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Determining the Attitudes of Elementary School Teachers
towards the Inclusion of Children with Disabilities:

A Case Study of Three Elementary Schools in Goroka, Eastern
Highlands Province, Papua New Guinea.

A thesis submitted in fulfilment of the requirements for the degree of
Master of Special Education at
The University of Waikato

by

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ABSTRACT

The global agenda for inclusive education led the Department of Education in Papua New Guinea to develop its policy on special education, which was then endorsed by the government to be implemented in all schools. The emphasis on inclusive education was to ensure that all children, both abled and disabled, were receiving education in schools in their community. The inclusive approach placed the onus on the regular classroom teachers, to establish an inclusive learning environment.

This study focused on the factors that were influencing teachers’ attitudes in the rural elementary schools. Numerous studies show that successful implementation of inclusion of children with special needs largely depends on teachers’ positive attitudes towards inclusion. The results of this study revealed a number of influential factors on teacher’s attitudes, it indicated that inclusion of children with disability into mainstream schools is challenging when individual teachers’ level of knowledge about special education is limited.

The aim of this study is to contribute knowledge relating to the elementary education sector in PNG. To date, research in inclusive education in PNG has been confined to primary schools. Seven elementary school teachers representing three schools in a rural district in Goroka, Eastern Highlands Province, PNG, participated in the study. A qualitative approach using semi-structured individual interviews and observations was used to gather data.

The study revealed that participants knew how important education was and supported the idea that education is important for all children, even those with disabilities. Further questioning revealed that teachers acceptance of inclusion was determined by a variety of factors. They included teacher training, teaching experience, gender, physical environment, class size, resources/materials, the type of disability, and the effects of cultural belief and geography on inclusion.

It also revealed that failure to establish collaborative and trusting relationships between teachers, parents, professionals and very importantly, adequate financial
support from the government can have serious impact on the outcomes of inclusion.

Though inclusive education is beneficial to all children it is also challenging for educators. Therefore the identified factors need addressing. Addressing these barriers could result in positive attitudinal changes among teachers.
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## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>CHAPTER ONE: INTRODUCTION AND RESEARCH CONTEXT</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Personal Experience</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Background to Special Education</td>
<td>3</td>
</tr>
<tr>
<td>1.3 The Medical Model of Disability</td>
<td>6</td>
</tr>
<tr>
<td>1.4 The Social Model of Disability</td>
<td>7</td>
</tr>
<tr>
<td>1.5 Human Rights</td>
<td>9</td>
</tr>
<tr>
<td>1.6 International Policies</td>
<td>11</td>
</tr>
<tr>
<td>1.6.1 Conventions on the Rights of the Child</td>
<td>11</td>
</tr>
<tr>
<td>1.6.2 Salamanca Statement</td>
<td>13</td>
</tr>
<tr>
<td>1.7 Rationale</td>
<td>14</td>
</tr>
<tr>
<td>1.8 Significance of the Study</td>
<td>15</td>
</tr>
<tr>
<td>1.9 Scope of the Study</td>
<td>15</td>
</tr>
<tr>
<td>1.10 Overview of the Thesis</td>
<td>16</td>
</tr>
<tr>
<td>CHAPTER TWO: LITERATURE REVIEW</td>
<td>17</td>
</tr>
<tr>
<td>2.0 Introduction</td>
<td>17</td>
</tr>
<tr>
<td>2.1 From Integration to Inclusion</td>
<td>17</td>
</tr>
<tr>
<td>2.1.1 The Difference between Integration and Inclusion</td>
<td>19</td>
</tr>
<tr>
<td>2.1.2 What is Inclusive Education?</td>
<td>21</td>
</tr>
<tr>
<td>2.2 The Importance of Education</td>
<td>23</td>
</tr>
<tr>
<td>2.3 What is Attitude and Why Study it?</td>
<td>24</td>
</tr>
<tr>
<td>2.4 Factors Influencing Teacher’s Attitudes</td>
<td>26</td>
</tr>
<tr>
<td>2.4.1 Teacher Training</td>
<td>26</td>
</tr>
<tr>
<td>2.4.2 Teaching Experience</td>
<td>28</td>
</tr>
<tr>
<td>2.4.3 Gender</td>
<td>30</td>
</tr>
<tr>
<td>2.4.4 Physical Environment</td>
<td>31</td>
</tr>
<tr>
<td>2.4.5 Time (workload and class size)</td>
<td>32</td>
</tr>
<tr>
<td>2.4.6 Resources and materials</td>
<td>33</td>
</tr>
<tr>
<td>2.4.7 Type of Disability</td>
<td>34</td>
</tr>
<tr>
<td>2.5 Effects of Cultural Belief and Geography on Inclusion</td>
<td>36</td>
</tr>
<tr>
<td>2.6 Papua New Guinea’s Special Education Policy</td>
<td>39</td>
</tr>
</tbody>
</table>
## CHAPTER THREE:
### RESEARCH METHODOLOGY

3.0 Overview of the Chapter .............................................................................. 41
3.1 Theoretical Framework of the Study ............................................................ 41
3.2 Qualitative Approach .................................................................................. 44
   3.2.1 Naturalistic/ Interpretive Paradigm ......................................................... 45
3.3 Research Methodology and Processes ......................................................... 46
   3.3.1 The Case Study Approach ..................................................................... 46
3.4 Methods ....................................................................................................... 48
   3.4.1 Data Collection and Data Analysis ......................................................... 48
   3.4.2 Interview ............................................................................................... 49
   3.4.3 Individual Open-Ended, Semi-Structured Interview ............................... 50
   3.4.4 Non-Participant Observation ................................................................ 51
3.5 The Chronology of the Research Process ................................................... 54
   3.5.1 Approval from Research Ethics Committee ............................................ 54
   3.5.2 Research Branch, Department of Education ......................................... 54
   3.5.3 Assistant Secretary for Education (Eastern Highlands Province) ....... 55
   3.5.4 Approval from Schools ....................................................................... 55
3.6 Participant Selection ..................................................................................... 56
   3.6.1 Selection of the Research Participants .................................................. 57
3.7 Ethical Considerations .................................................................................. 60
   3.7.1 Access to Participants and Informed Consent ........................................ 60
   3.7.2 Anonymity and Confidentiality ............................................................. 61
3.8 Summary of the Chapter ............................................................................. 62

## CHAPTER FOUR:
### DATA ANALYSIS AND RESEARCH FINDINGS ........................................... 63
4.0 Overview of the Chapter ............................................................................. 63
4.1 Demography of the Participants .................................................................. 63
4.2 Theme One: Elementary Teachers’ Perception of Special and Inclusive Education Concepts ................................................................. 64
4.3 Theme Two: Right to Education and the Importance of Education ........... 67
4.4 Theme Three: Factors Influencing Teachers’ Attitudes ............................... 71
   4.4.1 Teacher Training .................................................................................... 72
   4.4.2 Teaching Experience ............................................................................ 75
   4.4.3 Infrastructure and School Environment ................................................. 78
   4.4.4 Types of Disability ............................................................................... 81
   4.4.5 Time (Workload and class size) ............................................................. 84
4.4.6 Resources and Materials ................................................................. 87
4.4.7 Support from the Resource Centre and the Government .................. 89
4.5 Theme Four: Geographical Factor ..................................................... 96
4.6 Theme Five: Parental and Community Awareness .............................. 97
4.7 Summary of the Chapter .................................................................. 101

CHAPTER FIVE:
DISCUSSION, LIMITATIONS, IMPLICATIONS, AND
RECOMMENDATIONS OF RESEARCH FINDINGS ............................... 102

5.0 Overview of the Chapter .................................................................. 102
5.1 Theme One: Elementary Teachers’ Perception of Special and Inclusive
Education Concepts ............................................................................. 102
5.2 Theme Two: Rights To Education and the Importance of Education .... 104
5.3 Theme Three: Factors that Influence Teachers’ Attitudes .................. 106
  5.3.1 Teacher Training .......................................................................... 106
  5.3.2 Teaching Experience ..................................................................... 109
  5.3.3 Infrastructure and the School Environment .................................. 111
  5.3.4 Type of Disability ......................................................................... 113
  5.3.5 Time (workload and class size) .................................................... 114
  5.3.6 Resources and Materials ............................................................. 115
  5.3.7 Support from the Resource Centre and the Government to Implement
  Inclusive Education Programmes ....................................................... 116
5.4 Theme Four: Geographical Factors .................................................. 119
5.5 Theme Five: Parents and Community Awareness ............................ 120
5.6 Implications, Recommendations and Limitations ............................. 122
  5.6.1 Implications .................................................................................. 122
  5.6.2 Recommendations ....................................................................... 124
  5.6.3 Limitations of the Study ............................................................... 125
  5.6.4 Suggestions for Future Research ................................................ 126
5.7 Conclusions ..................................................................................... 127

