quality of teacher education and provide better educational services. However, there were fears about job security, loss of control and financial autonomy, and new terms and conditions of employees. Some of these negative perceptions and fears were due to

misunderstandings because there was lack of information of the policy. In supporting the policy, the Commissioner for CHE stated:

I am in favor of education being provided at the highest possible level.... Primary teachers to be trained to the secondary level, undergraduate to the graduate level, and all teachers must have a first degree. Colleges need to affiliate to improve the quality. (EP004)

Another NDOE bureaucrat added: "That's a good step forward to help us improve the quality of teachers by allowing some universities to take over teacher training" (EP001). Although these colleges are working closely with DWU to improve the quality of their programs, it is ironical that certain bureaucrats within NDOE and OHE appear to be hampering the full implementation of the policy. The situation is further exacerbated by a lack of commitment to transfer the appropriate financial allocation required to complete the amalgamation process, which was signed in 2003 (Leach, 2004). In the midst of this indecision, SBC and DWU continue to provide with great difficulty the teacher education training programs required to meet the national demand.

11.4.4 Ambivalence

The implementation of this higher education policy seems ambivalent. From postcolonial theory, ambivalence is an important concept because it provides an appropriate lens to understand more insightfully the educational dynamics occurring in the implementation of the policy of affiliation and/or amalgamation (Childs & Williams, 1997). This situation is representative of the colonial subject's attitude towards the "Other" which is not a simple rejection of difference but a recognition of the "Other" that holds an attraction and poses a threat (Childs & Williams, 1997, p. 125). While some of these NDOE bureaucrats realize the importance of this policy, to promote quality education, they are also threatened by the fact that the policy could be the demise of their own jobs.

The actions employed by certain NDOE bureaucrats are ambivalent and reflect neo-colonial thinking. For example, there are certain lecturers in these colleges who were not being paid their salaries by TSC. When queries were raised by SBC administration, they were told DWU should pay them. This direction seems ludicrous because NDOE has not provided the required funding under the amalgamation process. The same NDOE bureaucrats continue to exercise their power in making decisions regarding salaries and college funding. It is likely that these same bureaucrats are aware that, with the full implementation of the policy, they will no longer have control over the three colleges. Thus, it is understandable to assume that they may be reacting to this loss of power.

Creating instability among staff members, who wanted to remain with these affiliated and/or amalgamated colleges has been a convenient strategy adopted by certain NDOE bureaucrats. These same bureaucrats attempted to destabilize the colleges by telling staff members that if affiliated or amalgamated, they would have to resign from TSC and lose their benefits. Furthermore, these bureaucrats also told participating colleges that AusAID resources would no longer be available to them (EP005, PA103 &104, PP301).

The other strategy adopted by certain NDOE personnel was undermining the authority of the colleges. Communication of information was via telephone conversations with certain individual staff members, who were against the affiliation and/or amalgamation process in these colleges, instead of formal written communication to the lawful authorities. These practices exposed a lack of transparency in NDOE and generated unnecessary confusion in the colleges. In addition, staff meetings were scheduled during NDOE official visits to these colleges, and threats were issued to staff about job security concerning those staff members who wanted to remain with SBC (PP301 & PA304).

These strategies adopted by certain NDOE bureaucrats are hegemonic and neo-colonial in nature. Hegemony illustrates the force by which subordinate classes are convinced of their natural or right position and that of the ruling class (Childs & Williams, 1997). According to elite theory, ideas about the most fortunate in society making decisions for the lower working class are based on the presumption that they are the best informed regarding the interests of the poor. Such practice breeds a new form of colonialism which is neo-colonialism. In this case, certain NDOE elites thought they knew what was best for teacher education and made decisions for them. These neo-colonial attitudes reflect the "power plays" used to force issues on subordinates to exert their authority as a consequence for non-compliance. It is unfortunate to see the neo-colonial philosophy adopted by certain NDOE bureaucrats, who should be supporting government policies in promoting growth and development as a positive step for teacher education, instead of impeding the process.

11.4.5 Changing role of the Church Agency

Education is a shared venture of the national government with other agencies since 1970 (Barrington, 1976, p. 8). The Catholic Church is a major stakeholder in education. The three Catholic PTCs involved in this study were established in the late 1960s by different religious congregations of priests, brothers and sisters of the Catholic Church (Sections 6.1, 7.1 and 8.1).

Since the establishment of these colleges, the Catholic Agency has taken a leading role in the administration of its colleges, staff employment, curriculum development, and funding to

support their needs. The initial infrastructure developments of each of the colleges were financed by *Misereor*, an international funding agency sponsored by German Catholics. During that period, the Catholic Church was perceived to be a manifestation of colonial power because it was self-reliant and independent. The study revealed that, in the last decade, the financial support from the Church agency to its colleges has been minimal and tied to specific purposes depending on the needs of each college. An Agency representative explains: "The RE lecturers are paid by the Agency and a proportion is paid for ancillary staff or maintenance but it is not a great amount" (CA201).

Since joining the national education system, there have been some positive developments which have made it easier for the Agency to maintain its schools and colleges. The major developments include staff salaries and the development of a common curriculum. However, the Agency is still responsible for its infrastructure development and maintenance (Department of Education, 2001a). Since funding is no longer forthcoming from international Church donors, it has become increasingly difficult for the Agency to secure such financial commitments and therefore compromises have been made with NDOE and donor agencies. The provision of staff salaries imply a greater influence in staff appointments by TSC. This has caused some concern for the Agency as reflected: "There is still weakness in the TSC Act on the power of the Agency in the appointments of key positions of the staff and they are trying to strengthen the Agency's interests" (GC102). In support, the head of the Agency confirmed: "We expect the government also to be generous in a way that they allow us to look into appointments which we consider very crucial especially leadership positions" (CA101). In the endorsements of staff employments by TSC there are variations identified in the selection criteria. Unlike the Church Agency, which emphasizes the church codes for employment, TSC places greater emphasis on qualifications and minimal consideration for the Church affiliations of staff. This has resulted in the domination of staff from other Church agencies in these colleges. This was an area that caused conflict among staff members.

The Agency emphasizes the importance of Christian education and Christian living in the colleges. However, the values that the Church Agency wants to sustain are not always compatible with TSC. TSC provides the salary package for staff members and it is realistic to anticipate that TSC may override staffing lists from the Agency as occurred in 2005 and 2006. It appears that TSC has power to control who is employed or not, even if the Agency has reservations about certain staff members. This would suggest that the Agency has lost some of its control and power in its colleges to NDOE, in maintaining a Catholic ethos. The dilemma is that while the Agency may want to maintain control of its educational institutions, it is difficult

for the Agency to retain control without the adequate financial support, resources and qualified personnel.

As a strategy to deconstruct these colonial practices and hegemonic relationships, the Church Agency needs to review its own position, in light of all the current trends of educational change, by taking stock of itself and re-evaluating its role in these colleges. This may further necessitate re-examining the vision, mission and purpose of these teaching institutions and reconsidering events within the last decade. In the process, the Church Agency might discover the driving force behind the changes and so be able to manage these changes in a more empowered position rather than allowing itself to become irrelevant and disempowered. This might mean exploring possibilities of working beyond NDOE and its donor agencies by linking with DWU through the processes of affiliation and/or amalgamation.

11.4.6 Globalization, knowledge, education and training

In the globalization era where new technologies, communication and information systems are widely accessible, NDOE has a pivotal role to play in the PNG education system. This role requires NDOE to ensure that PNG has a relevant education system provided to meet the needs of its citizens through appropriate and quality educational services. This is increasingly becoming a considerable challenge because of the impact of globalization in the knowledge economy. The Global Information Infrastructure Commission (GIIC), an international, independent, non-governmental private sector organization argues that:

The globalization of the economy and its concomitant demands on the workforce requires a different education that enhances the ability of learners to access, adopt, and apply knowledge, to think independently, to exercise appropriate judgment and to collaborate with others to make sense of new situations. The objective of education is no longer simply to convey a body of knowledge, but to teach how to learn, problem-solve and synthesize the old with the new. (Quoted by Cogburn, 2006, p. 4)

These comments highlight the changing "face" of education. The current education reform is influenced by globalization and the current global trends in the knowledge economy. One of the major challenges for NDOE is to actively reshape PNG's educational system in ways that are "consistent with their national priorities" (Mansell and Wehn quoted by Cogburn, 2006, p. 3). This challenge is particularly acute for PNG as it is being bombarded with multiple options as to what actions and strategies are appropriate for the country. Cogburn argues that: "The education and learning paradigm around the world is under pressure to better meet the demands of this new knowledge and information-intensive global economy" (2006, p. 3). Implementing such changes to align its education system with the global trends is another huge challenge, because

PNG is highly dependent on foreign aid and their multinational corporations, to fund new developments (Hawksley, 2006; Papoutsaki & Rooney, 2006).

Globalization processes present some of the greatest challenges for educational systems especially in developing countries. As a strategy to address the challenges posed by globalization, high levels of cooperation are needed between public and private sectors, and between global, regional and national organizations. It seems that this is where NDOE needs to play a pivotal role in exploring different frameworks of engaging such partnerships for global cooperation. Locally, partnerships should be encouraged from recipients of these changes. Since independence, NDOE has had the privilege to make all decisions regarding the educational needs (in terms of structure, curriculum, policies and funding) at all levels. Within this increasing economic globalization and restructuring of the world's political and economic systems, the requirements for knowledge and information within that system, especially at tertiary level, need to change. Therefore, NDOE needs to establish partnerships with all educational institutions of higher learning and research to tap into that resource.

The study concluded that the command and control systems of NDOE in teacher education are still enforced. This is a concern because there are emerging issues within the global economy that are affecting the local context in terms of the type of education that should be provided. In an era when globalization is the driving force for change, Cogburn argues that "academic institutions must become less rigid and more flexible in their attempt to meet the varied needs of learners and the global economy" (Cogburn, 2006, p. 5). This means that the academic course offerings should be adapted to reflect these new knowledge, education and learning requirements, but this is rarely occurring in these educational institutions (Cogburn, 2006). Against such a backdrop, flexibility and on-going dialogue between NDOE and educational institutions should be encouraged.

The study revealed that educational change was imposed on these colleges prematurely without determining the suitability of the colleges' capacities to implement the reform. PASTEP innovations and EU's contributions have improved some of the college's facilities but there is more that needs to be done. Furthermore, there are few qualified personnel with specialized training in all colleges to implement the educational change. This was disclosed by an academic staff member: "The problem is that there are lecturers who are not trained and specialized in the areas that they are currently teaching... So they are just filling in wherever possible" (PA301). The situation indicates that there are disparities between the reality of the colleges and the expectations of NDOE. This reflects ambivalence and ambiguity. Ambiguity can lead to misrepresentation and this seems to be reflected in some of the decisions taken by NDOE and

the donor funding agencies. The type of training that teachers are currently receiving seems inadequate and needs to change to meet the national interests.

The study concluded that there was little flexibility of choice in terms of the educational change that had been implemented in the colleges. Teacher educators seem to be locked into a rigid model of thinking and are not empowered to implement what they judge to be important and relevant to the training of primary school teachers. Colleges are directed to follow what NDOE stipulates as curriculum and policy. This seems to contradict the flexibility in learning proposed by Cogburn (2006, p. 5). As Watson (1994) argues, "brown colonialism" is often more colonial than "white man". To get rid of this "brown" colonialism, NDOE needs to cultivate on-going dialogue and partnerships with educational institutions in their attempts to establish flexible systems of training to meet the varied needs of learners and the global economy (Cogburn, 2006).

Summary: The discussions generated under Research Question Three identified a number of issues. First, globalization is a powerful force in influencing educational change. While the education reform may be internally motivated, the process of globalization appears to have influence over its implementation. Consequently, PNG especially NDOE may be perceived to have lost some control in the way educational change is being conducted. Second, as a developing country, PNG depends on global financial institutions for assistance in its structural programs (Hawksley, 2006). For the process to be effective, PNG has to find the balance between satisfying the donor's agenda and fulfilling its own national interests. One of the disadvantages of globalization is that foreign agencies are not always responsive to the needs of the local context (Altbach, 2001). This may lead to little sustainable development in educational change. Most agencies enter developing countries for economic gains even through education since it is becoming an important commodity on the international market. This study argues that PNG needs to be cognizant of these issues and address them so that it can benefit from the globalization processes.

11.5 Leadership challenges within a postcolonial society

The theoretical lens adopted to discuss the major themes relating to leadership is postcolonial theory. There are six major themes that have been identified. Postcolonial theory is the appropriate lens because it "involves a studied engagement with the experience of colonialism and its past and present effects, both at the local level of ex-colonial societies as well as at the level of more general global developments thought to be the after-effects of the empire" (Quayson, 2000, p. 2). Postcolonial theory seeks to identify and describe the nature of colonial legacies in postcolonial societies. This section contributes to that goal by discussing some of the

major practices which may be perceived to be neo-colonial leadership practices. Similarly, the discussion focuses on other practices that have challenged neo-colonial leadership practices.

11.5.1 Reproduction of colonial characteristics of leadership

In the discussion of the leadership practices the goal is to identify the manner in which these college leaders have reproduced or challenged colonial views and characteristics. This discussion is framed within postcolonial theoretical perspectives suggested by postcolonial scholars (Loomba, 1998; Quayson, 2000; Said, 1978). Postcolonial theory is defined as a contestation of colonial domination and the legacies of colonization (Loomba, 1998). It is described also as a process of disengagement with the entire colonial saga (Tikly, 1999). Within this context, the negative leadership practices analysed in Chapters Six - Nine can be interpreted as reproducing colonial characteristics.

The negative manner in which the research participants experienced leadership in the colleges suggests that some of the leadership practices were neo-colonial in nature. Some of these leadership practices discussed were exemplified in practices such as not consulting with staff on issues that concern them; disliking outspoken staff; banning student forums; showing minimum concern for the needs of staff and students; penalizing staff and students to ensure compliance. These practices were perceived to be suppressive and neo-colonial in practice because they seemed to be reproducing colonial characteristics of power over subordinates. Such practices resembled the strategies used by colonizers to achieve and exercise power over the colonized. The continued existence of such practices among some of the leaders had negative effects on staff and students. That is why such practices should be challenged, because they reproduce the colonial mode of operation which results in low morale among staff and students.

The leadership approaches employed by some of these leaders reflected their personal experiences. Some of these leaders did not believe that their leadership approaches were inappropriate because they had been part of such a system for a considerable period of time. In addition, some of these practices were also employed by certain NDOE bureaucrats (Pagelio, 2002). This suggests that some of these leaders were simply replicating their own experiences of leadership from their higher authorities, due to minimal leadership training. The fundamental characteristics of these practices remained suppressive and unconstructive. This suggests that the leaders remain patriarchal, patronizing and unjust towards their staff and students, similar to the way colonial leaders related to their PNG staff (Pagelio, 2002). As disclosed by a participant of a focus group: "He [the principal] uses expressions like 'my dear staff, my students, my college'. An inspector picked this up during his visit to the college and commented on the use of 'my staff, my students and my college', saying that it should not be used" (PS103). Such

references give the impression that leaders believe in the rights of ownership over duties of office.

The negative leadership practices described in Sections 6.5, 7.5, and 8.5 can be interpreted as "neo-colonial" because they perpetuated a spirit of colonial leadership practices. Neo-colonialism is manifested where politically independent people of a developing country continue to be bound voluntarily to a former imperial power (Altbach & Kelly, 1978). However, in the context of this study, it is no longer the colonizer who is imposing power but rather it is the leadership approaches employed by some college leaders. These approaches have a deleterious effect on some staff and students. From the postcolonial perspective adopted in this study, the authoritarian approach associated in the decision-making processes may have its foundations in colonial histories (D. McLaughlin, 1996; O'Donoghue, 1994). This suggests that some leaders in these colleges demonstrated aspects of leadership that are synonymous with colonial practices. This does not imply that these leaders were replicating what the colonizers did, but what it means is that the leaders have adapted the practices of colonialism in a modern PNG educational setting.

Traditionally, Melanesians were governed by a communitarian value system where power was disseminated so that it was shared and communally owned (Chao, 1995; Narokobi, 1983). Such a concentration of power by a few is not a Melanesian tradition. However, this Melanesian view of power was replaced by colonial views introduced by the colonizers. The study concluded that the current leadership approaches demonstrated by some college leaders resulted in negative experiences and ineffective governance. These were exemplified in the limited allowance provided for staff and students to make positive contributions towards the college programs. Thus, the results of this study reaffirms other research that power be decentralized and exercised in ways more reflective of PNG values of equality, consensus, good relationships and sharing (MacDonald, 1995; Mantovani, 1995; Narokobi, 1983). This requires PNG educational leaders to be selective in the approaches employed from both Melanesian and Western leadership systems to ensure staff and students are empowered, rather than being disenfranchised in the education process.

11.5.2 Hegemonic practices in leadership

Constructive criticism of the way the colleges were organized was not openly encouraged by all leaders. By disallowing criticism, staff and students were denied choices about better alternatives. Some of the leadership practices which displayed leaders' intolerance of opposition included nepotism, by appointing friends to teaching positions, side-tracking and terminating employment of out-spoken staff to get rid of opposition and banning student forums to avoid

students' protests. In essence, there was fear of criticism among the leaders and a strong element of mistrust of critics. Fear of criticism and mistrust demonstrated a sense of insecurity existing in some leaders. Lack of leadership training may have contributed to lack of self-confidence, and anxiety that may lead to insecurity. However, appropriate leadership education and training are likely to enhance confidence and replace some of the insecurities with an attitude of openness, flexibility and tolerance for constructive criticism. Constructive criticism may assist stakeholders to be empowered so as to offer alternative strategies for improvement in these institutions (Fullan, 2001; Lewin & Regine, 2000; Pagelio, 2002).

Leadership practices that perpetuated colonial assumptions included conveying reminders of who is in authority such as controlling the use of vehicles by keeping keys of vehicles in their houses, making staff ask permission, and telling staff and students to do as their leader says without question or consultation, threatening staff and students to get compliance, and reminding them about the power of the leader. While controlling the use of vehicles and making staff ask permission are not unreasonable, since these qualities reflect accountability, it was the manner in which these rules were communicated to staff that was problematic. Evidence of fear was demonstrated by students who refrained from offering opinions contrary to college leaders. This colonial construction by Papua New Guineans represents "power" that needs to be dismantled and replaced by positive perspectives, which encourage better participation from stakeholders.

11.5.3 Deconstruction of neo-colonial practices of leadership

The deconstruction of neo-colonial leadership practices in these teaching institutions is a complex process. Postcolonial theory presents a way of thinking about the legacies of colonization and provides a framework to understand these legacies in postcolonial societies. In attempting to achieve this goal of deconstructing the neo-colonial practices of leadership, the discussion focuses on the findings that have challenged neo-colonial leadership characteristics and other colonial legacies.

There were some positive leadership practices present in the colleges. These leadership characteristics were selected judiciously from a paucity of data sources. As a strategy to deconstruct some of the present neo-colonial legacies and ethnic prejudices, the focus turns to the leadership qualities exhibited by a small minority of these educational leaders that were positive and empowering for stakeholders.

11.5.4 Leading with moral purpose

The creation of a new leadership culture is a complex dynamic. The situation is made more difficult when it is succeeded by bad experiences of leadership, especially when people are wounded physically, psychologically, emotionally and intellectually. This was particularly relevant for staff and students of one college, while in the other two colleges the experiences were not as dramatic because there was stability in the leaders and staff.

The creation of a new organizational culture is complex (Fullan, 2001). One particular leader initiated a new culture by challenging the status quo. In the first week of assuming the leadership post, the leader's attention was focused on each individual employee. He did this by taking time to sit down and listen to each person's story. This first paradigm shift was challenging because the entire college community expected him to lead by establishing new changes to programs, personnel, resources, and infrastructure. Instead, he concentrated his attention on the individual employee. This was well articulated by one of the administration staff: "...the current administrator is everywhere and takes an interest in what people are doing. He is out of the office where people are, talking to them and where there is a program, he is there" (CB301). This suggests that the leadership approach that he employed was moral and collaborative.

In the process of change, a leadership framework comprised of five key components is offered (Fullan, 2001, p. 4). One of those components is leading with moral purpose. "Moral purpose means acting with the intention of making a positive difference on the lives of employees, customers, and society as a whole" (Fullan, 2001, p. 3). In the context of this study, this particular leader is perceived to lead with moral purpose. Such a process necessitates establishing strong partnerships to assimilate the vision and collaboratively work towards making the vision a reality. In advocating for strong leadership, it can be argued that the process is not an isolated event, but rather one in collaboration with group members (Bass & Stogdill, 1990). Collaboration is important because of the disparities evident between the expectations of the stakeholders and the actions of their leaders. Collaborative partnerships challenge colonial legacies whereby power is disseminated among all stakeholders rather than it being kept in the hands of a few to make decisions. In addition, collaborative partnerships ensure accountability in decision making processes from all stakeholders instead of decisions being imposed by the leadership. This implies that good partnerships are important and need to be established in educational institutions. Leading with moral purpose is an important bench mark for strong leadership. The study concludes that there is observable change in the deconstruction of the

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⁹ Administrator was the title given to this leader when he was initially asked by DWU to assume the responsibility of caretaker Principal of SBC.

inherited colonial practices of leadership in this particular institution. Though small, it is change for the better.

11.5.5 Deconstruction of ethnic prejudices

As a corollary from the deconstruction of neo-colonial characteristics of leadership, a more challenging issue concerns the deconstruction of ethnic prejudices. Arguably, for leaders who lead a people with a multiplicity of cultures, it is imperative that the cultural context of the leadership phenomenon be understood to help institutions become effective in their delivery of new learning (Tivinarlik & Nongkas, 2002b). While cultural diversity can be an advantage, by the same token this diversity can also be a barrier to development. With so many different tribal groups, leaders are challenged to be sensitive to the value systems of the surrounding communities. Similarly, the ethnic groups within the vicinity of these educational institutions need to respect the leaders and understand that leadership qualities are part of a person's cultural background and thus play an important role in how leadership is exercised. This is a phenomenon that is unique to PNG.

The study identified that PNG ethnic prejudices and politics of location have resulted in lack of development in educational institutions as discussed in Sections 7.2.2b and 8.2.3b. These inherited prejudices are more difficult to deconstruct and dismantle than the colonial practices because they are "inbuilt" in Papua New Guineans. The study concluded that sporadically these prejudices have created problems. In a process of change, these prejudices have influenced important decisions regarding programs and appointments of key personnel in leadership positions. The popular saying, (*Em man o meri blong ples, em bai save*) "this man or this woman is local so he/she should know" does not always produce quality and favourable results. The study identified that certain leadership positions were awarded to people on seniority and tenure rather than qualification, experience and competency. The other reason was to maintain peace and harmony in the community. This would suggest that at times personal interests have taken precedence over institutional or ethical interests. This is a major problem that is prevalent not just in educational institutions but also in the public sector within PNG.

Leaders spoke of the difficulties, tensions, ambivalence and conflict they experienced because of their ethnic background. In their efforts to implement change, some of these leaders were accused of introducing their own cultural practices which were considered by locals to be foreign. Some of the local staff tended to concentrate narrowly on the change rather than on its overall impact on the institution and its stakeholders. Subsequently, this narrow mindedness has led to a lack of appreciation of the leaders' efforts to implement positive change.

In the pursuit of progress and development in education, these ethnic prejudices need to be challenged and dismantled to make way for diversity in leadership approaches that are more encompassing of all Melanesian value systems regardless of ethnic, regional or language propinquity. This was highlighted in some bold decisions adopted by a certain leader to incorporate ethnic diversity as a positive mechanism for building community, after some unfortunate incidents among staff and students in the community. This was exemplified in a process of reconciliation undertaken over a three month period to restore community relationships. This process of reconciliation culminated in the Easter Ceremonies that year. Although the processes of reconciliation encountered fierce resistance from certain local members of the college community, the end result was overwhelming. Incorporating Melanesian values into these processes created a sense of unity in diversity (Nongkas & Tivinarlik, 2006). The process of reconciliation adopted by this particular leader demonstrated that there is room for Melanesian values to be integrated into educational institutions using a Western bureaucratic system.

The other issue was the gender imbalance in leadership roles in these colleges. The leadership positions in these three colleges lacked gender equity. Although the gender equity policy is in place in NDOE, it is rarely enforced in these colleges. In the administrative positions of all the colleges, there was no female representative. There was some improvement in the leadership positions of the strands, with 33% female and 66% male. These results were consistent with the literature which argues that, regardless of whether women are competent, there are relational issues within the cultures that limit women leaders to promotional levels (Malpo, 2002).

In an education system where there are more female teachers than male, it is presumptuous that the top positions in schools, colleges, as well as NDOE are all occupied by men. Despite the fact that PNG claims affinity to both matrilineal and patrilineal societies, the matrilineal aspect of the Melanesian culture does not seem to have any impact on improving women leadership in education (Flaherty, 1998). While matrilineal culture assisted some women to gain leadership positions, the patrilineal culture was an obstacle for others to gain leadership positions (Malpo, 2002). This would suggest that although culture and religion were the catalysts in promoting women leaders in schools, gender equity in leadership is a long way from becoming a reality (Malpo, 2002; Kaiku, 2007).

Gender imbalance was identified also in the professional development programs for teacher educators. In all the colleges, the majority of teacher educators who participated in the sponsored programs were male. The imbalance was observed further in decision-making committees, where male staff dominated the composition of membership. This was observable

in a Student Discipline Committee meeting where the majority of students facing disciplinary actions were female students. In that meeting, there was not one female staff member present to represent female students' interests. This suggests that the education system is very much male dominated. This needs to change to provide a more balanced view of life for a healthy society where both female and male contribute equally towards a better education system. The current gender imbalance contradicts the philosophy of education that calls for equity and equal participation of all stakeholders in education (Matane, 1986).

11.5.6 Hybrid leadership

Contemporary PNG leadership is informed by postcolonial conditions - a hybrid of the colonial and Melanesian perspectives. In postcolonial theory, hybridity refers to the integration of cultural signs and practices from the colonizing and the colonized cultures. Furthermore, hybridity has the potential to move one beyond essential identities (Bhabha, 1994, p. 37). The research findings revealed that the leadership teams of the colleges experienced difficulties in their roles as leaders. Some of these difficulties can be explained by the context specificities which make each situation unique. However, the common component is that each of these educational institutions employs a western leadership paradigm and therefore, Papua New Guineans who hold these leadership positions, experience tensions and conflicts in fulfilling their roles. Conflicts and tensions are generated through an uncritical transfer of the traditional tribal assumptions and beliefs into a foreign western system. These conflicts and tensions are exacerbated by the current globalization phenomenon which seems to present the Western way as the answer to development and progress in terms of leadership, educational change, communication and technology, and economic success (Dimmock & Walker, 2005).

While developing countries are drawn into the globalization processes, there is also a realization within these nations that there are contextual issues, that globalization is incapable of addressing (Cogburn, 2006). One of these is the leadership issue for PNG educational institutions. While globalization processes may provide alternatives, PNG educational leaders have to develop appropriate leadership structures and approaches for their educational institutions (Dimmock & Walker, 2005). The tensions experienced by leaders illustrate that the leadership approaches employed within the current educational institutions can no longer be executed using purely western leadership approaches nor can they lead using purely traditional Melanesian approaches. This study argues that this is where PNG educational leaders can initiate change, because they have the power to choose by acquiring and applying authentic leadership qualities from both systems resulting in a hybrid of the leadership approaches that is neither Melanesian nor Western. The observable change in positive leadership identified in one college is relatively small however it offers hope for a better future if nurtured. This new leadership culture suggests

that it is possible for PNG leaders to find the appropriate leadership approaches for their institutions.

Transformational leadership is one approach that appears especially suitable for NDOE leaders (Pagelio, 2002). Nevertheless, the complexity and the diversity of organizations mean that no one model or leadership approach will suit perfectly. Although leaders have the authority to decide, the organizations also have to work out their optimum leadership structure. Research participants argued that leaders should have a clear "vision" of the "mission" of their institutions and the appropriate strategies to achieve this (PA201 &2). Participants expressed disappointment that some of their current leaders failed to demonstrate evidence of possessing these two components. Qualities such as credibility, confidence, competency, self-knowledge and self discovery, searching for purpose and spirituality, consensus and good relationships (Mantovani, 1995; Narokobi, 2005; Sergiovanni, 2000) are appropriate for leadership. Hybridity in leadership demonstrates a new leadership culture that cannot be compartmentalized according to race, land, language and political borders because "[h]ybridity shifts power, questions discursive authority, and suggests that colonial discourse is never wholly in the control of the colonizer" (Emerson & Holquist, 1981, p. 304). This would suggest that the colonized can make the shift.

Focusing on the importance of the context, and what is specific to it, could be a guide to negotiate a path within the Melanesian and Western systems of leadership. From a postcolonial perspective, this means the deconstruction of the inherited colonial leadership practices which depicted colonial leaders exerting power over the colonized who were their subordinates. Some of these inherited colonial practices are still maintained by some NDOE leaders (Pagelio, 2002). This would suggest that the current practices of certain NDOE leaders need to change to incorporate the qualities of authentic leadership qualities that are more empowering. This study argues that the future of PNG leadership can be created by acquiring and applying the authentic leadership qualities of both Melanesian and Western leadership approaches. The likely outcome would be hybrid leadership approaches integrating the Melanesian and the Western values systems that are relevant to the PNG educational context.