REFERENCES ..................................................................................... 128

APPENDICES ..................................................................................... 156
Appendix A: Letter of Approval from the University of Waikato ............. 156
Appendix B: Consent Letter To The National Department Of Education In
Papua New Guinea ............................................................................... 157
Appendix C: Consent Letter to The Provincial Education Advisor, Eastern
Highlands Province ........................................................................... 160
Appendix D: Approval Letter from the Department Of Education in Papua
New Guinea ..................................................................................... 163
Appendix E: Letter from the Provincial Education Advisor in Goroka, Eastern
Highlands Province ......................................................................... 164

vii
Appendix F: Letter of Consent to Schools.................................................. 165
Appendix G: Information Sheet for Participants........................................ 167
Appendix H: Informed Consent Form .......................................................... 170
Appendix I: Range Of Interview Questions................................................ 172
Appendix J: Personal Information Sheet..................................................... 173
Appendix K: Check Lists Of Elements Present During Observation.............. 174
# LIST OF TABLES

| Table 3.4 | Profile of Participating Schools | 58 |
| Table 4.1 | Demography of the Participants | 64 |
CHAPTER ONE:
INTRODUCTION AND RESEARCH CONTEXT

The principles of inclusive education were adopted by the government of Papua New Guinea in 2004, for it saw that through an inclusive programme education would reach disabled children in the rural communities. Teachers were trained to cope and work with disabled children in the regular schools. However, there have been very few students enrolled in mainstream schools of Papua New Guinea.

The need for this study rose from my experience as a classroom teacher, and later a resource teacher for students with special needs. I have experienced and observed teachers’ attitudes towards inclusion, and it has always made me wonder why teachers held these attitudes. I hope that this study will shed light on factors that are influencing teachers’ attitudes.

In the first section of this chapter I share my personal experience. Section 1.2 is a brief background of special education, followed by an explanation of the medical and social model of disability in sections 1.3 and 1.4, and in section 1.5, I discuss the issue of rights. International policies, specifically the Convention on the Rights of the Child and the Salamanca Statement are looked at in section 1.6. The rationale for this study is presented in section 1.7. In section 1.8 the significance of the study is discussed and the scope of the study is covered in section 1.9. The chapter concludes with section 1.10, the thesis overview.

1.1 Personal Experience

My interest in special education started when I first did my teacher training. By then teacher training institutions had included special education as one of their courses. To prepare us to work with children who had disabilities, we were taught the basics of inclusive practices. By the time we passed out from the teacher training institution we were aware of special education, and the rights of children with disabilities to be included into mainstream schools.
In the first year of my teaching in a rural school in Goroka, Eastern Highlands Province, Papua New Guinea, I noticed that there were hardly any students with physical or sensory impairments, only students who had learning difficulties. Teachers who had been teaching well before inclusive education courses were offered in teacher training institutions were not aware of the inclusive education policies. Those who had met the policies while training were not giving much thought to inclusive education. I realised that inclusion was important while teachers were doing teacher training, but out in the field it did not matter. Teachers just forgot about it, or were too busy to consider it. Although there were children with disabilities in the nearby communities they were not enrolled into the school. Though their non-disabled siblings were in school, parents did not see the need for them also to be in school.

In my second year of teaching at the school a child who was hyperactive was enrolled into the class I was taking. The first thought I had was how I was going to teach the child. I went through my special education books and saw teaching pedagogies that I could use. With the help of a resource staff from the resource centre school he had previously attended we were able to help the child. The child rarely sat quietly. He was always up and about disturbing other students. At times I found it tiring and frustrating, but I learnt that I had to have patience to help the child. Some teachers saw the child’s disruptive behavior as a problem, and made negative comments about his inclusion. Because the child was from the community most children knew him and the disability he had. For him to be attending a mainstream school was something new to the students. Students were reminded not to bully him, but a few kept on teasing him. Some teachers made comments that it was his fault because he was the one instigating things. However, the head teacher was very helpful and supportive of the child’s inclusion.

Through working with the child my interest grew and I desired to learn more about inclusive practices. I applied to do a two year programme specialising in special education at the University of Goroka (UoG). After I completed my study I worked with Mount Sion Resource center for disabled people. While working
there I was involved conducting in-service programmes in schools, and awareness raising in schools and communities. I worked with students with disabilities enrolled in mainstream schools, and also did home visitations for children who were not in school.

Through my experience of teaching in the primary schools and in the resource centre I have observed that many children do not attend school. Those who have enrolled leave school even before a semester is over. I have also observed that some teachers do not give much attention to children with disabilities.

In my experience being aware of rights of disabled children and the policy on inclusive education, making positive comments about the inclusive policy does not mean that all teachers have positive attitudes when it comes to actually teaching children with disability. Most prefer teaching children without disabilities rather than disabled children.

1.2 Background to Special Education

Papua New Guinea is an island nation located in the Pacific Ocean with a total land mass of about 462,860 km². The country’s population in 2007 was estimated to be about 6.1 million; and about 80% of the population lives in rural areas. There are about 800 plus indigenous languages and two national languages, Pidgin (Tok Pisin) and Motu. The country is mountainous except for some coastal areas and valleys in the highlands; it is also swampy and has very heavy forest. Because of the mountainous terrains there are no proper road networks (Hagunama, 2008).

Countries have their own unique reasons for adopting certain policies and practices. The government of Papua New Guinea adopted the inclusive education policy because of factors such as: the geography of the country, limited government services in the rural areas, poor road network, and the fact that the majority of the population resides in the rural areas. Education is inaccessible for
many children, specifically those with disabilities living in rural areas. Their non-disabled peers are able to attend school, but for them either schools are too far away, parents are ashamed to send them to school, or teachers are not trained to teach students with disabilities.

Special Education Resource centres have been set up in some provinces of Papua New Guinea. One of the first centres for children with visual impairments was the Mount Sion Centre for the Blind located in Goroka. It was established by Christian Brothers of the Catholic Church in 1983. The primary aim of the centre was to prepare visually impaired children for possible integration into the mainstream schools. At that time children were segregated from the mainstream schools. In line with the country’s policy, Mount Sion Centre for the Blind started integrating children into Sacred Heart Faniufa Primary School, a school which is located about five minutes’ drive from the resource centre (Rombo, 2006). Students with special needs are taught at the resource centre, but are integrated into the mainstream schools from time to time. However, many children with disabilities living in the rural areas are not able to enroll in Special Education Resource centres, mainly because they are located far from their home, or parents are not made aware of these centres’ existence.

It became clear that it would be possible to reach many children with disabilities through educating teachers. In line with the PNG’s government policy on special education, in the late 1990s the Christian Brothers advised the National Education Board that they were going to integrate special education training course for all student teachers. Working in collaboration with the Christian Brothers, initial changes were done at the teacher training level. This approach would ensure that new teacher graduates passed out into the field with the principles of ‘inclusive education’ (Tesni, n.d). In 1993 the government declared that all teacher training institutions, including University of Goroka, would provide special education course; in the same year special education was included as part of the mainstream curriculum, when the National Education Plan and Policy and Guidelines for Special Education was introduced and implemented (Department of Education,
1993 as cited in Rombo, 2006). In 1994 the government allocated funds to the Department of Education to establish the National Special Education Office within the Teacher Education and Staff Development Division. In addition, policy committees were set up and the government introduced ongoing educational reforms related to the inclusive education policy, which advocated for full inclusion of children with disabilities in mainstream schools. In 1995 St Benedict’s and Holy Trinity Teachers Colleges introduced special education courses in their training programmes, mainly taught by expert volunteers. Between 1995 and 2006 teachers were trained in special education either abroad or in institutions in the country. In 2001, the first eight special education teachers graduated with a Bachelors degree from UoG majoring in Special Education (Aiwa, 2006).

Though teachers were trained in special education, in reality many did not practise inclusion. They were referring children with special needs to the resource centres. There was no full inclusion of children with special needs into mainstream schools until 2009, when the resource centres were advised to send the boarding students in the resource centres back home. For example, Mount Sion Resource Centre had to send all the hearing and vision impaired students back to their respective provinces. As a result, responsibility for children with disabilities fell back on the educational departments and resource centres of each province.