Summary: Postcolonial theory was the one lens adopted in the discussion of the six issues generated under Research Question Four. The study concluded that there were practices synonymous with the colonial characteristics of leadership present in the colleges. Likewise, colonial leadership practices have also been a part of the culture of NDOE and this could have added to its preservation in the colleges. The deconstruction of colonial characteristics of leadership was an important challenge for all leaders and the results revealed that this was rarely

happening. However, there was evidence of some positive change in the deconstruction process. Furthermore, the deconstruction process of ethnic prejudices needs to be encouraged in these colleges. This is one of the most challenging assignments among leaders and all stakeholders. The deconstruction of colonial characteristics of leadership challenges leaders to judiciously select the qualities they need from both the Melanesian and the Western values systems to create a leadership approach that is hybrid and contextual. This needs to be an important undertaking of NDOE for leadership development and training.

11.5.7 Conclusion

This chapter has discussed the results of the study through the four lenses of the theoretical framework. There were four major sections. The first section discussed the results of the study using Beeby's theory of improving the quality of education in developing countries. Beeby's theory was insightful because it offered a theoretical framework to discuss the teacher educators' qualifications and its influence on enhancing the quality of education in primary teacher education. The second section discussed the results through the lens of dependency theory. Dependency theory was adopted as a useful framework to discuss the role of donor funding agencies and their impact in the developing countries. The third section discussed the results through the lens of globalization. In this section, the discussion focused on the globalization processes that influence educational change in developing countries. The fourth section discussed the results through the lens of postcolonial theory. Postcolonial theory was insightful because it offered a theoretical framework for postcolonial societies such as PNG to identify colonial or neo-colonial characteristics in society and dismantle such practices. The final chapter of this thesis presents a review and synthesis of the entire study and concludes by offering nine recommendations for consideration by the NDOE (policy makers), PTCs (policy implementers), PNG educational leadership and for future research.

CHAPTER TWELVE

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this research is to explore how educational change is being led in primary teacher education in PNG. The purpose of this final chapter is to present a synthesis of the findings from this study, draw conclusions and offer recommendations for further research.

12.1 Purpose of the study

The problem that underpinned this study was that, in spite of the various innovations and substantial financial assistance poured into the national education system by both foreign aid donors and the PNG National Government (Department of Education, 1999a), there appears to be minimal improvement in the quality of the education system in PNG (Department of Education, 2000a). Within the context of all these identified difficulties and the previous many failures of educational innovations in PNG, this research explores how educational change is being led in primary teacher education in PNG. This study is situated in the three Catholic PTCs in PNG. To address this problem, this study chose to illuminate the roles of all those leading educational change in the three Catholic PTCs and how this is negotiated in a complex context within the colleges, Agency, NDOE and the external funded agencies. This study contributes to the international scholarship concerning the impact of educational change in teacher education, the value of teacher educators and the contribution they make towards improving the quality of education and educational leadership in developing countries. This study adds its own value to the discussion on educational change and the importance of leadership by addressing four research questions which focussed the conduct of the study. These were:

- 1. What is the quality of education being experienced in the Catholic PTCs?
- 2. What are the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges?
- 3. How is the curriculum in the teachers' colleges perceived by the lecturers, students and recent graduates?
- 4. How is the leadership demonstrated in the Catholic PTCs?

In the sections following, a review and synthesis of the whole research is presented. Firstly, a summary of the research design is provided. This is followed by a display of the summary of the results pertaining to the four research questions. The following summary leads into the conclusions of the study, its contributions to theory, its recommendations and the implications for further research.

12.2 Research design of the study

Given that the search for meaning, reality and knowledge was central to this study, it was appropriately embedded in a constructivist paradigm. Constructionism was adopted because it offered a voice to the experiences and stories of the participants of this study. Furthermore, constructionism asserts that knowledge and truths are constructed and sustained through language, linguistic resources and social processes (Neuman, 2000; Papert, 1980, p. 1).

The theoretical perspective is a lens of interpreting the world and making sense of it. The adoption of the interpretivist approach was appropriate since the emphasis was on the meanings in the actions of the participants involved, their daily life experiences, and how they used such meanings to interpret and make sense of their world (Candy, 1989, p. 3; Neuman, 2000, p. 71). To understand the meanings that the research participants construct, the study was conducted within their natural setting. Empirical exploration of the participants was enhanced by the adoption of a case study methodology. This study was a multi-case study which involved the three Catholic PTCs linked by religious affiliations. The strategies adopted for data collection included in-depth interviews, focus groups, documentary analysis, participant observation and journal writing.

The participants (N=144) selected for the study included the administration, staff, students and recent graduates of these colleges as the naturally occurring group in this research. In order to generate more trustworthy findings, other participants involved in this research included representatives from the Church Agency, NDOE, PASTEP and other educationists (N=22) were interviewed. The opportunity to engage with participants was essential to distinguish between the three case studies through the responses provided by the participants to the research questions.

12.3 Key findings of the study: Research questions addressed

Consonant with the purpose of the research, this study focused on four specific research questions. This section presents a summary of each question.

12.3.1 What is the quality of education being experienced in the Catholic PTCs?

The first question sought to explore the quality of teaching and learning processes that are utilized by teacher educators in the delivery of the programs. Similarly, the question also sought to explore the students' perceptions regarding their own learning processes.

The study concluded that there was improvement in the quality of education offered in the teacher education programs. However, there were difficulties experienced in defining the quality of education in these colleges. Thus the study identified the major contributing factors to the quality of education. These were mainly in the areas of the staff members' and students' qualifications. The study noted the emphasis made by NDOE especially on higher education to improve the level of staff qualifications as well as the entry levels of students to primary teacher education. The improvement was assisted by an increase in the number of academic staff achieving first degree qualifications. Moreover, there was a further increase in the number of staff undertaking post-graduate studies at Masters Degree level both in-country and overseas. Furthermore, the quality of students enrolled in the programs had improved with more than 80% of the students entering primary teacher education from grade 12 (Department of Education, 2002d). These were positive factors in improving the quality of education.

In contrast, the study concluded that there were a number of barriers that continue to impede the quality of education. First, the current post-graduate studies offered in-country were important however, these programs had diverse foci on leadership and curriculum studies. This study acknowledged that it was premature to evaluate the impact of these programs. However, the area of subject specialization is still lacking, because as yet, there is no post-graduate program available in-country. Subject content knowledge is crucial for improving the quality of education.

Second, the transference of knowledge and skills gained in professional training into the work environment among the majority of academic staff members was not observable. Drawing on Beeby's theory (1966), the majority of teacher educators in these institutions had made the transition from stage one *Dame school* to stage two, *Formalism*. However, there was a minority that had reached stage three *Transition* and stage four *Meaning*. Nominated staff members attended and participated in organized professional development programs however, the dissemination of such knowledge and skills was disappointing.

Third, the inadequate grasp of the English language exacerbated the teaching and learning process. The study concluded that the use of the English language continues to generate substantial problems for both teacher educators and student teachers. With an inadequate understanding of the English language, communication of knowledge and skills through teaching and learning is adversely affected. This has a ripple effect in the school system and impacts deleteriously on the quality of education.

Fourth, the scarcity of resources and inappropriate infrastructure were highly observable in the colleges. Quality education is expensive and this requires appropriate funding allocation from the government. The study concluded that the daily operations of the college programs have not been adequately funded to enable colleges to produce quality graduates. In addition, the infrastructure is inadequate to nurture the quality product that is required. Consequently, unless PNG addresses these impediments in primary teacher education, achieving quality education which is one of the reform goals is unlikely to succeed.

12.3.2 What are the lecturers', students' and recent graduates' perceptions of the recent PASTEP innovations occurring in the teachers' colleges?

The second question sought to explore the participants' perceptions of the recent PASTEP innovations within their colleges. It aimed to explore their understanding and experiences of the impact of these innovations within their organizations.

The study concluded that the recent PASTEP innovations provided positive contributions to the colleges. PASTEP innovations improved some of the colleges' infrastructures through the refurbishment and construction programs. The construction of the ITCC centre in HTTC was most useful. PASTEP also developed curriculum resources for the strands and furnished books for the colleges' libraries.

The professional development programs conducted by PASTEP throughout the duration of the project were rated highly by the staff who participated in such workshops and training programs. PASTEP provided the financial, technical, and professional support required for the staff professional development. The study concluded that PASTEP fulfilled its goals to varying degrees for primary teacher education.

However, the strategies adopted by PASTEP to achieve its goals were questionable. As part of a postcolonial society, these colleges depended on PASTEP. PASTEP had the personnel, funding, resources, strategies, and the power to achieve its goals in these institutions. PASTEP had the prerogative to use whatever process it wanted irrespective of the views of the colleges and the Agency. In the process, there was evidence of colonial characteristics demonstrated in the attitudes of PASTEP personnel and its construction companies. Some of these characteristics identified were lack of consultation with the Agency and local stakeholders, and a lack of sensitivity to check local knowledge and the local community's interests. These attitudes created poor relationships among the stakeholders and further resulted in a lack of ownership for the innovations initiated by PASTEP.

In addition, the study identified cases where equipment supplied and refurbishment projects built by PASTEP were damaged by students. In other cases, equipment was stolen and sold to the public by staff members. These cases demonstrated the importance of local participation in foreign aid projects to ensure accountability and promote sustainability.

12.3.3 How is the curriculum in the teachers' colleges perceived by the lecturers, students and recent graduates?

The third question sought to explore the participants' personal understanding and experiences of the curriculum of the teachers' colleges. Its aim was to explore their perceptions of the curriculum, its relevance and the challenges the participants encountered in its implementation.

The study concluded that lecturers and students experienced difficulties in the implementation of the curriculum. The current curriculum was dictated by the trimester program. The majority of lecturers believed that the trimester program made it difficult for them to teach adequate content in their units within each trimester. The students experienced similar problems, indicating that there were inadequate periods allocated for reflection and revision in their learning. Students' lack of understanding did little to change the pace. This was exacerbated by the large range of grade 12 students enrolled from Matriculation and Open Campus centres. Lecturers continued teaching regardless of the students' problems, because they were pressured to complete the unit content planned for the trimester.

Special education and the DEPI programs are part of the curriculum of these colleges since the reform. The study concluded that the colleges are conducting both programs with varying levels of success. Special education is a successful program because these colleges have been adequately supported by NDOE and the Agency with skilled personnel, adequate funding and resources, and infrastructure. However, the failure rested with NDOE for not recognizing these teachers with special education training and supporting them in the school system. In contrast, DEPI is more popular with NDOE. After graduation from the DEPI program, these teachers are recognised and renumerated accordingly by NDOE.

Assessment is an important component of the curriculum. The study concluded that the conduct of assessment was problematic for both staff and students because of the excessive workloads expected of them. Practically for students, this meant their completing 12 to 15 assessment tasks within a 14 week trimester. With such a workload, the quality of students' work was of questionable quality. Lecturers were also required to complete all assessments prior to the commencement of the next trimester. This pressure led to what the study identified as a "culture

of passing everybody" among some academic staff members. With such a culture, the curriculum loses its value and, subsequently, the quality of education in these colleges is likely to suffer.

Furthermore, the study concluded that OBE is a highly complex innovation originating from Australia. From the outset, OBE was inadequately introduced into the education system. There was insufficient time allocated for the professional development of teachers. The in-services and workshops were rushed, uncoordinated and inadequately conducted. There are insufficient numbers of teachers trained to teach OBE while the majority is still waiting for some form of training to be conducted for them. OBE is relatively sophisticated but has been introduced to unsophisticated teachers. In spite of the lack of training, schools are expected to implement OBE. Drawing on Beeby's theory (1966), this practice invites failure. The study anticipates that OBE will be added to the long catalogue of Western originated educational innovations in PNG.

12.3.4 How is leadership demonstrated in the Catholic PTCs?

The fourth question sought to explore the perceptions and experiences of participants about the quality of leadership in their organization. The aim was to explore the leadership approaches adopted by leaders and how these approaches are utilized to promote quality education in these colleges.

The study concluded that while leadership is pivotal to leading educational change, the quality of leadership demonstrated in these colleges was inadequate, and in some places incompetent. Three main leadership approaches were identified: authoritarian, laissez-faire and transformational leadership. In exerting their authority there was evidence that some of the leadership practices adopted by leaders in these colleges were oppressive. Some of these practices were derived from the leaders' own experiences of leadership and authority. These practices were exacerbated by a lack of leadership training as evident in the following situations. Some of the leaders were promoted because they had been in that institution for a considerable period of time. Others were promoted because they had been successful deputy principals or academics. Others were appointed as leaders because there was no one else available. There was an absence of an appropriate selection procedure for leadership positions in these colleges. Under such circumstances, the quality of leadership is unlikely to improve in the immediate future.

In contrast, there were some empowering leadership practices identified among a very small minority of leaders. In these cases, staff and students were invited to collaborative partnerships.

While responding to such invitations was challenging for most staff and students, the strategy created a new culture of leadership. Staff and students were invited to embrace some of their own Melanesian cultural practices of leadership and value systems. Some of these were: building good collaborative relationships within the strands and among the different ethnic groups, and respecting for diversity. The ability to provide quality leadership that embraces both Western and Melanesian leadership approaches, was derived from professional leadership training, mentoring and personal experiences. The study concluded that such valuable leadership qualities were relatively isolated in these colleges.

The study identified a number of barriers to good leadership. These were: lack of professional leadership training; ethnic prejudices; gender inequity and political ambivalence.

- 1. Lack of professional leadership training: The study concluded that in the age of rapid change influenced by globalization, there is urgency for leaders to be professionally trained and well-informed about leadership and educational issues. The results of this study illustrated that participants need clear directions in the implementation of educational change. This is an area that was lacking. As a result, the implementation of educational change suffered and the colleges are still experiencing some of the negative consequences of poor leadership.
- 2. Ethnic prejudice: While PNG is home to more than 800 languages and more than 1,000 tribes (D. McLaughlin &O'Donoghue, 1996), the study concluded that aspects of regionalism and parochialism are still evident in these institutions among educated professionals. Ethnic affinity is alive and has a negative influence on leadership.
- 3. Gender inequity: The study concluded that there was an obvious gap in the promotion of female leaders in these colleges. While PNG's philosophy of education clearly stipulates equal participation as one of its goals in the development of the nation, this was not a priority in these colleges (Matane, 1986). Gender equity is consonant with some of its Melanesian cultures however there is minimal political will to introduce such a concept (Kaiku, 2007). There are more female teachers than male in PNG but the education system is dominated by male participation. This current patriarchal hegemony is contradictory to PNG's philosophy of education.
- 4. Political ambivalence: The study concluded that there was a sense of political ambivalence displayed by certain officers in NDOE. The ambivalence was illustrated in the discourses with these colleges, interpretation of policies and practice, and the communication of contradictory messages which resulted in poor relationships. This was exacerbated by the lack of support in

the remuneration of some college personnel, inadequate funding and resources, and inappropriate infrastructure. Despite these difficulties, college leaders are constantly expected to produce more and more with depleting resources and meagre support.

12.4 Conclusions of the study

The purpose of this research was to explore how educational change is being led in primary teacher education in PNG. The study specifically focused on the three Catholic PTCs. Four key areas were explored. These were: quality of education in the program delivery, the recent PASTEP innovations, curriculum, and leadership. These four areas were targeted to gain some understanding of the perceptions of the staff members and students of the leadership and the recent educational change, and its impact on them. To gain an objective perspective of these issues, other key stakeholders as illustrated in Table 5.2 were included in the study.

The study concluded that there is a wide range of issues that contribute and influence the way educational change is negotiated. Some of these issues are controlled externally while the others are internal. External issues are those associated with policies and their interpretation, staffing, curriculum, funding, and resources. Internal issues are those directly under the control of the PTCs. These include the understanding and implementation of the curriculum in the lecture room. The level of understanding of educational change in the curriculum content and teaching strategies demonstrated by teacher educators is not of a high quality. Opportunities for more robust debate and innovative lecture presentations of the curriculum are limited by lack of subject specialization and a trimester system. Success is further contained by inadequate grasp of and fluency in the English language, which has negative influences on the teaching of the subject content. Such lack of understanding affects the teaching and learning processes.

The study observed that promoting of quality education is a costly enterprise (Beeby, 1966). The depleting funding allocation to these PTCs is very noticeable. Thus the engagement of the PASTEP innovations was invaluable. PASTEP's contribution to the core curriculum and the resources produced to support the core curriculum was important as a guide for colleges to develop their own. However, the study concluded that some lecturers adopted the modules as presented by PASTEP with minimal adjustments to ensure the content was relevant to the students' needs and interests. There were others who were selective and critical with the quality of the modules developed. One of the major weaknesses of PASTEP was the strategies adopted to achieve its goals. In the process, PASTEP and its construction companies bypassed local knowledge and this created poor relationships with the colleges and the Agency. After the departure of PASTEP, there was little continuity in the activities initiated by PASTEP. This would suggest a lack of local ownership of the project.

The study concluded that the trimester program is not the appropriate program for the training of teachers. In its present form, with its short course duration, the trimester affects the curriculum, practicum, and assessments. Staff and students struggle to nurture the quality product that they are required to produce. Consequently, an overwhelming majority of the research participants believed that the current trimester program is not the appropriate program for PTCs in its present form. Adjustments need to be made to the trimester program to nurture quality teachers for the PNG school system.

The study concluded that the demonstration of leadership in nurturing a professional learning community is relatively superficial. While most leaders are struggling to provide appropriate leadership, there is a small minority that is producing strong leadership with encouraging results. Educational leaders commit themselves to lead by generating and creating knowledge inside and outside the organization. In fulfilling that role, leaders need to be mindful of three important aspects; "[F]irst, people will not voluntarily share knowledge unless they feel some moral commitment to do so; second, people will not share unless the dynamics of change favour exchange; and third, that data without relationships merely causes information glut" (Fullan, 2001, p. 6). In all this complexity, leadership is difficult because of the ambiguities and disequilibrium which are part and partial of a culture of change. Whatever the case, it is important that "[E]ffective leaders make people feel that even the most difficult problems can be tackled productively" (Fullan, 2001, p. 7). This is why leaders are pivotal in leading change.

The discussion of the major themes generated from Research Questions 1-4 have been conducted through the four theoretical lenses presented in Chapter Four. Beeby's theory (1966) of improving the quality of education in developing countries confirmed the findings of this research. In particular, Beeby's four stages of teaching and learning were insightful in providing a framework to discuss the progress made by teacher educators in the teaching and learning processes. In adopting Beeby's stages of teaching and learning, the study concluded that, despite the increased academic qualifications of teacher educators, a small minority of them have progressed to stages III (Transition) and IV (Meaning). However, the majority have remained in stage II (Formalism). Dependency theory challenged the findings on the role and impact of donor funding agencies. Although the dependency syndrome can be attributed to being colonized and the pre-colonial period, the theory challenged the current attitudes of PNG elites where they seem to foster a "voluntary" sense of dependency on foreign funding donors instead of providing an alternative for self-reliance. Globalization was the appropriate lens to discuss the impact of educational change. The theory challenged the findings and the interpretations of this study because, as a developing nation, PNG seems to possess little control over its education reform agenda as it is being driven externally by foreign policies and aid

corporations. Hence, contemporary PNG educational leaders need to be vigilant and pro-active in identifying the national interests and work collaboratively with global and regional agents to implement change (Papoutsaki & Rooney, 2006). Globalization does not respond to the local context and its interests. Postcolonial theory was insightful in providing a framework in which to discuss the findings relating to the leadership issue and the power relations. There are residues of colonial leadership practices present in educational institutions that need to be dismantled (Pagelio, 2000). The theory was challenging because the deconstruction of the colonial characteristics has to be driven internally and this was beginning to occur on a relatively small foundation.

12.5 Contribution to theory

This study is the first research of its kind conducted in the Catholic PTCs in PNG using four lenses in its theoretical framework. This study contributes to theory by providing a framework to critique educational change, foreign aid projects, power relations and leadership in PNG education from different dimensions, using any combination of four theoretical lenses. The adoption of four lenses, each with its own theoretical framework, allows for more autonomy in undertaking further educational research. Without limiting the theoretical framework to these four lenses, further studies might consider employing other relevant theories, such as the critical theory, to gain better understanding of some of the issues explored in this study.

Beeby's theory originates from "administrative experience rather than scholarly research" (Beeby, 1966, p. 50) and as such the theory has not been empirically validated. Therefore, this study contributes to theory by offering an empirical basis for Beeby's theory of improving the quality of education in developing countries. The theory is appropriate for future educational and cultural initiatives. The theoretical framework offers an intellectual rationale for what is occurring in the PNG education system.

Globalization theory assists in explaining the data in a variety of ways. PNG seems to possess little control over its education reform agenda as it is being driven externally by foreign policies and aid corporations. This study contributes to globalization theory by highlighting that money alone expended in various educational innovations is no guarantee of increased quality. In primary teacher education, the type of qualification (subject specialization) and general educational experiences are important considerations in the pursuit for quality education.

Dependency theory provides a theoretical framework which helps explain the foreign aid phenomenon. AusAID projects have provided salaries for Australian consultants who possess little knowledge and appreciation of the PNG culture. As a result, Papua New Guineans are not

transformed to be self-reliant and competent in the process. This study contributes to dependency theory by emphasizing the importance of a "participatory approach" to be adopted in foreign aid projects to ensure ownership and sustainable development.

Postcolonial theory is insightful in providing a theoretical framework in which to discuss the findings relating to the leadership issue and power relations. There are residues of colonial and neo-colonial leadership practices present in educational institutions that need to be dismantled (Pagelio, 2000). This study contributes to postcolonial theory by offering a paradigm shift in leadership practices. A model that is likely to work in the PNG context is the creation of strong partnerships among all higher educational institutions. This requires an integration of Melanesian and Western leadership approaches to assist PNG educational leaders to create an organizational culture built on relationships underpinned by a deep respect for the "Other" and social equity. Such a process demands a common search for a new model of hybrid leadership whereby educational institutions are led by a team rather than an individual.

12.6 Implications of research findings

The findings of the study have implications for both theory development and practical application. For theory development, much more needs to be done to add to what is known about educational change and leadership in primary teacher education in PNG. The evidence suggests that knowledge gained from further investigations in different settings and different population will provide a more comprehensive view of teacher educators' perspectives of educational change and leadership. In terms of practical application, implications for leadership, teacher training, and development of programs can be drawn also from the findings. These are presented in greater detail below.

12.6.1 Recommendation for practice

The findings from this study are offered to inform practice in the training of teachers. This study has demonstrated that teacher educators' conceptualization of the teaching content and the best methods for teaching are essential to best practice. A likely source of such knowledge is postgraduate studies focused on subject specialization. Postgraduate programs aimed at subject specializations have an important role in preparing teacher educators adequately, so they are properly equipped with specific knowledge of their subject content area to contribute meaningfully to any educational change. Therefore the study recommends that:

Postgraduate programs in subject specializations be conducted in PNG to address
this deficit in primary teacher education. In addition, special attention be made to
improving the level of competency in the English language for staff and students.

Teacher educators have experience; however they seem to be having difficulties in implementing reform in the colleges. They have expectations placed on them by NDOE and the Catholic Agency but, regardless of their qualifications, teacher educators need empowering. To enhance their practice, there needs to be a shift away from teacher educators to professional educators. This can be done through linkage with universities which have the capacity to provide strategies for professional development for teacher educators. Furthermore, teacher educators will be empowered by universities to understand the philosophies and ideas of educational change. The process will further empower teacher educators to make sure diversity of experience and expertise through the education department becomes a catalyst for developing education in PNG. Therefore the study recommends that:

• The partnership between the State and the Catholic Church Agency in the provision of education, in particular teacher education, be reviewed to create better understanding between the two major partners and all stakeholders to ensure that there is quality in the service and delivery of education.

Donor funding agencies have been pivotal in providing aid for developing countries. The study concluded that these foreign aid agencies were essential to the implementation of the education reform agenda of PNG. However, there was an absence of local ownership. Therefore the study recommends that:

 The issues of ownership, community capacity building and sustainability of donor funded projects be included in the initial negotiation, policy and decision-making strategies between the National Government of PNG, donor funding agencies and the project recipients throughout the duration of any donor funded project.

Finally, the findings of this study illustrated the importance of curriculum in the pursuit if quality education. The study concluded that the trimester program is not appropriate in its present form. Therefore the study recommends that:

• The teacher education curriculum be flexible to allow more room and time in which teacher educators can work. This means establishing partnership with CDD

to develop a relevant curriculum. Furthermore, any implementation of change in the curriculum be appropriately funded, resourced and supported.

12.6.2 Recommendations for policy

The current policies for higher education are adequate. A major policy explored in this research, is the affiliation and/or amalgamation policy which is vital in the pursuit of quality education. However, the problem seems to be the commitment of NDOE to ensure the full implementation and appraisal strategies of such policies. Therefore the study recommends that:

- In the implementation of any future educational reform and policies in teacher education, the National Government fully supports the entire process by providing the appropriate personnel, strategies, funding, resources and infrastructure necessary for the institutions. The implementation of the resources be distributed equitably across all primary teacher education institutions committed to the one important task of educating the citizens of PNG regardless of religious affiliations.
- Prior to the implementation of any reform policies, proper training of personnel must be conducted with all relevant stakeholders.

12.6.3 Recommendations for PNG leadership

Leaders in educational institutions are constantly bombarded with issues that require a different response. To adequately respond to such trends requires a new paradigm shift in leadership practices. A model that is likely to work in the PNG context would be to create strong partnerships among all institutions of higher education and value teacher educators, using them as leaders for educational change rather than mere mechanisms for educational change. Therefore this study recommends that:

- PNG educational leaders be adequately trained and mentored prior to assuming
 any leadership positions in any educational institution. Included in the training
 program should be a process of analysis which allows these potential leaders to
 critique global leadership theories and practices as well as their traditional
 Melanesian leadership practices. Such training will offer them the knowledge and
 skills needed to respond appropriately to the changing global trends in education.
- The Melanesian culture of establishing and maintaining reciprocal relationships with all members of the tribe be emphasized and developed further within the

educational institutions. The culture of relationships is underpinned by a deep respect for the "Other" and a sense of equity. In re-imagining leadership for PNG, this important value can greatly assist PNG leaders in creating an organizational culture built on such values. Such a process demands a common search for a new model of leadership whereby educational institutions are led by a team rather than an individual.

12.6.4 Implications for research and future directions

This exploratory study offers a launch pad for further research. There is a need for more research to be undertaken in primary teacher education to gain a better understanding of the issues explored. There is a large scope for on-going research in pursuit of best practice and quality education. Thus the study recommends that:

• Further research within the same context could include issues such as the impact of the OBE in the school system, the impact of the affiliation and/or amalgamation policy on the quality of graduates, and the impact of the Masters of Leadership and Curriculum studies in primary teacher education.

12.7 Epilogue

I began this thesis fully aware that the journey was going to be difficult, long and lonely. The results of the study reflect my own educational journey. As I listened to the stories of each participant, I was reminded of who I am, where I have come from and the challenges I have endured to arrive at this point. Their stories reflected my own story, my journey.

The challenges faced by the college leaders, teacher educators, and students produced mixed emotions. I was angry about the manner in which these PTCs have been allowed to deteriorate in leadership, quality, commitment, and infrastructure. I had empathy for the way some leaders and staff struggled to respond appropriately to change, though limited through a lack of training. I was proud to celebrate their success stories.

However, I struggled to understand and accept the power relations evident in the education system. There is good will in PTCs to fulfil the task of producing quality teachers for the school system, but the bureaucratic support is often not available to them. Sustainable partnerships with aid donors are not promoted within communities. There is an absence of cohesive partnerships of all stakeholders within the education system. The results of this study have also portrayed the overall socio-economic and political situation of the country, in that there seems to be an underlying sense of 'powerlessness' and mixed emotions within these institutions.

In conclusion, I hope that this study has provided an impetus for educational leaders and teacher educators to tap into the richness of both Western and Melanesian value systems, to assist them in their future endeavours in leading primary teacher education to produce quality products for the education system.

LIST OF REFERENCES

- Abercrombie, N., Hill, S., & Turner, B. (2000). *The Penguin Dictionary of Sociology* (4th ed.). London: Penguin Books.
- Alphonse, A. (2005, October 4). Holy Trinity Teachers' College in Mt Hagen to affiliate with DWU. *The National*, p. 18.
- Alphonse, A. (2006, June 29). Teachers lack proper training. *The National*, p. 7.
- Altbach, P. (2001). Higher education and the WTO: Globalization runs amok. *International Higher Education*, 23(1), 1-4.
- Altbach, P., & Kelly, G. (1978). Colonialism and education. London: Longman.
- American Heritage Dictionary. (2000). *The American Heritage Dictionary*, Retrieved May 14, 2007 from www.dictionary.com
- Anderson, G. (1990). Fundamentals of educational research. London: The Falmer Press.
- Ashcroft, B., & Ahuwalia, P. (2001). Edward Said. New York: Routledge.
- Ashcroft, B., Griffiths, G., & Tiffin, H. (1998). *Key concepts in post-colonial studies*. London: Routledge.
- Australian Government. (2003). *Papua New Guinea and the Pacific A development perspective*. Canberra: AusAID.
- Australian International Development Assistance Bureau. (1989). PNG Community Teachers College Lecturers Professional Development: A project review and design study. Canberra: Department of Foreign Affairs and Trade.
- Avalos, B. (1985). Training for better teaching in the third world: Lessons from research. *Teaching and Teacher Education*, 1, 289-299.
- Avalos, B. (1989). *Characteristics and problems of the practice teaching component in college training*. Port Moresby, PNG: Department of Education, Research and Evaluation Unit.
- Avalos, B. (1991). Contexts, training theory, and teaching practice. *Teaching and Teacher Education*, 7, 169-184.
- Avalos, B. (1993). Ideology, policy and educational change in Papua New Guinea. *Comparative Education*, 29, 275-291.
- Avalos, B., & Haddad, W. (1981). A review of teacher effectiveness research in Africa, India, Latin America, Middle East, Malaysia, Philippines and Thailand: Synthesis of results. Ottawa: International Development Research Centre.
- Bakhtin, M. (1981). The dialogic imagination: Four essays. Austin: University of Texas Press.
- Barrington, T. E. (1976). *Problems of educational provision in Papua New Guinea: An area of scattered population*. In T. E. Barrington (Ed.), *Papua New Guinea education* (pp. 3-17) Melbourne: Oxford University Press.