The government, through the Education Department, has come a long way in preparing teachers to take on the practice of inclusive education. However, although laws and decisions have guaranteed basic human rights to people with disabilities, Handlers and Austin (1980) have indicated in their study that people need to develop more positive attitudes towards people with disabilities, and teachers have to have positive views about inclusion. Two different models of disability now underpin the process of full inclusion of children with disabilities in their local schools, the medical and the social model of disability. Inclusive education is a move towards removing barriers, and giving disabled children the right to be educated alongside their peers. Inclusive education goes in line with the movement towards creating a society free of social barriers (Terzi, 2008).
1.3 The Medical Model of Disability

The medical model emerged as a result of the WHO (1980) debate on terms such as ‘handicap’, ‘impairment’ and ‘disability’. This model reflected the World Health Organization’s (WHO) definition of disability (Llewellyn & Hogan, 2000). This definition states that:

[an] abnormality is the structure of the functioning of the body, through which disease or trauma; disability [as] referred to the restriction in ability to perform tasks...; and handicap [as] referred to the social disadvantage that could be associated with either impairment and/or ability. (Bury, 1996, as cited in Terzi, 2008, p. 43)

This definition of disability viewed disability as a problem for people who are disabled. The model has been criticised for viewing people with disabilities as “lacking”, unable to play a ‘full role’ in society” (Dewsbury, Clarke, Randall, Rouncefield & Sommerville, 2004, p. 147) because of the disability they have. From the medical model’s perspective, disability is the consequence of some physiological impairment due to injury or sickness. Although the model refers to social disadvantage, it principally requires disabled people to adjust in order to fit into society (Coleridge, 1993; Johnston, 1994, as cited in Llewellyn & Hogan, 2000).

However, disabled people have different opinions about disability, and disagree with the opinions of the ‘medical experts’. The medical model classifies disabled people as being sick; however, most people with disabilities are not sick, and do not need medical treatment (Marks, 1999). Longmore (2003) states that “implementation of the medical model in health care, social services, education, private charity and public policies has institutionalised prejudice and discrimination” (as cited in Loewen & Pollard, 2010, p. 7). The medical model in itself discriminates against disabled people, and prevents them from becoming full members of the society. For example, some children with disabilities in Papua New Guinea are denied access to mainstream schools because they are seen as problems for the school and teachers, and are referred instead to the resource centres for people with disabilities.
There is no suggestion in the medical model that the society needs to change. It has always been concerned with cure or prevention of the disability, and mainly focusing on ‘normality’ (Bochel & Bochel, 1994; Rioux, 1994, as cited in Bricher, 2000). Policies guided by the medical model place too much attention on how to ‘fix’ disabled people, rather than considering removal of environmental barriers, or providing adequate support for disabled people to exercise their rights. The model does not realise that disabled people have the capability of living a satisfying life (Harpur, 2012). Disabled people see that the medical model encourages other people to think that they are not able to live independent lives. They are regarded as being abnormal because they do not fit the description of a normal human being. People with disabilities reject being seen as abnormal and this has led many to reject this model (Coleridge, 1993; Llewellyn & Hogan, 2000).

1.4 The Social Model of Disability

The drive for acceptance of a social model of disability primarily came from a group of disabled writers and activists (O’Grady, Pleasence, Balmer, Buck & Genn, 2004; Purdue, 2009). The social model, as Barnes, Mercer and Shakespeare (1999) state, “was a political, rather than an academic approach, built on a basic rejection of the individual or medical approach…” (p. 67). During the 1970s the disability rights movement was becoming active, and disabled people were able to transform the previous concepts of disability, which viewed disability from a medical model and regarded disabled people as being abnormal (Donoghue, 2003). The new social model has been successful in changing many views about disabled people (Hughes & Paterson, 1997; Terzi, 2008).

The driving force behind the social approach to disability is that the definition of disability should not be related to the definition of impairment (Harpur, 2012). Oliver (1990) clearly makes a distinction between impairment and disability in which he points out that the aim of distinguishing between impairment and disability is “to demonstrate how it is not a person’s impairment that makes them
disabled but the way in which society is structured, which means the impairment becomes disabling” (p. 11). The social model as Oliver (1996) states “does not deny the problem of disability but locates it squarely within society” (as cited in Dewsbury et al., 2004, p. 147). If the society could be constructed with disabled people in mind, barriers could be minimised or eliminated. For example, classroom spaces would be bigger so that a child with a wheelchair could move about freely. The model points out that the majority of the problems faced by disabled people are produced by social arrangements, rather than their physical limitations. Therefore, the social model advocates for the removal of these barriers in order for disabled people to participate in the society (Shakespeare, 2006; Terzi, 2008).

The term disability as defined by WHO saw people with disabilities as the problem; however, when disability was redefined in terms of a disabling environment, it repositioned disabled people as citizens with rights (Dewsbury et al., 2004; Hughes & Paterson, 1997). Disabled people are entitled to be part of the society, and to be able to participate in it. Therefore, the society needs to adopt the notion of providing everyone with an unrestricted environment. The sole purpose of the social model is as Harpur (2012) states, to “move society from treating persons with disabilities as ‘defective’ and to change society to render it more inclusive” (p. 3). People with disabilities want a society that will include them regardless of the disability they have. The model identifies the environment as the problem; thus, the responsibility for the problem is placed back on the society. Through the social model, disability is perceived as an effect of an environment which discriminates against and disables certain impaired individuals (Llewellyn & Hogan, 2000; Marks, 1999).

The model addresses concerns that affect the daily lives of people with disabilities and their entitlement to full inclusion in society. They have to be accepted as citizens who have equal rights and entitlements with other citizens of the society (Terzi, 2008). The social model was created by people with disabilities, so that it brings to people’s attention that they have the right to be included in the society,
and the society has to adapt the environment to accommodate them. The model brings into the light a human rights agenda; it addresses issues of inequality and unfair treatment of disabled people (Mckenzie & Macleod, 2012). People with disabilities have the right to live normal lives; therefore, the stereotypes and prejudice which were pinpointed by disabled people as allowing only some people to be part of society (Donoghue, 2003) needed to change in order to create a society which was fully inclusive.

### 1.5 Human Rights

Article 1 of the Universal Declaration of Human Rights (1948) states that “all human beings are born free and equal in dignity and rights…” Furthermore, in Article 2, the first paragraph states that “everyone is entitled to all rights and freedoms set forth in this Declaration without distinction of any kind such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or status…” (para. 9 &10). Human rights are universal in that they do not apply to a homogeneous group of people; rather, the concept applies to every individual (UN, 1995, as cited in Stellmacher, Sommer & Brähler, 2005), regardless of where they originate from, their status, age, or whether they are disabled or able bodied people (Hendy, 1995 as cited in Mapsea, 2006). Essentially, human rights are the basic entitlements to which all human beings are entitled. These rights are seen as natural in that belong to each individual simply because she/he is a human (Haocai & Gongde, 2012; Griffin, 2008; Mckenzie, & Macleod, 2012; Augender, 2002).

The notion of human rights is to give every individual, whether able or disabled, the right to live a life as normal as possible. Brems (2001) states that it is “the understanding of universality of human rights, which comes down to all-inclusiveness within the human race. It signifies the rejection of the notion of “non persons” or inferior human beings” (p. 4). The United Nations Declaration of Human Rights (UDHR) signals equality for all people and the need to eradicate discrimination against people with disabilities. Every human being is entitled their rights. However, Smith (1997) states that:
although the notion of rights flows from a philosophical and moral analysis of the essential nature of human beings, it is superimposed as a political and social construction. In this sense rights are relative not only in terms of who holds the political power to define what rights citizens may have, but in terms of differential access to resources which are necessary to translate having a right to do something into achieving that right. (p.44)

In most countries it is usually the case that some individuals are denied their rights due to lack of resources. For example, a disabled child may not attend school because their parents are poor and cannot afford the child’s school fees. Even though it is the child’s right as a human being to attend school, the right is denied because of financial problems. This also clearly shows that rights also come with responsibilities; to be able to fully exercise some rights it is a person’s responsibility to do certain things. For example, for a child to get an education and get a job it is the parent’s responsibility to finance the child’s education. The child is responsible for how she/he performs in school. In this sense it is very clear that some people may be denied some basic rights because they cannot afford access to that right. However, the purpose of human rights is to protect individuals, and to ensure that people are treated with respect (Haocai & Gongde, 2012).