- Bass, M. B., & Stogdill, R. M. (1990). *Handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York: The Free Press.
- Bassey, M. (1999). *Case study research in educational settings*. Buckingham, England: Open University Press.
- Beeby, C. E. (1966). *The quality of education in developing countries*. Cambridge, MA: Harvard University Press.
- Beeby, C. E. (1979). Teachers, teacher education and research. In L. Gardner (Ed.), *Teacher education in developing countries: Prospects for the eighties*. London: Institute of Education, University of London.
- Beeby, C. E. (1980a). Reply to Gerard Guthrie. *International Review of Education*, 26, pp. 439-449.
- Beeby, C. E. (1980b). The thesis of stages fourteen years later. *International Review of Education*, 26(4), 451-474.
- Bhabha, H. (1994). Location of culture. London: Routledge.
- Biggs, J. (1979). Individual differences in study processes and the quality of learning outcomes. *Higher Education*, 8(1), 381-394.
- Biggs, J. (1986). The role of meta learning in study process. British Journal of Education, 55.
- Blumer, B. (1969). Symbolic interactionism. Englewood Cliffs, NJ: Prentice Hall.
- Blumer, H. (1962). Society as symbolic interaction. In A. Rose (Ed.), *Human behaviour & social process* (pp. 1-13). Boston: Houghton Mifflin.
- Bodgan, R. C., & Biklen, S. K. (1992). *Qualitative research for education: An introduction to theory and methods* (2nd ed.). Boston: Allyn and Bacon.
- Bray, M. (1999). *Community partnerships in education: Dimensions, variations, and implications*. Hong Kong: The University of Hong Kong, Comparative Education Research Centre.
- Brooker, P. (1999). Cultural theory: A glossary. London: Arnold.
- Bruffee, K. (1995). *Collaborative learning: Higher education, interdependence and the authority of knowledge*. Baltimore: John Hopkins University Press.
- Burke, C., Elliot, R., Lucas, K., & Stewart, D. (1997). Lessons for sustainable professional development: A model from a teacher education project in Papua New Guinea. Canberra: Pirie Printers.
- Burnside, C., & Dollar, D. (2000). Aid, policies and growth. *American Economic Review*, 90, 847-868.
- Cabral, A. (1973). National liberation and culture. In *Return to the source: Selected speeches*. New York: Monthly Review Press.
- Candy, P. (1989). Alternative paradigms in educational research. *Australian Educational Researcher*, *16*(3), 1-11.

- Carrick, N. (1969). Let's visit New Guinea. London: William Clowes and Sons.
- Castells, M. (Ed.). (2001). Information technology and global capitalism. London: Vintage.
- Chao, J. P. (1995). Leadership (5th ed.). Goroka, PNG: Melanesian Institute.
- Charon, J. M. (2001). *Symbolic interactionism: An introduction, an interpretation, an integration* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Childs, P., & Williams, P. (1997). *An introduction to post-colonial theory*. London: Prentice Hall.
- Clarkson, P. (2003). *The baseline survey of the primary and secondary teacher education project*. Melbourne: Australian Catholic University.
- Clements, M. A., & Lean, G. A. (1981). *Influences on mathematical learning in Papua New Guinea: Some cross-cultural perspectives* (Report No. 13). Lae, PNG: University of Technology, Mathematics Education Centre.
- Clifford, J. (1988). *The predicament of culture: Twentieth-century ethnography, literature and art*. Cambridge: Harvard University Press.
- Cogburn, D. (2006). *Globalization, knowledge, education and training in the information age*. Retrieved July 31, 2006, from http://www.unesco.org/webworld/infoethics_2/eng/papers/paper_23.htm
- Commission for Higher Education. (1990). *National higher education plan*. Port Moresby, PNG: Education Printshop.
- Commission for Higher Education. (1996a). Awards, accreditation and advanced standing in Papua New Guinea higher education. Port Moresby, PNG: Higher Education Project.
- Commission for Higher Education. (1996b). *Draft white paper on higher education, research science and technology for consideration by the ministers for education and national planning*. Port Moresby, PNG: Higher Education Project.
- Commission for Higher Education. (1999). *National higher education plan II*. Port Moresby, PNG: Author.
- Commission for Higher Education. (2000a). *National higher education plan II 2000-2004* (Vol. II). Port Moresby, PNG: National Research Institute.
- Commission for Higher Education. (2000b). *White paper on higher education, research, science and technology* (Vol. I). Port Moresby, PNG: National Research Institute.
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2002). Educational research: Planning, conducting and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Merrill Prentice Hall.

- Crossley, M. (1983). Strategies for curriculum change with special reference to the secondary schools community extension project in Papua New Guinea. Unpublished doctoral dessertation, La Trobe University, Melbourne.
- Crotty, M. (1998a). The foundations of social research: Meaning and perspective in the research process. Sydney: Allen & Unwin.
- Crotty, M. (1998b). Introduction: The research process. In M. Crotty, The foundations of social research: Meaning and perspective in the research process (pp.1-17). Sydney: Allen & Unwin.
- Crowther, F., & Olsen, P. (1996). *Teachers as leaders: An exploration of success stories in socio-economic disadvantaged communities*. Kingaroy, QLD: Wide Bay Southern School Support Centre.
- Dahlstrom, L. O. (1999). Transforming teacher education for a democratic society: The case of Namibia. *Teaching and Teacher Education*, 15, 143-155.
- de Lepervanche, M. (1973). Social structure. In I. Hogbin (Ed.), *Anthropology in Papua New Guinea* (pp. 1-60). Melbourne: Melbourne University Press.
- De Pree, M. (1986). Leadership is an art. New York: Dell.
- Delco, W. (1992, February). *Education and political processes and policies*. Paper presented at the American Association of Colleges for Teacher Education, San Antonio, TX.
- Department of Education. (1975). *Language of instruction in schools and college* (Vol. 10). Port Moresby: Ministry of Education.
- Department of Education. (1996). *Bridging and vernacular maintenance*. Port Moresby, PNG: Education Printshop.
- Department of Education. (1998). *National curriculum guidelines for diploma in teaching primary*. Port Moresby, PNG: Ministry of Education.
- Department of Education. (1999a). *National education plan, 1995-2004: Update 1.* Port Moresby, PNG: Author.
- Department of Education. (1999b). Primary education handbook. Port Moresby, PNG: Author.
- Department of Education. (2000a). *Education for all: Assessment 2000 Papua New Guinea Country Report*. Port Moresby, PNG: Uramina and Nelson.
- Department of Education. (2000b). *Primary education handbook* (2nd ed.). Port Moresby, PNG: Author.
- Department of Education. (2001a). Education Act 1983. Port Moresby, PNG: Author.
- Department of Education. (2001b). *Ministerial Brief: Education in Papua New Guinea*. Port Moresby, PNG: Ministry of Education.
- Department of Education. (2002a). *Brief for Honourable Michael Laimo, MP Minister for Education*. Port Moresby, PNG: Author.
- Department of Education. (2002b). *National curriculum statement for Papua New Guinea*. Port Moresby, PNG: Author.

- Department of Education. (2002c). Primary and secondary teacher education project. Port Moresby, PNG: AusAID.
- Department of Education. (2002d). The state of education in Papua New Guinea: Education reform facilitating and monitoring unit. Port Moresby, PNG: Author.
- Department of Education. (2003a). *National assessment & reporting policy*. Port Moresby, PNG: Author.
- Department of Education. (2003b). *National special education plan 2004-2013*. Port Moresby, PNG: Author.
- Department of Education. (2003c). The state of education in Papua New Guinea: Education reform facilitating and monitoring unit. Port Moresby, PNG: Author.
- Department of Education. (2004). 2003 Annual report: Relevant curriculum for a better future. Port Moresby, PNG: Author.
- Department of Education. (2005). 2004 Annual report: Prosperity through self-reliance. Port Moresby, PNG: Author.
- Department of Education Special Education Unit. (2003). *Policy and guidelines for special education*. Port Moresby, PNG: Author.
- Dickson, D. J. (1976). Murray and education: Policy in Papua, 1906 to 1941. In E. Barrington (Ed.), *Papua New Guinea education* (pp. 21-45) Melbourne: Oxford University Press.
- Dimmock, C., & Walker, D. (2005). *Educational leadership: Culture and diversity*. London: Sage.
- Dorney, S. (1990). *Papua New Guinea: People, politics and history since 1975*. Sydney: Random House.
- Dos Santos, T. (Ed.). (1971). The structure of dependence. Boston: Porter Sargent.
- Dos Santos, T., & Randall, L. (1998). The theoretical foundations of the Cardoso Government: A new stage of the dependency theory. *Latin American Perspectives* (25), 53-70.
- Dowa, P. (2006, March 3). Saure villagers lock Kaindi college gates. *The National*, p. 6.
- Downer, A. (2005). *Parliamentary policy seminar on PNG*. Canberra: Australian Federal Government.
- Dunkin, M. J. (1977). A study of classroom interaction in Papua New Guinea. *Papua New Guinea Journal of Education*, 13(2), 1-11.
- Editorial. (2003a, May 15). Australian budget help stays at K700m. PNG Post Courier, p. 1.
- Editorial. (2003b, September 17). Country is losing K700m annually. *PNG Post Courier*. Retrieved September 17, 2003, from http://www.postcourier.com.pg
- Editorial. (2003c, September 11). Review a must Govt. *PNG Post Courier*. Retrieved September 11, 2003, from http://www.postcourier.com.pg
- Editorial. (2004a, March 4). Baki optimistic on education reforms. *PNG Post Courier*. Retrieved March 17, 2004, from http://www.postcourier.com.pg

- Editorial. (2004b, February 23). The education reforms are failing the people of PNG. *PNG Post Courier*. Retrieved February 23, 2004, from http://www.postcourier.com.pg
- Editorial. (2004c, February 20-22). MP opposes teacher policy. *PNG Post Courier*. Retrieved February 22, 2004, from http://www.postcourier.com.pg
- Editorial. (2004d, February 23). Supporting MP's theory. *PNG Post Courier*. Retrieved February 23, 2004, from http://www.postcourier.com.pg
- Editorial. (2006, June 21). Schools not set for new reform. PNG Post Courier, p. 13.
- Editorial. (2007a, May 14). AusAID shifts. *PNG Post Courier*. Retrieved May 14, 2007, from http://www.postcourier.com.pg
- Editorial. (2007b, July 17). Is curriculum review worth it? *PNG Post Courier*. Retrieved July 17, 2007, from http://www.postcourier.com.pg
- Editorial. (2007c, June 28). PNG population 6.1 million: UN report. *The National*, p. 7.
- Editorial. (2007d, July 12). Population day focus on women. PNG Post Courier, p. 4.
- Editorial. (2007e, July 16). Self-employment needs push. *PNG Post Courier*. Retrieved July 16, 2007, from http://www.postcourier.com.pg
- Editorial. (2007f, July 12). Teachers receive training. *PNG Post Courier*. Retrieved July 12, 2007, from http://www.postcourier.com.pg
- Elliot, R. (Ed.). (2002). *The spirit of Australian leadership*. Roseville, NSW: McGraw-Hill Australia.
- Elvin, H. (1974). The making of the teacher. In *The teacher education in a changing society:*Commonwealth conference on teacher education (pp. 138-146). London:

 Commonwealth Secretariat.
- Emerson, C., & Holquist, M. (Eds.). (1981). *Discourse in the novel*. Austin: University of Texas Press.
- Epeli, A. (1996). *The development of higher education in Papua New Guinea and its co-ordination*. Unpublished Master of Education thesis, University of New England, Armidale, NSW.
- Fanon, F. (1967). The wretched of the earth. Harmondsworth, England: Penguin.
- Fanon, F. (1986). Black skins, white masks. London: Pluto Press.
- Ferraro, V. (1996). *Dependency theory: An introduction*. Retrieved February 2, 2006, from http://www.mtholyoke.edu/acad/intrel/depend.htm
- Fife, W. (1993). Crossing boundaries: Dissolution as a secondary message of education in Papua New Guinea. *International Journal of Educational Development*, 12, 213-221.
- Fischer, S. (2000). *Globalization: Valid concerns?* Retrieved November 11, 2006, from http://www.imf.org/external/np/speeches/2000/082600.htm
- Flaherty, T. A. (1998). *The women's voice in education: Identity and participation in a changing Papua New Guinea*. Goroka, PNG: Melanesian Institute.

- Flaherty, T. A. (2003). Horizons for women administrators in education in the twenty-first century: Implications from contemporary research in Papua New Guinea. In A. Maha & T. Flaherty (Eds.), *Education for 21st Century in Papua New Guinea and the South Pacific* (pp. 49 -65). Goroka, PNG: The University of Goroka.
- Frank, A. G. (1972). The development of underdevelopment. In J. D. Cockcroft, A. G. Frank & D. Johnson (Eds.), *Dependence and underdevelopment* (p. 3). Garden City, New York: Anchor Books.
- Freud, S. (1986). The ego and the id. London: W. W. Norton.
- Fullan, M. (1993). *Change forces: Probing the depths of education reform.* London: The Falmer Press.
- Fullan, M. (1999). *Change forces: The sequel*. Philadelphia, PA: The Falmers Press.
- Fullan, M. (2001). Leading in a culture of change. San Francisco: Jossey-Bass.
- Fuller, B. (1987). What school factors raise achievement in the third world. *Review of Educational Research*, *57*, 276-294.
- Gani, A., & Clemes, M. (2003). Aid type and its relationship with human well being. *International Journal of Social Economics*, *30*, 666-678.
- Gates, H. L. (1991). Critical Fanonism. Critical Inquiry, 17, 457-470.
- George, T. C. (1990). *Ethnoscience and its implications for Science teaching and Science teacher training*. Paper presented at the Teacher education Conference, Adelaide.
- Giddings, R. (1995). Land tenure (5th ed.). Goroka, PNG: Melanesian Institute.
- Gillham, B. (2000). Case study research methods. London: Continuum.
- Giris, J., & Rynkiewich, T. (2005). *Emerging issues for women and children in Papua New Guinea*. Goroka, PNG: Melanesian Institute.
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory. Chicago: Aldine.
- Glesne, C. (1999). Prestudy tasks: Doing what is good for you. In C. Glesne (Ed.), *Becoming qualitative researchers: An introduction* (2nd ed., pp. 17-42). New York: Longman.
- Glesne, C., & Peshkin, A. (1992). Finding your story: Data analysis. In C. Glesne (Ed.), *Becoming qualitative researchers: An introduction*. (pp. 127-149) Vermont: Longman.
- Goleman, D. (2000). Leadership that gets results. *Harvard Business Review*, 78(2), 78-90.
- Gramsci, A. (Ed.). (1971). *History of the subaltern classes: Some methodological criteria*. London: Lawrence and Wishart.
- Gray, J. (1999). False dawn: The delusions of global capitalism. London: Granta.
- Grimes, D. (1989, March). PNG definitely has over 800 languages. The Times of PNG, p, 26.
- Guba, E. G., & Lincoln, Y. S. (1981). Effective evaluation. San Francisco: Jossey-Bass.

- Guthrie, G. (1980). Stages of educational development? Beeby revisited. *International Review of Education*, 26, 411-449.
- Guthrie, G. (1985). Current research in developing countries: Teacher credentialling and distance education. *Teaching and Teacher Education*, *1*, 81-90.
- Guy, R., Bai, W., & Kombra, U. (2000). *Enhancing their futures*. Port Moresby, PNG: Ministry of Education.
- Hagen, E. G. (1962). On the theory of social change. Homewood, IL: Dorsey Press.
- Hall, S. (1996). When was postcolonial thinking at the limit? In I. Chambers & L. Curti (Eds.), *The post-colonial question: Common skies, divided horizons* (pp. 242-260). London: Routledge.
- Hallinger, P., & Leithwood, K. (1996). Culture and educational administration: A case of finding out what you don't know. *Journal of Educational Administration*, 34, 98-116.
- Hargreaves, A. (1994). Changing teachers, changing times: Teachers' work and culture in the post-modern age. New York: Teachers' College Press.
- Harrington, J. J. I. (2002). *Higher education and reform in El Salvador: A participatory education sector study*. Unpublished doctoral dessertation, Boston College.
- Harris, A., Brown, D., & Abbott, I. (2006). Executive leadership: Another lever in the system? *School Leadership and Management*, 26(4), 397-409.
- Hart, A. (1994). Creating teacher leadership roles. *Educational Administration Quarterly*, 30, 472-497.
- Hawes, H. (1979). The curriculum of teacher education. In R. Gardner (Ed.), *Teacher education in developing countries: Prospects for the eighties*. London: Institute of Education, University of London.
- Hawksley, C. (2006). Papua New Guinea at thirty: Late decolonisation and the political economy of nation-building. *Third World Quarterly*, 27, 161-173.
- Heck, R., & Hallinger, P. (1996). *Next generation methods for the study of leadership and school improvement*. Boston: Kluwer Academic.
- Held, D., McGrew, A., Goldblatt, D., & Perraton, J. (1999). *Global transformation: Politics, economics and culture*. Standford University Press.
- Hickling-Hudson, A. (1999). Globalization, postcolonialism and educational change. In D. Meadmore, B. Burnett, & P. O'Brien (Eds.), *Understanding education: Context and agenda for the new millennium* (pp. 82-90). Sydney: Prentice Hall Australia.
- Hickling-Hudson, A., Matthews, J., & Woods, A. (Eds.). (2004). *Disrupting preconceptions: Postcolonialism and education*. Maryborough, QLD: Post Pressed.
- Higgins, R. (2001). *Ok Tedi: Creating community partnerships for sustainable development*: Ok Tedi Mining Limited.
- Hindson, C. (Ed.). (1992). *Education and developing countries: A framework for analysis*. New York: Garland Press.

- Hoy, K., & Miskel, G. (2001). *Educational administration: Theory, research, and practice*. Boston: McGraw-Hill.
- Hutton, W., & Giddens, A. (Eds.). (2001). On the edge: Living with global capitalism. London: Vintage.
- Ishwar Lingam, G. (2004). *Teacher preparation for the world of work: A study of pre-service primary teacher education in Fiji*. Unpublished doctoral dessertation, Griffith University, QLD.
- Ismail, O. H. (1991). *Understanding educational policies in developing countries: The case of the new higher education policy in the Sudan*. Unpublished doctoral dessertation, Pennsylvania State University.
- JanMohamed, A. (1986). The economy of Manichean allegory: The function of racial difference in colonial fiction. *Critical Inquiry*, 12(1), 59-87.
- Jung, C. G. (1964). Man and his symbols. London: Aldus Books.
- Kaiku, P. (2007, January 17). Women needed in politics. *PNG Post Courier*. Retrieved January 17, 2007, from http://www.postcourier.com.pg
- Kaut, J. (2007, March 15). Barnabas: Partnerships vital for education. *The National*, p. 11.
- Kayrooz, C., Chambers, B., & Spriggs, J. (2006). Between four worlds: Buildings research capacity in Papua New Guinea. *Development in Practice*, *16*, 97-102.
- Kelly, G., & Altbach, P. (1984). Introduction: The four faces of colonialism. In G. Kelly & P. Altbach (Eds.), *Education and the colonial experience* (pp. 1-5). New Brunswick: Transaction.
- Kelly, M., & Uriari, K. (1970). A short preliminary report on a study of thought processes on New Guinea children. *New Guinea Psychologist*, 2(1), 12-19.
- Kelly, W. (1999). *Postcolonial perspective on intercultural relations: A Japan-U.S. example*. Retrieved October 11, 2005, from http://www.interculturalrelations.com/v2i1Winter1999/w99kelly.htm
- Kenehe, S. (1981a). *In search of standards*. (Vol. 1) Port Moresby, PNG: Ministry of Education.
- Kenehe, S. (1981b). *In search of standards*. (Vol. 2) Port Moresby, PNG: Ministry of Education.
- Kennedy, B., & Kennedy, B. (1983). *Papua New Guinea: Pageant of the Pacific*. Melbourne: Longman Cheshire.
- Kinjap, P. (2007, July 18). HIV work needs local expertise. *The National*, p. 9.
- Klaus, D. (2003). The use of indigenous languages in early basic education in PNG: A model for elsewhere? *Language and Education*, 17(2), 105-111.
- Klein, N. (2000). *No Logo*. London: Flamingo.
- Kotter, J. P. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review*, 73(2), 59-66.

- Kouzes, J. (1999). Finding your leadership voice. In F. Hesselbein & P. Cohen (Eds.), *Leader to leader: Enduring insights on leadership from the Drucker Foundation's award winning journal* (pp. 37-42). San Francisco: Jossey-Bass.
- Kulwaum, G. P. (1995). *Problems of devolution in PNG education*. Unpublished doctoral dessertation, University of Queensland, Brisbane.
- Lahui, B. A. (1997). *The instructional leadership behaviour of high school principals: A New Ireland case study*. Unpublished Master of Education thesis, University of New England, Armidale, NSW.
- Lancy, D. (1983). *Cross-cultural studies in cognition and mathematics*. New York: Academic Press.
- Leach, G. (2004). The history of teacher education in the East Sepik. *Catholic School Studies*, 77 (1), 15-18.
- Leadbeater, C. (2002). The weightless society. New York: Texere LLC.
- Leithwood, K., & Duke, D. (1999). A century's quest to understand school leadership. In J. Murphy & K. Louis (Eds.), *Handbook of research on educational administration* (2nd ed., pp. 45-72). San Franscisco: Jossey-Bass.
- Leithwood, K., Jantzi, D., & Steinback, R. (1999). *Changing leadership for changing times*. London: Open University Press.
- Lewin, R., & Regine, B. (2000). The soul at work. New York: Simon & Schuster.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Thousand Oaks, CA: Sage.
- Lindsay, B. (1993). The profession of teaching: Complexities in developing countries. *Teaching and Teacher Education*, *9*, 119-125.
- Lindstrom, L. (1990). Local knowledge systems in the South Pacific classroom. *Papua New Guinea Journal of Education*, 26, 1-14.
- Loomba, A. (1998). Colonialism/Postcolonialism. London: Routledge.
- Lotherington, H. (1998). Trends and tensions in post-colonial language education in the South Pacific. *International Journal of Bilingual Education and Bilingualism*, 1(1), 65-75.
- Louisson, B. H. (1974). Education old and new. Port Moresby, PNG: The University Bookshop.
- Lye, J. (1998). *Some issues in postcolonial theory*. Retrieved December 13, 2006, from http://www.brocku.ca/english/courses/4F70/postcol.html
- MacCabe, C. (1988). Foreword to G. C. Spivak. In S. Gayatri (Ed.), *In other worlds: Essays in cultural politics* (pp. xii-xxvi). London: Routledge.
- MacDonald, M. (1995). *Melanesian communities: Past and present* (5th ed.). Goroka, PNG: Melanesian Institute.
- MacKenzie, J. (1995). *Orientalism: History, theory and the arts*. England: Manchester University Press.

- Maha, A. (1993). Promotion to the principalship: A comparison of Papua New Guinea and western experience. *International Journal of Educational Development*, 13(2), 171-182.
- Malinowski, B. (1961). Argonauts of the Western Pacific. New York: Dutton.
- Malpo, K. (2002, December). *The influence of cultural traditions on school principals in Papua New Guinea*. Paper presented at the Annual ANZCIES Conference, University of New England, Armidale, NSW.
- Manning, M. (2003, September 26-28). Aid review, good result for all? *PNG Post Courier*, pp. 1-3.
- Mantovani, E. (1995). *Traditional values and ethics* (5th ed.). Goroka, PNG: Melanesian Institute.
- Maraj, J. A. (1974). The teacher educator. In *Teacher education in a changing society: Commonwealth Conference on Teacher Education*, London, Commonwealth Secretariat.
- Markwell, P. (1975). *Development of religious concepts among the Tolai children*. Unpublished Master of Education Thesis, University of New South Wales, Sydney.
- Marshall, C., & Rossman, G. (1989). Designing qualitative research. Newbury Park, CA: Sage.
- Marshall, C., & Rossman, G. (1995). *Designing qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- Matane, P. (1986). *A philosophy of education for Papua New Guinea*. Port Moresby, PNG: Ministry of Education.
- McElhanon, K., & Whiteman, D. (1995). Kinship: Who is related to whom. In D. L. Whiteman (Ed.), *Introduction to Melanesian cultures* (5th ed., pp. 105-126). Goroka, PNG: Melanesian Institute.
- McLaughlin, D. (1990). *Teaching the teachers of teachers: Tertiary teacher education in Papua New Guinea*. Unpublished doctoral dessertation, University of London.
- McLaughlin, D. (1994). Through whose eyes do our children see the world now? Traditional education in Papua New Guinea. *Papua New Guinea Journal of Education*, 30(2), 63-79.
- McLaughlin, D. (1996). School teaching and higher education: A Papua New Guinea case study. *Teaching in higher education*, 1(1), 105-126.
- McLaughlin, D. (1997a). Adult learning in Papua New Guinea. *Papua New Guinea Journal of Education*. 33(1), 1-12.
- McLaughlin, D. (1997b). The clash of cultures: Learning through English in Papua New Guinea. *Language, Culture and Curriculum, 10,* 89-105.
- McLaughlin, D., & McLaughlin, J. (1995). Basic skills in teacher education: A sad experience for Papua New Guinea education. *Papua New Guinea Journal of Teacher Education*, 2(2), 43-48.
- McLaughlin, D., & O'Donoghue, T. (1996). *Community teacher education in Papua New Guinea*. Port Moresby, PNG: University of Papua New Guinea Press.

- McLaughlin, J. (2003). *The outcomes of the Australian/Papua New Guinean secondary school students project: An analysis from a postcolonial perspective.* Unpublished doctoral dessertation, Queensland University of Technology, Brisbane.
- McLaughlin, J., & Hickling-Hudson, A. (2005). Beyond dependency theory: A postcolonial analysis of educating Papua New Guinean high school students in Australian schools. *Asia-Pacific Journal of Teacher Education*, 25, 193-208.
- McLaughlin, J. M. (2002, December). Seeking hybrid identities through ambivalence: A postcolonial interpretation of the experiences of an international (Australian and Papua New Guinean) secondary education project. Paper presented at the ANZCIES Conference, University of New England, Armidale, NSW.
- McNamara, V. (1989). *The future direction of community school teacher education*. Port Moresby, PNG: Department of Education.
- McNeir, G. (1993). Outcome-based education. *Eric Digest*, 85, 1-9.
- McSwain, R. (1977). The past and future people. Melbourne: Oxford University Press.
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco: Jossey-Bass.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Merriam, S. B., & Associates. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Miller, L. (1998). Redefining teachers, reculturing schools: Connections, commitments and challenges. In A. Hargreaves, A. Lieberman, M. Fullan, & D. Hopkins (Eds.), *International handbook of educational change* (pp.529-557). London: Kluwer Academic.
- Moore-Gilbert, B. J. (1997). Postcolonial theory: Contexts, practices, politics. London: Verso.
- Murphy, P. S. (1991). Why planning fails: A study of higher education planning in Papua New Guinea 1984-1990. Unpublished doctoral dessertation, University of New England, Armidale, NSW.
- Musgrave, P. (1974). Primary schools, teacher training and change: Beeby reconsidered-some data for the Pacific. *Papua New Guinea Journal of Education*, 10(1), 42-48.
- Musonda, L. W. (1999). Teacher education reform in Zambia ... is it a case of a square peg in a round hole? *Teaching and Teacher Education*, 15, 157-168.
- Mydral, G. (1968). Asia drama: An inquiry into the poverty of nations. New York: 20th Century Fund.
- Nakata, M. (2004). Indigenous knowledge and the cultural interface: Underlying issues at the intersection of knowledge and information systems. In Hickling-Hudson, A., Matthews, J., & Woods, A. (Eds.), *Disrupting preconceptions: Postcolonialism and education*. (pp. 19-38) Flaxton, QLD: Post Pressed.