Groups of people vary in relation to being able to enjoy the full benefits of their rights. Marginalised groups such as women, children, the poor and disabled people can be denied some of their rights. Enable, the UN’s programme for people with disabilities, states that,

full participation in the basic units of society, family, social groups and community is the essence of the human experience. The right to equality of opportunity...is set forth in the Universal Declaration of Human Rights and should apply to all people, including those with disabilities. (2000, p. 5)
People with disabilities across the world are regularly being excluded from the society and, in some jurisdictions, even need to fight for their right to life. Prior to the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), disabled people come under the regular Human Rights Convention. However, they were still denied most of their human rights. The United Nations Convention on the Rights of Persons with Disabilities commenced operation in 2008; it empowered organisations of people with disabilities and disabled scholars (Harpur, 2012). Disabled people were able to voice their concerns about how the society was creating barriers for them to fully exercise their rights. What disabled people wanted was for society to recognise their rights as citizens (Coleridge, 1993). As citizens with rights, they have the right to equally participate in all activities of the society.

1.6 International Policies
Several international policies also support the rights of disabled children as individuals who deserve respect, and the opportunity of equally participating in the society. The Convention on the Rights of the Child and the Salamanca Statement make it clear that every child needs to be educated. It is also the obligation of the state to uphold these rights.

1.6.1 Conventions on the Rights of the Child
In 1989, world leaders decided that children under the age of eighteen or who were still under their parents’ care needed a special convention. By November 2009, 194 countries had ratified and accepted the Convention on the Rights of the Child (CRC). It was the first legally binding international instrument to incorporate the full range of human rights for children – civil, cultural, economic, political and social rights. The convention was written because it had become clear that children were abused and mistreated. It was written to protect and show that children had their rights as human beings. The convention is founded on
respect for the dignity and worth of each individual regardless of race, colour, gender, language, religion, opinions, origins, wealth, birth status, or ability. Therefore, it applies to every human being around the world (UNICEF, 2011). One of those rights in this document is the right of all children who are of school age to be educated. Avramidis, Bayliss and Burden (2000b) clearly outlined that there were several United Nations policies written affirming the right of all children, regardless of race, gender or degree of ability, to be treated with respect and included in mainstream schools at all levels.

In the 1990s, driven by two major international conferences held in Jomtien, 1990, and Dakar, 2000 (UNESCO, 2001 as cited in Ainscow, 2005), programme Education for All (EFA) was created. It was set around international policies, mainly coordinated by UNESCO, and created to increase access to and full participation in education (Ainscow, 2005). The conference held in Jomtien was particularly significant because it recognised that great numbers of people especially groups of people that were regarded as vulnerable and marginalised were not included in education systems worldwide. Even though the concept of inclusive education was not mentioned at the Jomtien conference it was a landmark in the development of thinking about inclusive education (UNESCO 2000, expanded commentary on the Dakar Framework for Action, para. 19, as cited in Miles & Singal, 2010).

The 2008 EFA Global Monitoring Report showed that substantial progress had been made in enrolment of children in schools in the developing countries. However, over 69 million children were still not in school, quality of education was low and various noteworthy issues such as social, geographic and other inequities remained, including those associated with disability (UNESCO, 2007, 2011 as cited in Bines & Lei, 2011).
1.6.2 Salamanca Statement

The Salamanca Statement and Framework for Action came into existence in 1994 during the World Congress on Special Needs Education in Salamanca, Spain. It was adopted by 92 governments and 25 organisations. The Salamanca Statement was the first to bring children with disabilities out from the back, and it placed them in front. It went on to outline inclusive education as the vehicle for the strategies first outlined in EFA.

It emphasised the need and importance of providing education for individuals with special educational needs inside the regular educational system. UNESCO, (1994) claims that:

> every child has the fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning.… [T]hose with special educational needs must have access to regular schools which should accommodate them within child centred pedagogy capable of meeting these needs. (as cited in Terzi, 2008, p. 21)

Furthermore it outlines that admission to regular schools is the fundamental element towards equalisation of opportunities:

> inclusion and participation are essential to human dignity and to the enjoyment and exercise of human rights. Within the field of education, this is reflected in the development of strategies that seek to bring about a genuine equalisation of opportunity. (Cited in Terzi, 2008, p. 21)

Through an inclusive education framework EFA would move forward (Hunt, 2011). Finally, education will combat discrimination, unequal opportunities and in return will create a society that is able to receive people with disabilities (Terzi, 2008). The education of people with disabilities will mean people with disabilities will have opportunities to participate in the work force and be able to live an independent life.
1.7 Rationale

Inclusive education is still a new concept for many in Papua New Guinea. It was introduced quite recently into the country. Given that a majority of the country’s population live in rural areas and that most children with disabilities reside there, inclusive education provided a possible way of reaching them. As many children with disabilities do not receive education, it was seen that through the regular school system children with disabilities would be able to receive quality education. Therefore, to support the inclusive programme teacher institutions were called on to offer courses in special education. So in 1993 special education courses were offered in teacher institutions. Training in special educational programme was necessary for teachers; it prepared them to cope with and provide education for children with disabilities (Vlaardingerbroek, Tottenham & Leach, 1994).

However, there were still problems at the school level; most teachers were not willing to include students with special needs, even those who had gone through special education training. Such attitudes create barriers for children with disabilities to receive quality education, and appear to play a major role in exclusion of children with disabilities in mainstream schools. Therefore there is a need to identify factors that influence teachers’ attitudes, and address them.

Equality of opportunities for all people starts with being educated. Education opens up a whole new opportunity for children with disabilities. Quality education matters because it can make the dream of equal opportunity real and it eliminates discrimination. Education has the power to liberate disabled people; it opens up the door to a society that does not demoralise disabled people (Galbraith, 1996). The success of inclusion depends on the government, the Education Department, resource personnel in resource centres and, significantly, teachers who work in the classroom.
1.8 Significance of the Study
This study focuses on the attitudes of teachers to inclusive education in rural elementary schools of Goroka, Eastern Highlands Province. Very little research has been done on this topic, and this study was the first of its kind done in Goroka. The study is significant for a number of reasons. Firstly, it investigated teachers’ knowledge about inclusive education, particularly whether they understood the concept of inclusive/special education. Through gathering their collective views, an informed judgement was able to be made about why teachers may have negative attitudes towards inclusion. Secondly, the study brings to light factors that influence their attitudes. Thirdly this study may indirectly act to raise awareness of teachers in the elementary schools who were previously unaware or may have overlooked the rights of children with disabilities. Finally, it is hoped that the study will contribute to overall knowledge about inclusive/special education in Papua New Guinea.

1.9 Scope of the Study
The study was a case study of three rural elementary schools in Goroka rural district, Goroka, Eastern Highlands Province, Papua New Guinea. It is expected that similar results might be found in other rural elementary schools in Goroka, Eastern Highlands Province, but some results may not be generalised to urban and rural elementary schools in other parts of Papua New Guinea. However, some aspects of the results may be generalised to other elementary schools in Papua New Guinea (Denscombe, 2007 as cited in Bell, 2010).

The initial plan was to interview ten participants. However, only seven participants took part in the study for reasons outlined later. Participants were engaged in an individual open-ended semi-structured interview. Open-ended semi-structured interviews were used to collect data and selected participants were observed in class. The schools and participants selected were considered to be a homogeneous group, as using homogeneous groups restricted the findings to that particular group. External validity of the study was reduced (Ary, Jacobs,
Razavieh, 2002), however, and care must be taken when generalising the findings of the study to other rural elementary schools in Goroka and other centres of Papua New Guinea.

Prior to the researcher going into the country to do the study the National Department of Education in Papua New Guinea and the Department of the Education in Eastern Highlands Province were informed about the study. Participating schools also received letters informing them about the study (see Appendices A and B).

1.10 Overview of the Thesis
Chapter Two presents relevant literature on the development of inclusive education and teacher attitudes towards inclusive policies. It explains the difference between integration and inclusive education, and defines inclusive education. Attitudes are also defined, and there is an explanation about why attitudes are important and need to be studied. The chapter outlines factors that influence teachers’ attitudes towards inclusive education, and summarises Papua New Guinea’s policy on inclusive education.