- Narokobi, B. (1980). *The Melanesian way*. Port Moresby, PNG: Institute of Papua New Guinea Studies.
- Narokobi, B. (1983). Life and leadership in Melanesia. Suva, Fiji: University of South Pacific.
- Narokobi, B. (2005). Leadership in Papua New Guinea. Madang, PNG: DWU Press.
- Neuman, W. (2000). Social research methods: Qualitative and quantitative approaches. Sydney: Allyn & Bacon.
- Neuman, W. (2006). *Social research methods: Qualitative and quantitative approaches* (6th ed.). Boston: Pearson International.
- Ngugi, w. T. o. (1986). *Decolonising the mind: The politics of language in African literature*. London: James Currey.
- Ngugi, w. T. o. (1993). *Moving to the centre: The struggle for cultural freedoms*. London: James Currey.
- Nongkas, C., & Tivinarlik, A. (2006, November). *Melanesian values in a contemporary organization: An analysis of conflict resolution processes*. Paper presented at the Australian Association of Research in Education (AARE) Conference, Adelaide.
- Norman, P. (2003). Curriculum reform under program 2000 for primary teachers' colleges in Papua New Guinea. In A. Maha & T. Flaherty (Eds.), *Education for 21st century in Papua New Guinea and the South Pacific* (pp. 93-98). Goroka, PNG: University of Goroka.
- O'Donoghue, T. (1994). Transactional knowledge transfer and the need to take cognisance of contextual realities: A Papua New Guinea case study. *Educational Review*, 46, 73-87.
- O'Donoghue, T. (1995). Educational restructuring gone astray in paradise: The Papua New Guinea experience. *Journal of Educational Administration*, 33(1), 79-90.
- O'Donoghue, T., & Austin, D. (1995). The professional development of teacher educators in the developing world: A consideration of recent developments in Papua New Guinea. *South Pacific Journal of Teacher Education*, 23(1), 45-59.
- Ommerborn, J. (1996). Church-state partnership in higher education: The way forward. *Point*, 20, 138-153.
- O'Neill, J. E. (1997). The role of foreign aid in development: Congressional Budget Office.
- O'Toole, J. (1989). *Impact evaluation study teacher education fellowships: First primary education project (1982-1988)*. Port Moresby, PNG: Department of Education.
- Otto, P. (1989). The community life syllabus: How it is used in the classroom and how it affects community school leavers. Port Moresby, PNG: National Research Institute.
- Pagelio, J. (2002). A study of leadership of the department of education in Papua New Guinea: Perspectives from postcolonial and leadership theory. Unpublished doctoral dessertation, Queensland University of Technology, Brisbane.
- Papert, S. (1980). *Mindstorms: Children, computers and powerful ideas*. New York: Basic Books.

- Parry, B. (1987). Problems in current theories of colonial discourse. *Oxford Literary Review*, 9, 1-2.
- Papoutsaki, E., & Rooney, D. (2006). Colonial legacies and neo-colonial practices in Papua New Guinea higher education. *Higher Education Research & Development*, 25, 421-433.
- Passe-Smith, J. T. (Ed.). (1998). The persistence of the gap between rich and poor countries: Taking stock of world economic growth, 1960-1993. Boulder, CO: Lynne Reiner.
- PASTEP. (2002). *Primary and secondary teacher education project*. Retrieved January 29, 2004, from http://www.pngteachereducation.com/pastep/
- Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). London: Sage.
- Pau, M. (2002). The challenge of amalgamation A life experience of a principal: 1994-2002. OLSH Teachers' College Kabaleo. Kokopo, PNG.
- Pearse, R., Sengi, S., & Kiruhia, J. (1990). Community school teaching in the Central province: An observational study. *Papua New Guinea Journal of Education*, 26(1), 69-84.
- Porter, D. (1991). *Haunted journeys: Desire and transgression in European travel writing*. Princeton, NJ: Princeton University Press.
- Premdas (Ed.). (1989). *Ethnicity and nation-building: The PNG case*. Tokyo, Japan: The United Nations University.
- Proudford, C. (2003). Building professional learning communities for curriculum change. *Curriculum Perspectives*, 23(3), 1-10.
- Quartermaine, P. A. (2001). *Teacher education in Papua New Guinea: Policy and practice* 1946-1996. Unpublished doctoral dessertation, University of Tasmania, Sandy Bay.
- Quayson, A. (2000). *Postcolonialism: Theory, practice or process?* Cambridge, UK: Polity Press.
- Queensland School Curriculum Council. (1999). *Science: Years 1-10 syllabus*. Brisbane: Author.
- Ramsden, P. (1992). Learning to teach in higher education. New York: Routledge.
- Richmon, M., & Allison, D. (2003). Toward a conceptual framework for leadership inquiry. *Educational Management & Administration*, 31(1), 31-50.
- Roberts, R. (1978). Primary mathematics in Papua New Guinea. *Papua New Guinea Journal of Education*, 14, 45-55.
- Roberts, R., & Kada, V. (1979). The primary mathematics classroom. *Papua New Guinea Journal of Education*, 15, 63-74.
- Romer, P. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94, 1002-1037.
- Romer, P. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5), 71-102.

- Ross, A. (1987). The teacher education fellowships training component of the first primary education project (1982-1987): An evaluation. Port Moresby, PNG: Ministry of Education.
- Ross, A. (1989). *Problems of beginning teachers*. Port Moresby, PNG: Department of Education, Research and Evaluation Unit.
- Russel, T. (1993). Teachers' future knowledge and the future of teacher education. *Journal of Education for Teaching*, 19, 205-216.
- Sahlberg, P. (2004). Teaching and globalization. *Managing Global Transitions*, 2(1), 65-83.
- Said, E. W. (1978). Orientalism. London: Penguin Books.
- Said, E. W. (1993). Culture and imperialism. London: Vintage.
- Sanders, A. G. (1989). Kamasu perceptions of learning: Traditional training and formal schooling. *Papua New Guinea Journal of Education*, 25(2), 29-40.
- Sarantakos, S. (1998). *Social research* (2nd ed.). South Yarra, VIC: Macmillan Education Australia.
- Sarantakos, S. (2005). Social research (3rd ed.). New York: Palgrave Macmillan.
- Sarere, E. (2003, May 27). Amalgamation has not worked Principal. PNG Post Courier, p. 22.
- Schwarz, B. (1995). Urbanization. In D. L. Whiteman (Ed.), *Introduction to Melanesian cultures* (5th ed., pp. 231-251). Goroka, PNG: Melanesian Institute.
- Sergiovanni, T. J. (2000). The lifeworld of leadership: Creating culture, community, and personal meaning in our schools. San Francisco: Jossey-Bass.
- Sergiovanni, T. J., & Starratt, R. J. (1993). Supervision: A redefinition (5th ed.). San Francisco: McGraw-Hill.
- Sikil, E. (2003). *College report from January to September 2003*. Kokopo, PNG: Our Lady Sacred Heart Teachers' College (OLSHTC) Kabaleo.
- Sikwibele, A. L. (1989). *International education assistance to higher education development in Zambia: Problems, policy implications and future prospects.* Unpublished doctoral dessertation, University of Illinois at Urbana-Champaign.
- Smith, G. (1975). Education in Papua New Guinea. Melbourne: Melbourne University Press.
- Smith, M. K., & Smith, M. (2002). 'Globalization' the encyclopaedia of informal education, Retrieved October 10, 2005 from www.infed.org/biblio/globalization.htm.
- Smith, P. (1987). *Education and colonial control in Papua New Guinea: A documentary history*. Melbourne: Longman Cheshire.
- Smith, P. (Ed.). (1985). *Colonial policy, education and social stratification, 1945-1975*. Melbourne: Longman Cheshire.
- Smith, R. (1975). Social relations in Papua New Guinea primary schools. *Papua New Guinea Journal of Education*, 11(2), 1-13.

- Smock, A. C. (1981). Women's education in developing countries, opportunities and outcomes. New York: Praeger.
- Southard, J. (1997). *Colonial education*. Retrieved October 11, 2005, from http://www.english.emory.edu/Bahri/Education.html
- Spivak, G. (1993). Outside the teaching machine. New York: Routledge.
- Spivak, G. (Ed.). (1996). The Spivak reader. London: Routledge.
- Staff Development & Training Division. (1990). *Towards a new three-year curriculum for community school teacher education*. Port Moresby, PNG: Department of Education.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Starratt, R. J. (1993). *Transforming life in schools: Conversations about leadership and school renewal.* Hawthorn, VIC: Australian Council for Educational Administration.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). London: Sage.
- Sturnam, A. (1997). Case study methods. In J. P. Keeves (Ed.) *Educational research*, *methodology and measurement: An international handbook* (2nd ed., pp. 61-66). New York: Pergamon.
- Subramani, S. (2000). *Cultural preservation measures adopted in the higher education system of Malaysia*. Unpublished doctoral dessertation, University of Oregon.
- Tapo, M. (2004). *National education standards: Local implementation, case studies of differing perceptions of education standards*. Unpublished doctoral dessertation, Queensland University of Technology, Brisbane.
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York: The Falmer Press.
- Throsby, C., & Gannicott, K. (1990). *The quality of education in the South Pacific*. Canberra: National Centre for Developmental Studies.
- Tikly, L. (1999). Postcolonialism and comparative education. *International Review of Education* (45), 603-621.
- Tikly, L. (2001). Post-colonialism and comparative education research. In K. Watson (Ed.), *Doing comparative education research: Issues and problems* (pp. 245-264). Oxford: Symposium Books.
- Tikly, L. (2004). Globalization and education in Sub-Saharan Africa: A postcolonial analysis. In Hickling-Hudson, A., Matthews, J., & Woods, A. (Eds.), *Disrupting preconceptions: Postcolonialism and education*. (pp. 109-126) Flaxton, QLD: Post Pressed.
- Tivinarlik, A. (1996). Religious development: An experience in PNG. CATALYST, 26(1), 55-63.
- Tivinarlik, A. (2000). *Leadership styles of New Ireland high school administrators: A Papua New Guinea study*. Unpublished doctoral dessertation, University of Iowa, Iowa City.

- Tivinarlik, A., & Nongkas, C. (2002a, August). *Catholic leadership in Papua New Guinea high/secondary schools and teachers' colleges*. Paper presented at the Catholic Educational Leadership Conference, Mecure Hotel, Sydney.
- Tivinarlik, A., & Nongkas, C. (2002b, December). Lead me not but walk with me: The "wantok system" in the leadership styles of New Ireland high school administrators. Paper presented at the ANZCIES conference, University of New England, Armidale, NSW.
- Trevaskis, G. A. (1976). Teacher education in Papua New Guinea. In E. Barrington (Ed.), *Papua New Guinea education* (pp. 145-158) Melbourne: Oxford University Press.
- Turner, J. D. (1994). First report on teacher education in Papua New Guinea. Port Moresby, PNG: Commission for Higher Education.
- Turner, W., & Sharp, S. (2006). Evaluating the effective relationships and participation in teacher education partnerships. Paper presented at the Australian Teacher Education Association Conference.
- United Nations Development Program/ International Labour Organization (UNDP/ILO). (1993). *PNG: Challenges for employment and human resources development*. New Delhi, India: Author.
- United Nations Educational, Scientific, and Cultural Organization (UNESCO). (2004). *Higher education in a globalized society*. Paris: Author.
- Vick, M. (2006, November). *Partnerships in teacher education: historical perspectives in recent rhetoric*. Paper presented at the Australian Association for Research in Education (AARE) Conference, Adelaide.
- Viotti, P., & Kauppi, M. (1993). *International relations theory* (2nd ed.). New York: Macmillan.
- Viswanathan, G. (1989). *Masks of conquest: Literary study and British rule in India*. New York: Columbia University Press.
- von Liebenstein, G. (2000, December). *Interfacing global and indigenous knowledge: Towards an indigenous knowledge information system.* Paper presented at the 6th UNESCO-APEID International Conference on Education, Bangkok, Thailand.
- Vulliamy, G. (1980). SSCEP and high school outstations: A case study. Port Moresby, PNG: University of Papua New Guinea, Educational Research Unit.
- Vulliamy, G. (1981). *Planning for SSCEP: A case study* (Research report No. 38). Port Moresby, PNG: University of Papua New Guinea, Educational Research Unit.
- Vulliamy, G. (1987). *School effectiveness and provincial high schools in PNG*. Port Moresby, PNG: University of Papua New Guinea, Educational Research Unit.
- Waide, S. (2007, July 6). Gender inequality still pervasive. *The National*, p. 28.
- Waiko, J. (2003). Minister's keynote address. In A. Maha & T. Flaherty (Eds.), *Education for 21st century in Papua New Guinea and the South Pacific* (pp. 12-15). Goroka, PNG: The University of Goroka.
- Waninga, K. T. (1998). An investigation into the potential for change in approaches to environmental education in teacher education programs in Papua New Guinea.

- Unpublished Master of Education thesis (Honours), University of New England, Armidale, NSW.
- Warren, M. (1991). *Using indigenous knowledge in agricultural development*. Paper presented at the World Bank Conference, Washington, DC: World Bank.
- Warren, M. (1993). Using indigenous knowledge for agriculture and rural development: Current issues. *Indigenous knowledge and development monitor [Online journal]*, 1(1), 1-6.
- Watson, K. (1994). Technical and vocational education in developing countries: Western paradigms and comparative methodology. *Comparative Education*, 30, 85-91.
- Wendt, N. (2004). *Good governance Pacific-style: The role of Australian NGOs in assisting Pacific civil society*. Deakin, ACT: Australian Council for Overseas Aid.
- Wheatley, M. (1999). *Bringing schools back to life: Schools as living systems*. Retrieved June 29, 2001 from http://www.margaretwheatley.com.articles/lifetoschools.html
- Whiteman, D. L. (1995). Melanesia: Its people and cultures. In D. L. Whiteman (Ed.), *Introduction to Melanesian cultures* (pp. 85-104). Goroka, PNG: Melanesian Institute.
- Wilson, A. (2001). *An application of dependency theory in Ghana*. Retrieved August 12, 2005, from http://www.carbonsoft.com/ghana/original/intro.html
- Wingfield, R. (1987). *The English language program of community school teachers' colleges in Papua New Guinea: An evaluation*. Port Moresby, PNG: Department of Education.
- Wolf, A. (2002). Does education matter: Myths about education and economic growth. London: Penguin.
- Wong, W., & Swan, J. (1984). *Thinking: Breaking away from convention*. Paper presented at the Harvard Conference on thinking, Harvard University, Cambridge, MA.
- World Bank Group. (1998). *Assessing aid What works, what doesn't, and why*. Retrieved August 9, 1999 from http://www.worldbank.org/wdr/wdr98/contents.htm
- World Bank Group. (1999). World development report 1998/99: Knowledge for development. Retrieved August 9, 1999, from http://www.worldbank.org/wdr/wdr98/contents.htm
- World Bank Group. (2005). *Mining gender bias*. Retrieved August 19, 2005, from http://web.worldbank.org
- Yeoman, L. (1986). Teacher education in Papua New Guinea: An overview of major projects or reviews recently undertaken to identify needs to enhance development. Port Moresby, PNG: Department of Education, Research and Evaluation Unit.
- Yeoman, L. (1988). *Structure and impact of basic skills course and examination*. Port Moresby, PNG: Department of Education, Teacher Education Project.
- Yin, R. K. (1994). Case study research: Design and methods (2nd ed., Vol. 5). London: Sage.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Yoko, J. K. (2000). An analysis of implementation of the philosophy of education for Papua New Guinea in university teacher education curriculum: Congruence between

- educational philosophy, policy and practice. Unpublished doctoral dessertation, University of New England, Armidale, NSW.
- Young, R. (1990). White mythologies: Writing history and the west. London: Routledge.
- Young, R. E., & Bartos, G. F. (1977). Education and the image of western knowledge in Papua New Guinea: Part II. *Papua New Guinea Journal of Education*, *13*(2), 12-21.
- Zeegers, M. (2000). Rhetoric, reality and the practicum: Reconstructionism, behaviourism and primary teacher education in Papua New Guinea. *Asia-Pacific Journal of Teacher Education*, 28(2), 149-163.
- Zeegers, M. (2005). English community school teacher education and English as a second language in Papua New Guinea: A study of a practicum. *Asia-Pacific Journal of Teacher Education*, 33(2), 135-146.
- Zeichner, K., & Liston, D. (1996). *Reflective teaching: An introduction*. Mahwah, NJ: Lawrence Erlbaum.
- Zocca, F. (2002). The pattern of urbanization in Papua New Guinea and its pastoral implications. *CATALYST*, 32(2), 197-234.

APPENDICES

Appendix A: Ethics approval from Research Ethics Committee

Australian Catholic University Brisbane Sydney Canberra Ballarat Melbourne



Human Research Ethics Committee

Committee Approval Form

Principal Investigator/Supervisor: A/P Denis McLaughlin Brisbane Campus

Co-Investigators:

Brisbane Campus

Student Researcher: Ms Catherine Nongkas Brisbane Campus

Ethics approval has been granted for the following project:

Leading Educational Change in Primary Teacher Education: A Papua New Guinea Case Study

for the period: 11th October 2004 - 31st.March 2005

Human Research Ethics Committee (HREC) Register Number: Q2003.04-20

The following <u>standard</u> conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans* (1999) apply:

- (i) that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as:
 - · security of records
 - compliance with approved consent procedures and documentation
 - compliance with special conditions, and
- that researchers report to the HREC immediately any matter that might affect the ethical acceptability of the protocol, such as:
 - proposed changes to the protocol
 - unforeseen circumstances or events
 - adverse effects on participants

The HREC will conduct an audit each year of all projects deemed to be of more than minimum risk. There will also be random audits of a sample of projects considered to be of minimum risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a *Final Report Form* and submit it to the local Research Services Officer.

If the project continues for more than one year, researchers are required to complete an *Annual Progress Report Form* and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.

K. Pashlyf.

Date: 11 October 2004

(Research Services Officer, McAuley Campus)

(Committee Approval.dot @ 28.06.2002)

Page 1 of 1

Appendix B: Letters to the College Principals and their responses

Australian Catholic University

School of Educational Leadership Queensland



Australian Catholic University Limited A8N 15 050 192 660 Brisbane Campus (McAuley at Banyo) 1100 Nudgee Road Banyo QLD 4014 PO Box 456 Virginia QLD 4014 Telephone 617 3623 7301 Facsimile 617 3623 7105 www.acu.edu.au

Title of Research: Leading Educational Change in Primary Teacher Education: A PNG Case Study Researcher: Catherine Nongkas

Dear Dr Tivinarlik,

My name is Catherine Nongkas. I am a Doctoral candidate at Australian Catholic University. I seek your permission to undertake research at St Benedict's teachers' college in Wewak. The study aims to explore how educational change is occurring in the teachers' colleges. I will be conducting research in the other two Catholic teachers' colleges.

In order to gather such information, the leadership team, lecturers, students and recent graduates of the college are asked to participate in interviews and focus groups. Participation is entirely voluntary. I anticipate that research would take about a month.

The results of the study will be used in the first instance for my doctoral thesis. I intend to publish the findings in appropriate ways, preserving the identity of the college, schools and the persons involved.

Cooperation in the study will not place your college's staff and students at any foreseeable risk. Responses in the interviews and focus groups will be anonymous. All the results will be treated in the strictest confidence

The time needed to complete the interviews is up to one hour in duration.

The study has been approved by the Human Research Ethics Committee at the Australian Catholic University. Any questions regarding this research should be directed to my principal supervisor, Associate Professor Denis McLaughlin.

In the event that you have any complaint or concern about the way you or your staff and students have been treated during the study, or if you have any query that the researcher has not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee.

Chair, HREC C/o Research Services Australian Catholic University PO Box 456 VIRGINIA 4053 Tel: 07 3855 7200

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If you are willing to assist in this phase of the study, please contact me by phone, mail, or email.

Yours sincerely,

Catherine Nongkas EdD Candidate

Email: nongkasc@yahoo.com.au

Tel: 617 3623 7318 (w)

A/Prof. Denis McLaughlin School of Educational Leadership

Email: d.mclaughlin@mcauley.acu.edu.au
Tel: 617 3623 7154

CRICOS registered provider: 00004G, 00112C, 00873F, 00885B



Divine Word University

Faculty of Education – St. Benedict's Campus, Wewak P.O. Box 542, Wewak, East Sepik Province, Papua New Guinea Tel: (675) 856 2327 Fax: (675) 856 2331

7th April 2004

Ms Catherine Nongkas
Australian Catholic University
Brisbane Campus
1100 Nudgee Road Banyo QLD 4014
PO Box 456 Virginia, QLD 4014

Dear Catherine,

Subject: Research at St. Benedict's Campus for a Doctoral Study

You are very welcome to conduct research at St. Benedict's Campus for your study on educational change in the Catholic Primary Teachers' Colleges in Papua New Guinea. We commend you in your undertakings and hope that your study will contribute to the betterment of education in our colleges and Papua New Guinea as a whole. As part of the faculty of education of Divine Word University, we are particularly interested in your findings as they will assist us in the development and delivery of our teacher-education program. In your time here, we will try as much to assist you in the mammoth task of your data collection.

Study prospects like yours provide an individual the rare opportunity to read widely in the area one is researching. If at all possible in your time here at this campus, can you have some time with either our staff or students to talk about current issues in the area of your study.

Yours truly,

Dr. Alfred Tivinarik

wowlar

a/Administrator

Divine Word University is a Catholic university open to all, serving society through its teaching and research in a Christian Environment



Title of Research: Leading Educational Change in Primary Teacher Education: A PNG Case Study Researcher: Catherine Nongkas

Australian Catholic University Limited ABN 15 050 192 660 Brisbane Campus (McAuley at Banyo) 1100 Nudgee Road Banyo QLD 4014 PO Box 456 Virginia QLD 4014 Telephone 617 3623 7301 Facsimile 617 3623 7105 www.acu.edu.au

Dear Mr Sikil,

My name is Catherine Nongkas. I am a Doctoral candidate at Australian Catholic University. I seek your permission to undertake research at OLSH Kabaleo teachers' college in Kokopo. The study aims to explore how educational change is occurring in the teachers' colleges. I will be conducting research in the other two Catholic teachers' colleges.

In order to gather such information, the leadership team, lecturers, students and recent graduates of the college are asked to participate in interviews and focus groups. Participation is entirely voluntary. I anticipate that research would take about a month.

The results of the study will be used in the first instance for my doctoral thesis. I intend to publish the findings in appropriate ways, preserving the identity of the college, schools and the persons involved.

Cooperation in the study will not place your college's staff and students at any foreseeable risk. Responses in the interviews and focus groups will be anonymous. All the results will be treated in the strictest confidence

The time needed to complete the interviews is up to one hour in duration.

The study has been approved by the Human Research Ethics Committee at Australian Catholic University. Any questions regarding this research should be directed to my principal supervisor, Associate Professor Denis McLaughlin.

In the event that you have any complaint or concern about the way you or your staff and students have been treated during the study, or if you have any query that the researcher has not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee.

Chair, HREC C/o Research Services Australian Catholic University PO Box 456 VIRGINIA 4053 Tel: 07 3855 7200

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If you are willing to assist in this phase of the study, please contact me by phone, mail, or email.

Yours sincerely,

Changlas
Catherine Nongkas
EdD Candidate

Email: nongkasc@yahoo.com.au

Tel: 617 3623 7318 (w)

A/Prof. Denis McLaughlin School of Educational Leadership Email: d.mclaughlin@mcauley.acu.edu.au Tel: 617 3623 7154

CRICOS registered provider: . 00004G, 00112C, 00873F, 00885B

From: "esikil" <esikil@global.net.pg> Add to Address Book

To: "Catherine Nongkas" <nongkasc@yahoo.com.au>

CC: "Denis McLaughlin" <d.mclaughlin@mcauley.acu.edu.au>

Subject: Re: Permission granted to conduct research at OLSH-Kabaleo

Date: Tue, 20 Apr 2004 12:43:07 +1000

Dear Miss Nongkas,

Greetings from OLSH- Kabaleo.

Your request to conduct the research activities at this college had been considered, and permission has been granted.

You are most welcome to carry out your research at OLSH Teachers College-Kabaleo.

I look forward to assisting you with your research work.

Thank you.

Regards.

Edwin Sikil

Principal.



Title of Research: Leading Educational Change in Primary Teacher Education: A PNG Case Study Researcher: Catherine Nongkas

Australian Catholic University Limited ABN 15 050 192 660 Brisbane Campus (McAuley at Banyo) 1100 Nudgee Road Banyo QLD 4014 PO Box 456 Virginia QLD 4014 Telephone 617 3623 7301 Facsimile 617 3623 7105 www.acu.edu.au

Dear Mr Kuboid,

My name is Catherine Nongkas. I am a Doctoral candidate at Australian Catholic University. I seek your permission to undertake research at the Holy Trinity teachers' college in Mt Hagen. The study aims to explore how educational change is occurring in the teachers' colleges. I will also be conducting research in the other two Catholic teachers' colleges.

In order to gather such information, the leadership team, lecturers, students and recent graduates of the college are asked to participate in interviews and focus groups. Participation is entirely voluntary. I anticipate that research would take about a month.

The results of the study will be used in the first instance for my doctoral thesis. I intend to publish the findings in appropriate ways, preserving the identity of the college, schools and the persons involved.

Cooperation in the study will not place your college's staff and students at any foreseeable risk. Responses in the interviews and focus groups will be anonymous. All the results will be treated in the strictest confidence

The time needed to complete the interviews is up to one hour in duration.

The study has been approved by the Human Research Ethics Committee (HREC) at Australian Catholic University. Any questions regarding this research should be directed to my principal supervisor, Associate Professor Denis McLaughlin.

In the event that you have any complaint or concern about the way you or your staff and students have been treated during the study, or if you have any query that the researcher has not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee.

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Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If you are willing to assist in this phase of the study, please contact me by phone, mail, or email.

Yours sincerely,

Catherine Nongkas

Doctoral Candidate
Email: nongkasc@yahoo.com.au

Tel: 617 3623 7318 (w)

A/Prof. Denis McLaughlin School of Educational Leadership

Email: d.mclaughlin@mcauley.acu.edu.au Tel: 617 3623 7154

CRICOS registered provider: 00004G, 00112C, 00873F, 00885B



HOLY TRINITY TEACHERS COLLEGE

P . O . BOX 274, MT. HAGEN, WHP, PAPUA NEW GUINEA

Phone: 542 1411 / 542 1129 Fax: 542 3042 Email: trinity@dg.com.pg

16th April 2004

Ms Catherine Nongkas Doctoral Candidate Australian Catholic University Brisbane Australia

RESEARCH REQUEST IN THE COLLEGE AS PER CORRESPONDENCE RECEIVED UNDATED

Dear Ms Nongkas,

Thank you for the correspondence received on the 16th April 2004. I see no problem in assisting you in carrying out the research in this college. In fact Dr Alfred from Divine Word University mentioned this to me but I told him that I have yet to hear from you.

It would be good if you can provide your plans and the number of samples to be used with proposed time of your arrival here at Holy Trinity Teachers College. Such plans help to give you feed back in case it is done over semester breaks or block teaching times.

Once again thank you for the letter querying entry to the college.

Sincerely yours,

Kubod LAIEN Principal (Tel: 542 3676)



Title of Research: Leading Educational Change in Primary Teacher Education: A PNG Case Study Researcher: Catherine Nongkas

Australian Catholic University Limited ABN 15 050 192 660 Brisbane Campus (McAuley at Banyo) 1100 Nudgee Road Banyo QLD 4014 PO Box 456 Virginia QLD 4014 Telephone 617 3623 7301 Facsimile 617 3623 7105 www.acu.edu.au

Dear Fr Jan,

My name is Catherine Nongkas. I am a Doctoral candidate at Australian Catholic University. I seek your permission to undertake research at the following teachers' colleges which are now amalgamated or affiliated with Divine Word University. These are: St Benedict's in Wewak, Holy Trinity in Mt Hagen and OLSH Kabaleo in Kokopo. The study aims to explore how educational change is occurring in teachers' colleges.

In order to gather such information, the leadership teams, lecturers, students and recent graduates of these colleges are asked to participate in interviews and focus groups. Participation is entirely voluntary. I anticipate that research would take about six months.

The results of the study will be used in the first instance for my doctoral thesis. I intend to publish the findings in appropriate ways, preserving the identity of the colleges, schools and the persons involved.

Cooperation in the study will not place your colleges' staff and students at any foreseeable risk. Responses in the interviews and focus groups will be anonymous. All the results will be treated in the strictest confidence

The time needed to complete the interviews is up to one hour in duration.

The study has been approved by the Human Research Ethics Committee at Australian Catholic University. Any questions regarding this research should be directed to my principal supervisor, Associate Professor Denis McLaughlin.

In the event that you have any complaint or concern about the way you or your staff and students have been treated during the study, or if you have any query that the researcher has not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee.

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Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If you are willing to assist in this phase of the study, please contact me by phone, mail, or email.

Yours sincerely,

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Tel: 617 3623 7154

CRICOS registered provider: 00004G, 00112C, 00873F, 00885B

Appendix C: Consent Form

Australian Catholic University
- Brisbane Sydney Canberra Ballarat Melbourne

ACU National

PARTICIPANT'S CONSENT FORM

I,, agree to	participate in the research study
entitled Leading educational change in primary teac	her education: A Papua New Guinea
case study that is being conducted by Catherine Nongkas, a doctoral student in the School	
of Educational Leadership in the Australian Catholic University in Brisbane. I have	
discussed the nature of the project with the researcher and understand that my	
participation is voluntary. I also understand that I may choose not to participate at any	
time and there will be no penalty to me if I choose to withdraw from the project.	
This study will involve interviewing and recording in	aformation related to my ideas about
leading educational change specifically in the Catholic Primary Teachers' College in	
PNG. I am aware that my name will not be used in any reports, papers or presentations	
about this research. Minimal discomfort, stress or risks may be involved in my	
participation. My signature indicates that I understand the purpose of the study and my	
agreement to participate. It also authorizes the researcher to use the information that I	
provide as appropriate to the research project.	
Participant's Signature	Date