Chapter Three looks at the research methodology and method used for the study, and discusses the approach and the reasons for choosing this framework. Chapter Four presents the data analysis and findings. Chapter Five discusses the findings of the study; and the study is concluded with the summary of its findings together with its implications, recommendations and limitations.
CHAPTER TWO:
LITERATURE REVIEW

2.0 Introduction
On the assumption that successful implementation of inclusive education policy largely depends upon educators, studies of teachers’ attitudes have been carried out internationally in educational institutions to understand why some teachers continue to hold negative views about inclusion (Avramidis & Norwich, 2002). This chapter will specifically investigate research literature related to inclusion and attitudes of teachers. It will also review the literature on factors that influence teachers’ attitudes towards inclusion in mainstream schools.

Section 2.1 looks at the transition from integration to inclusive education. It presents the difference between integration and inclusion, and it defines inclusion. Section 2.2 briefly gives an overview of the importance of education, while Section 2.3 defines attitude, and why it is important to study attitudes. Section 2.4 presents the factors that influence the attitudes of teachers towards inclusion. This section will address factors such as: teacher training, teaching experience, gender, physical environment, class size, resources/materials, and types of disability. Section 2.5 considers some effects of cultural belief and geography on inclusion. Finally, section 2.6 looks at Papua New Guinea’s Special Education Policy. This chapter ends with a summary of the chapter (Section 2.6).

2.1 From Integration to Inclusion
There has been a significant shift around the globe from segregated schools to inclusion of disabled children into mainstream schools (Mittler, 1993; Parasuram, 2006). Kisanji (1995) says “This is in fact a story of changing attitudes towards people with disabilities; from private tuition, institutions, special schools to integration and now gradually to inclusive education” (pp. 2-3). As attitudes changed towards disabled people the realisation that disabled children needed to be educated in regular schools, like every other child, began to emerge. Today the
The inclusion of disabled children in mainstream schools is an important goal for many countries (Parasuram, 2006).

The notion of including disabled children in regular schools has had a long history, especially in developed countries (Rakap & Kaczmarek, 2010). Prior to integration and inclusive practices, children with disabilities were segregated from non-disabled children and from society as well. They were taught in institutions that were built specifically for them and had everything that they needed. However, over the last century as the Human Rights Convention, Conventions on the Rights of Children, and other documents came into the picture; the realisation that every human being had rights took hold. That was when the idea of the integration of children with special needs arose.

The idea behind integrated education and practice is not a twentieth-century innovation but was advocated in 1810 by Johann Wilhelm Klein in Austria. He helped teachers in preparing guides for blind children in their classes. This led to the issuing of a policy statement on integration in 1842 (Kisanji, 1995), but it was not popular at that time. Concerns about integration and inclusion emerged again around the time of the civil rights movement in the United States (US) in the 1960s and in the early 1970s civil rights legislation opened the door for all children with special needs to receive education and to participate equally in all activities of the school (Thomas, 1997). It was not until the early 1980s after the longstanding segregation of disabled learners in special schools that integration into mainstream education became an alternative, mainly in Western countries (Miller, 1992).

Disabled children were integrated into non-specialised schools to work alongside their non-disabled peers, but often without the support necessary for their full participation (Loreman, Deppeler & Harvey, 2005). Integration was perceived as still having exclusionary practices because of its characteristics. Therefore, with
UNESCO’s Sala manca Statement and Framework for Action on Special Needs Education (1994), the idea for inclusion replaced the concept of integration (Michailakis & Reich, 2009).

The Salamanca Statement and Framework for Action on Special Needs Education (1994) regards mainstream schools with inclusive orientation as “the most effective means of combating discriminatory attitudes and, moreover, to provide an effective education to the majority of children and improve the efficiency and ultimately the cost effectiveness of the entire education system” (UNESCO, 1994, p.ix). Inclusive education opened up doors for disabled children to receive quality education in their own neighbourhood schools. To those in the rural areas it gave them an opportunity to receive education that was once denied to them.

2.1.1 The Difference between Integration and Inclusion

Inclusion was formulated on the notion of an equal society, especially as this applied to reforms in institutions (Vislie, 2003). The concept of integration and inclusion developed from a social model view of disability: society needed to change in order to include those with disabilities. Segregation, on the other hand, came from a medical perspective of disability. It gave a view that children with disabilities were incapable. By the late 1980s the term inclusion replaced integration in the vocabulary of special educators (Thomas, 1997). Although the terms integration and inclusion are often used confusingly (Mittler, 2008), there are considerable theoretical differences between them in terms of their values and practices.

Integration and inclusion do not mean the same thing; inclusion follows from integration but they differ from each other. Integration calls for the child to make adjustments to the requirements of the school, in order to fit into the school (Thomas, 1997). Integration rests on what Lipsky and Gartner (1996) called a ‘readiness’ model. It means that disabled children have to prove their capacity to be included in regular school settings, rather then the schools being prepared to
accept and include them. There participation depends entirely on what they are able to do for themselves, rather then the school providing the necessary support for them to be involved. Integration was not full placement into regular schools. It was referred to as, Polat (2011) states “the partial or full physical placement of disabled learners in mainstream schools...” (p. 50). Physically children with special needs are present, in the school but there participation is restricted to very few activities that happen in class and in the school as a whole.

For Ainscow (1995), “integration means going to school (as a visitor) while inclusion means participating in school life” (as cited in Mushoriwa, 2001, p. 142). Inclusion means more than just being present and being part of some activities, it means to be fully included in all activities. Loreman et al. (2005) describe integration as:

- educating children part time in schools and part time in regular classes,
- educating children in special, mostly segregated, environments in regular schools,
- educating children in regular class, but requiring them to follow substantially different courses of study in terms of content and learning environment to their peers (unless all children in the class follow individualised programmes). (p. 2)

In contradiction to integration, inclusive practice puts the responsibility on the school. This means that to effectively implement the inclusive policy schools have to make adjustments to the physical environment as well as the curriculum in order to accommodate their disabled students (Loreman et al., 2005; Mushoriwa, 2001; Thomas, 1997). In line with a social model approach, inclusive practices in schools make certain that every child belongs and is fully involved in the school (Thomas, 1997). Simply enrolling disabled children in mainstream schools without preparing the physical environment, including providing appropriate resources and materials, will not lead to meaningful inclusion. According to Sebba and Ainscow (1996), inclusion:
is a process (rather than a state), by which a school attempts to respond to all pupils as individuals;

- regards inclusion and exclusion as connected processes; schools developing more inclusive practices may need to consider both;

- emphasises the reconstructing of curricular provision in order to reach out to all pupils as individuals;

- emphasises overall school effectiveness;

- is of relevance to all phases and types of schools, possibly including special schools, since within any educational provision teachers face groups of students with diverse needs and are required to respond to this diversity. (Cited in Vislie, 2003, p. 21)

Many educators confusingly regard integration as the same as inclusion, but looking at the characteristics of each clearly shows that they are not similar in practice. However, though different in practices, integration and inclusion share the same outcome, and that is to give all children as normal an education as possible in the mainstream school settings (Thomazet, 2009).

### 2.1.2 What is Inclusive Education?

Inclusion does not restrict who should be included and who should not be included in the mainstream schools. Inclusion is about a philosophy of acceptance and providing all children an equal opportunity to education (Thomas, 1997; Coşkun, Tosun& Macaroğlu, 2009; Abbot, 2006). Booth (2005) states “inclusion is about increasing participation in, and reducing exclusion from, the curricula, cultures and communities of local education settings” (p. 152). Inclusion aims to give clear support to disabled people and to minimise exclusionary practices within the society.

The fundamental principle of inclusive education is that all regular schools should accept and provide education for all children. Schools should provide education by adapting to the needs of each individual child (Sosu, Mtika & Colucci-Gray,
Inclusive education is not concerned with only some learners but, as stated in UNESCO (2001), “inclusive education is concerned with all learners, with a focus on those who have traditionally been excluded from educational opportunities such as learners with special needs and disabilities, children from ethnic and linguistic minorities…” (as cited in Thomazet, 2009, p. 556). It is concerned about providing every individual the right to an education regardless of ability, gender, ethnicity or social class. All it is concerned with is to provide opportunity for all, including the less privileged, to be educated. Inclusive education calls for an education system that caters for all children.

According to UNESCO, 2007, “inclusive education…means that the school provides good education to all pupils irrespective of their varying abilities. All children will be treated with respect and ensured equal opportunities to learn together...” (cited in Coskun et al., 2009, p. 2759). It means full inclusion of children with diverse disabilities into mainstream schools. In relation to that adaptation needs to be made to the curriculum and to the physical environment, so that schools can cater for all children. Moreover, it is each school’s duty to be prepared to accept and include all its students (Artiles, Kozleski, Dorn & Christensen, 2006; Thomas & Vaughan, 2004; Ainscow, 2005).

Inclusive education involves changing values, attitudes of people, especially teachers and students, policies and the normal practices within schools (Polat, 2011). Inclusive education calls for an education system which does not discriminate but welcomes all individuals, providing support and services so that every child benefits equally. According to UNESCO (1994) documents, inclusive education:

- challenges all exclusionary policies and practices in education; is based on a growing international consensus of the right of all children to a common education in their locality regardless of their background, attainment or disability; aims at providing good-quality education for learners and a community-based education for all. (As cited in Vislie, 2003, p.18)
Inclusive education starts from the assumption that all children have an equal right to be educated in regular schools and to participate equally in activities, irrespective of their differences (Moran, 2007). Inclusion is based on the principle that every human being is equal. Therefore, inclusive practices in schools demonstrate the full meaning of equality. Inclusion of disabled children in regular classes not only gives opportunity for disabled children to attend school, it gives disabled children the opportunity to be part of the society and participate in it meaningfully. Most importantly, it provides them with skills and knowledge necessary to seek formal employment and contribute to their society (UNESCO, 2009).

2.2 The Importance of Education
For all citizens to play a substantial role in their society they need to be educated. Therefore, education is very important in that it creates opportunities for people to show what they are capable of, and to use this capacity in later life. However, unequal provision of education means unequal opportunities for people to effectively show their potential. Therefore, education should be equally available to all people, but especially to children, because it is very important for their future (Terzi, 2008). The mere experience of attending a school and participating in both academic and social activities enhances a child’s ability and knowledge and shapes their social values and personal dispositions (Kingston, Hubbard, Lapp, Schroeder & Wilson, 2003).

Education For All (EFA) is an international commitment to the idea that every individual can receive quality education. Education For All is based on concepts of human rights and on the belief that education is the central part of both individual well-being and the well-being of the development of the nation as a whole (Miles & Singal, 2010). It has been said that “education benefits not just children, but families and communities, and whole countries. It improves job chances and prosperity; promotes health and prevents disease” (Department for International Development, Her Majesty’s Treasury, 2006, Foreword, as cited in
Education plays a very important role in the lives of people. UNESCO (1990) states that education is required by “human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions...” (UNESCO, 1990, Article 1). Education provides life skills that are effective tools for empowerment and social transformation in the lives of people (Singh, 2010).

In summary, disabled children need quality education that prepares them to go out and live independently in society. Education is like a stage where plans for the development of countries are presented and, moreover, it is the key to human development. The denial of education to a disabled person is therefore damaging to the person as well as the society (Meredith, 2009). Being educated means one is more likely to be employed as employers favour the educated over the uneducated (Kingston et al., 2003). However, disabled children cannot thrive in life if teachers have negative attitudes towards them, and are not willing to include and teach them.

2.3 What is Attitude and Why Study it?

The term attitude needs to be defined so that we are aware of its meaning in relation to teachers’ attitudes concerning inclusive education. Attitudes as defined by Gall, Borg and Gall (1996) are “an individual’s viewpoint or disposition towards a particular ‘object’ (a person, a thing, an idea, etc...” (as cited in de Boer, Pijl & Minnaert, 2011, p. 333). A person’s attitude is made up of, as Loreman et al. (2005) point out, “groups of feelings, likes, dislikes, behavioral intentions, thoughts, and ideas we all have about people and things we encounter in our everyday lives” (p. 40). Teachers in mainstream schools have opinions about disabled children and inclusive education, and they make judgements based upon their feelings, and beliefs.

Therefore, Gibbs (2007) emphasises that, “in considering how to help educational systems become more inclusive, the nature of teachers’ beliefs and how beliefs
relate their consequent actions need to be understood” (as cited in Jordan, Glenn & McGhie-Richmond, 2010, p. 260). Teachers’ behaviours and actions towards inclusive education are influenced by their attitudes because the behaviour is the consequence of the attitude; however, this link is not always straightforward (Rajecki, 1982 as cited in Mushoriwa, 2001; Rot, 1994 as cited in Todorovic, Stojiljkovic, Ristanic & Djigic, 2011). Moreover, attitudes can serve the same purpose as stereotyping and categorising of people (Loreman et al., 2005). Yet attitude is an extremely important variable in the education of disabled children, and it is vital that teachers’ attitudes are studied, as they are important to the successful implementation of the inclusion policy (Parasuram, 2006).

Studies suggest that teacher attitudes are a significant contributing factor to inclusion of disabled children in mainstream schools (Ward, Centre, Bochner, 1994; Prasiner, 2003; Mayer, 2009; Hammond & Ingalls, 2003; Forlin & Chambers, 2011; de Boer et al., 2011). For an inclusive education programme to succeed and progress in a country, Mushoriwa (2001) states, “it becomes compelling to study the attitudes of teachers, towards inclusive education... since many educational programmes have been found to fail because of teachers’ attitudes” (p. 142). Teachers’ attitudes can support or hinder the implementation of inclusion in schools (Ččagran & Schmidt, 2011). Therefore, it is essential to study teachers’ attitudes and factors that influence those attitudes (Park & Chitiyo, 2009). If teachers hold positive attitudes to inclusion, then it encourages the establishment of policies that guarantee the right of disabled children to be educated in mainstream schools (Alghazo, Dodeen & Algaryouti, 2003).

However, teachers’ negative attitudes and prejudices may cause barriers to universal education for all children (Agbenyega, 2007). Attitudes are more likely to be influenced by factors within the school environment, and teachers’ own knowledge about disability. Therefore, it is worthwhile to identify these factors and address them accordingly (Parasuram, 2006).
2.4 Factors Influencing Teacher’s Attitudes

Studies carried out among principals, teachers, and teacher education students have revealed that they possess a positive attitude towards the notion of inclusion (Meredith, 2009; Avramidis, Bayliss & Burden, 2000a). However, they become reluctant when it comes to the actual implementation (Campbell, Gilmore & Cuskelly, 2003). Several studies previously pointed out in this review suggest that teacher attitude has a significant impact on the implementation of the inclusive programme but such a programme will be challenging if educators and schools are not supportive and committed to implementing the policy (Moran, 2007).

Therefore, there is a need to intervene to change the attitudes of teachers, so that they view inclusion positively (Campbell et al., 2003). Their attitudes as mentioned in numerous studies may be influenced by factors such as teacher training, teachers’ experience, gender, type of disability, physical environment, materials and resources, and class size (Singal, 2011; Coşkun et al., 2009; Ernst & Rogers, 2009). These will be covered more fully below.

2.4.1 Teacher Training

The child rights policy clearly mentions that all children have the right to be educated; however Hsien, Brown and Bortoli (2009) state “the commitment for all children to have equal rights, and access to an education in regular schools has direct implications for… teacher training for inclusion” p. 27). Teaching students with disabilities in an inclusive classroom is regarded as a challenge for teachers accustomed to teaching in the regular classroom (Coşkun et al., 2009). Moreover, Roody (1990) states, “teachers may feel challenged, hopeful, and desirous of what can be accomplished, but they may also feel frustration, burden, fear, lack of support, and inadequacies about their ability to teach children with different kinds of problems” (as cited in Shade & Stewart, 2001, p. 37). Therefore, quality and informative training in teaching special needs children during pre- and in- service training is considered a very important part of improving attitudes of teachers in mainstream schools for the effective implementation of an inclusive education policy (Avramidis & Norwich, 2002).
Numerous studies about teacher attitudes to inclusion of children with disabilities in mainstream schools have found that teachers need training in order to implement inclusive programmes (de Boer et al., 2011; Goodman & Burton, 2010; Forlin & Hopewell, 2006; Hammond & Ingalls, 2003). Studies by Avramidis et al. (2000b) in one local education authority in the south-west of England and another study by Avramidis and Kalyva (2007) in Greece showed that teachers with substantial training held positive attitudes and were more confident in meeting the needs of disabled students. Participants who saw themselves as having skills due to training appeared to have more positive attitude towards inclusion than their counterparts who did not have the skills.

Studies in Zimbabwe by Mutepfa, Mpofu and Chataika (2007), among Zimbabwean teachers, and Agbenyega (2007) in Ghana among 100 teachers from five ‘Inclusive Project’ schools and five Non-Project co-educational basic schools made similar their findings. They found that teachers perceived that their knowledge and skills were not sufficient to teach disabled children, and that they needed to enhance their teacher training, especially in inclusive education practices. Similar studies in the USA (Dupoux, Wolman & Estrada, 2005), India (Ahsana & Burnip, 2007), Australia (Forlin & Hopewell, 2006), Hong Kong (Ching, Forlin & Lan, 2007), and Fiji (Daveta, 2009) also reinforce the view that attitudes of teachers are influenced by their pre- and in-service training. Thus, the more knowledgeable teachers are, the more positive their attitudes towards inclusion.

Attitudes are influenced by information and knowledge about the disability, and the skills teachers possess in working with disabled children in mainstream schools (de Boer et al., 2011). Florian, Young and Rouse (2010) also state that “rather than defend the need to accommodate learner differences, we argue that a more just and equitable approach to meeting the needs of all learners can be supported by preparing newly qualified teachers to focus on improving the quality of what is generally available...” p.719). Further training of teachers in inclusive practices will be beneficial for them.
Finally, inadequate training will continue to reinforce in educators the belief that they have insufficient knowledge to implement inclusive education policy (Forlin & Hopewell 2006). Therefore, Dickens-Smith (1995), in her study of both regular and special educators, claims that “staff development is the key to the success of the inclusion programmes” (as cited in Avramidis & Norwich, 2002). Knowledge and skills in inclusive practices are very important for the implementation of an inclusive policy (Opdal, Wormnæs & Habaye, 2001).

2.4.2 Teaching Experience

Teachers’ attitudes vary according to their personal teaching experiences. Their attitudes are affected by whether they have taught a child with disability, have had training in special education, and whether they have become knowledgeable and confident after teaching for many years.

Years of teaching experience is found to be a significant contributing factor towards teachers’ attitudes regarding inclusion (Parasuram, 2006; Forlin; 1995). Teachers with less experience tend to have a positive view on inclusion while on the other hand those with much experience have negative views towards it.

Younger teachers who have less experience in teaching have positive attitudes towards inclusion (Coutsocostas & Alborz, 2010; Jerlinder, Danermark & Gill, 2010). However, some studies found that older teachers too had a positive attitude. For example, Rakap and Kaczmarek (2010) found this in their research. These older teachers had positive attitudes most probably because they had had some experience teaching disabled children. Several other studies in different countries had similar findings. For example, researchers working in the USA (Smith, 2000), and India (Parasuram, 2006) both found that teachers in ages ranging from 20-30 years and those 51 years and above held positive attitudes, while the age group between, of 31-50 year olds, held negative attitudes. However, a more recent study by Todorovic et al., (2011) discovered that teachers
with more experience were more resistant towards inclusive education since they had worked in a time when the educational system was different.

Other recent and older studies have found that teachers who have had experience in teaching children with disabilities have positive attitudes towards inclusion (Ernst & Rogers, 2009; Avramidis & Kalyv, 2007; Leatherman & Niemeyer, 2005; Bender, Vail & Scott, 1995). The experiences and exposure that teachers had regarding disabled students had influenced their attitudes. Opdal et al., (2001) also indicated in their study that exposure to and experience with disabled children had modified teacher attitudes. Studies by Forlin, Loreman, Sharma and Earle (2009) among pre-service students showed that those who had previous training and involvement in teaching disabled children held positive attitudes; similarly Alghazo (2002) also found that special education teachers were more positive towards inclusion because they had experience and skills to work with the disabled children. This evidence seems to indicate that teachers’ negative or neutral attitudes change over time with experience through the process of implementation (Avramidis & Norwich, 2002).

Other studies show that not all experienced teachers have positive attitudes. Lampropoulou and Padelliadu (1997) carried out a study among 297 teachers in schools in Greece. Their sample included mainstream teachers, special education teachers, and teachers of the deaf. They found that those with more experience in teaching disabled children held less favourable attitude towards inclusion than those with fewer years of experience. This suggests that being experienced and knowledgeable in inclusive education does not necessarily develop positive attitudes.

Furthermore, some studies revealed that special education and deaf teachers had more negative attitudes towards inclusion. Leyser and Tappendorf (2001) found that experienced teachers had negative attitudes. Their main concern was whether disabled students would receive all necessary services and support in mainstream schools. Because special education and deaf teachers know and have experienced
the difficulty of teaching disabled students they are not sure that mainstream schools and teachers can provide effectively for pupils with disability.

The studies show that teaching experience and age do influence attitudes; however, some studies have revealed that it is not consistent across every teacher. For example, findings suggest that regular teachers who have had previous experience in teaching disabled children, including the special education teachers, hold positive attitudes (Van Reusen, Sho ho, Barker, 2000; de Boer et al., 2011; Nietfeld & Wilkins, 2004). However, other studies contradict these findings; for example, Cook, Semmel and Gerber (1999) found that the special education teachers in their study had negative attitudes towards inclusion. Other studies have found no significant difference in teacher attitudes in relation to the teachers’ work experience in mainstream schools (Memisevic & Hodzic, 2011; Dupoux et al., 2005; Annemaree, Forlin, & Jobling, 2003). For example, Van Reusen et al., 2000) found no significant relation between teacher attitudes and age and teaching experience.

### 2.4.3 Gender

With regard to gender, too, research evidence appears inconsistent. In some studies it has been noted that female teachers have a positive attitude for inclusion of disabled children in mainstream schools, unlike male teachers (Avramidis & Norwich, 2002). This is perhaps because females as mothers are more sympathetic to disabled children (Alghazo & Gaad, 2004). Studies by Alghazo & Gaad (2004), Avramidis et al., (2000a) and Leyser and Tappendorf (2001) all had similar findings.

However, several past and recent studies have found the opposite, with male teachers showing more positive attitudes than females (Lampropoulou & Padellia du, 1997; Ernst & Rogers, 2006; Rakap & Kaczmarek, 2010). Batsiou, Bebetsos and Antoniou (2008) found that male teachers from Cyprus had positive attitudes, unlike the female teachers. Moreover, Forlin et al., (2009), in a study of
pre-service students found that male students reported positive attitudes after their experience. On the contrary, a study in seven colleges and universities by Hodge (1998) in the US found that male teachers, even experienced, did not have positive attitudes towards inclusion.

Other studies, however, did not find much difference between the genders (Carroll, Forlin & Jobling, 2003; Opdal et al., 2001; Memisevic & Hodzic, 2011; Chireshe, 2011), and one, a study by Alghazo et al., (2003), found that neither female nor male teachers had positive attitudes towards inclusion. Studies seem to show, then, that there is no consistent relationship between gender and teacher attitude to working with disabled children.

2.4.4 Physical Environment

Any policy of inclusion can be seen as part of a human rights agenda; therefore, the policy requires that access to and equality regarding education for all students’ needs are to be met (Florian, 2008). The physical environment of the school, including buildings and the school area, could be barriers for inclusion.

Infrastructure, as suggested in some studies, is found to be a reason why teachers are reluctant to include pupils with disability (Singal, 2011; Meredith, 2009). A pleasant physical environment and a supportive infrastructure are likely to improve access to education for all children (Polat, 2011). Buildings and classroom layout should be structured to accommodate students with disabilities. The physical designs of some school buildings are very likely to hinder access for pupils with disability (Abbot, 2006). For example, Daveta (2009) found in her study that inadequate facilities, including the general structure of school buildings and school compounds, were identified by teachers as contributing factors to the non-inclusion of students with disabilities. Similarly, Opdal et al., (2001) found in their study that 90% of participants suggested that schools should change in terms of the buildings and classroom sizes, and should have
electricity and supply special desks and other furniture to be suitable for inclusion.

The unsuitable physical environments in mainstream schools, with inaccessible buildings and classroom spaces, have contributed to teachers’ attitudes (Evans & Lunt, 2002). Providing a supportive physical environment is therefore crucial for the successful implementation of the inclusive policy (Jerlinder et al., 2010).

2.4.5 Time (workload and class size)

Time is another important factor that influences teachers’ attitudes. For favourable attitudes towards inclusive education (Ross-Hill, 2009), teachers require smaller class sizes, so that they can spend more time with each student.

Several recent studies have found that large class sizes are a concern for teachers in mainstream schools. Teachers should have fewer children in their class if disabled children are included (Cousins & Thomson, 2001; Adera & Asimeng-Boahene, 2011; Vuran & Varlier, 2006; Lambe & Bones, 2008). A study in Ghana and Botswana showed that teachers had concerns about class sizes, especially for teachers in Ghana, where the teacher: students ratio is 1:45-60 (Kuyini & Mangope, 2011). Similarly, Forlin and Chambers (2011), in their study among pre-service students, found that the students were primarily concerned with the increasing workload that they would have with larger classes and having to include a disabled child as well. In such large classes teachers may not want to include a disabled child because of the extra workload, and moreover they will not want to spend too much time with one student (Scruggs & Mastropieri, 1996). They would require more time to plan Individual Education Plan (IEP) programmes for the disabled child as well as plan for the whole class (Avramidis et al., 2000a, Rakap & Kaczmarek, 2010). A survey by Buell, Hallam, Gamel-McCormick and Scheer (1999) of general and special education teachers showed that adequate class size was a particular concern of the general education teachers.
With the workload they already have teachers see that it sometimes becomes too difficult to have a disabled child in class (Coşkun et al., 2009). Moreover, non-specialist teachers in mainstream schools feel that teaching children with disabilities is too much to ask of them (Minke, Bear, Deemer & Griffin, 1996), when they already have their hands full; therefore, inclusive practices to be successful the issue of workable class sizes needs addressing. If all students are to benefit from an inclusive environment, we must create and maintain appropriate classroom size (Short & Martin, 2005), so that teachers have ample time to spend with each child.

2.4.6 Resources and materials

It is evident in past and present studies that resources, materials, equipment and an inclusive curriculum are also determinants of teacher attitudes towards inclusion and inclusive practices (Scruggs & Mastropieri, 1996; Mapesa, 2006; Chireshe, 2011). Many teachers do not support inclusion without resources (Minke et al., 1996). The lack of instructional and other educational resources presents roadblocks to a teacher’s efforts to include all learners (Adera & Asimeng Boahene, 2011), resulting in regular classroom teachers being unwilling to include and teach disabled children.

Teachers with positive attitudes have outstanding impacts on both able and disabled children’s learning (Sosu et al., 2010). However, when there is a shortfall in materials and equipment, disabled students are severely affected. For most developing countries lack of sufficient and appropriate resource materials is a common phenomenon (Ahsana & Burnip, 2007). For example, studies in Africa (Agbenyega, 2007), in which teachers’ attitudes were examined in regard to inclusive education, and similar studies by Memisevic and Hodzic (2011), who studied teachers’ attitudes towards intellectually disabled students, yielded similar results. These clearly showed that teachers were concerned about the resources they would need in order to implement inclusive education. Studies among certified teachers and student teachers in Fiji (Daveta, 2009), Papua New Guinea (Mapsea, 2006), and Hong Kong (Ching et al., 2007) had similar findings.
Interestingly, studies carried out in developed countries such as Northern Ireland (Lambe & Bones, 2008), West England (Avramidis et al., 2000a), and an Australian and US study (Scruggs & Mastropieri, 1996) all found that teachers indicated the need for resources and materials to enable them to implement inclusive education successfully; however, their situation may be less serious than in developing countries.

Furthermore, some studies suggest that the curriculum seems not to be inclusive. One study by Wehbi (2006) on challenges faced in inclusive education in Lebanon found that the curriculum was not adapted to cater for varying needs of children. Similarly, teachers in Zimbabwe indicated that the curriculum was examination oriented, and thus failed to support inclusive education. For inclusion to succeed modification of the curriculum is vital (Memisevic & Hodzic, 2011).

Finally, findings from Praisner’s (2003) study emphasised the importance of high quality inclusive programmes, rather than students with disabilities being simply abandoned in mainstream classes. Quality inclusive programme implementation may become a problem if teachers do not have the resources necessary to assist them in implementing the policy. Availability of such resources is the basis for equality of opportunity in the education process. It enriches the learning process and makes learning concrete (Coşkun et al., 2009).

2.4.7 Type of Disability

Recent findings have also suggested that teachers’ attitudes towards inclusion are influenced by the type and severity of disability (Avissar, Reiter & Leyser, 2003; Cook, 2001, 2004; Kim, 2011).

Studies have found that educators prefer inclusion of students with mild or moderate disabilities over severely disabled students (Scruggs & Mastropieri, 1996; Taylor, Richards, Goldstein & Schilit, 1997; Forlin & Chambers, 2011;
Most studies seem to show that emotional, behavioural, and intellectually disabled children are least favoured for inclusion by regular classroom teachers. Research by Jobe, Rust and Brissie (1996), in which 500 mainstream classroom teachers in the USA participated, showed that teachers were more willing to accommodate children with physical disabilities than those with cognitive, emotional, and behavioural disabilities. Furthermore, a study of student teachers’ attitudes towards the inclusion of children with special needs showed that the student teachers rated emotionally and behaviourally disabled children as likely to have more negative impact on everyone in school (Hastings & Oakford, 2003). In addition, it was also found to be more demanding to control these children in class and in school (Ččagran & Schmidt, 2011).

Contrary to findings reported in some studies, children with sensory impairments, sight, and hearing are not necessarily supported for inclusion (Kuyini & Mangope, 2011). In Ghana a study by Agbenyega (2007) found that teachers believed that those with sensory impairments should not be in regular classes and would rather they were educated in existing special schools. The result was also similar in research completed by Praisner (2003) and Todorovic et al., (2011), with both studies showing that teachers were not accepting of the idea of including children with impairments such as those of sight and hearing, and with intellectual inability. However, they were less resistant to other disabilities such as physical impairments.

Conversely, Lifshitz, Glaubman and Issawi’s (2004) study showed that teachers expressed willingness to include pupils with sensory, mild physical, and health problems, provided that they did not require too much assistance. Participants in a study carried out by Opdal et al., (2001) strongly supported students with physical disabilities being included in mainstream schools, while Ččagran and Schmidt’s (2011) study among Slovene teachers found that teachers were in favour of including children with physical disabilities. On the contrary, Lanier and Lanier (1996) reported from their findings that teachers were not welcoming to the presence of physically disabled children.
There may be many other reasons why teachers are not willing to include disabled students. One reason found by Smith (2000), in a study conducted among secondary teachers' perceptions of inclusion of students with severe disabilities, showed that teachers did not feel they had adequate knowledge to teach such students. Memisevic and Hodzic (2011) in their study regarding teachers’ attitudes towards inclusion of students with intellectual disability in Bosnia reported that only 24.2% of the teachers agreed with the statement that “They have sufficient skills and training for teaching children with intellectual disabilities”, while 48% disagreed. Additionally, Koutrouba, Vamvakaria and Steliou (2006), in a study of 245 teachers working in schools in the four provinces of Cyprus, found that teachers were “in favour” of including students with motor, hearing, emotional and behavioural problems in regular schools only so long as extra supportive teaching and equipment were provided.

In conclusion, there is inconsistency in the attitudes of teachers regarding the type of disability they feel confident working with. The studies clearly reveal that teachers have different perceptions of various disabilities. Avramidis et al., (2000b) state that “teachers are not prepared to meet the needs of students with significant disabilities and…the severity of the disability presented to them determines their attitudes” (p.280). Skills training may be needed for specific disabilities in order to build teachers’ confidence in their ability to include and teach all children.

2.5 Effects of Cultural Belief and Geography on Inclusion

Cultural Beliefs
Culture is a wide concept that contains within it the forms of knowledge, belief systems, languages, religions, and values of a society. The literature reveals that each society has cultural beliefs regarding the cause of disability (Simi, 2008; Faamanatu-Eteuati, 2011). In each culture people have their own explanations for why some babies are born with disabilities (Kisanji, 1995; Groce, 1999).
A study based in a multicultural metropolis community of 31 Euro-American undergraduates and 17 international graduate students in a teacher training programme found a variety of responses to the question “What are some examples of cultural beliefs that people have may regarding the cause of childhood disability?” Included were beliefs that reflected the role of supernatural, cosmic and divine causes, and fate, as well as biomedical reasoning (Lamorey, 2002; Danseco, 1997). For example, health beliefs in India have been described as holistic, incorporating physical, psychological and social factors and the supernatural (Edwardraj, Mumtaj, Prasad, Kuruvilla & Jacob, 2010).

Some of the myths are so shaming that parents try to hide their disabled child. This may be a reason why local teachers in Papua New Guinea are not willing to include them. Half of the teachers interviewed by Mapsea (2006) in PNG’s Southern Highlands Province felt that culture had an impact on inclusion of children with special needs in regular schools. Samoans have a strong culture and their religious beliefs greatly influence the way they do things. One of their beliefs is that disability is a result of a sin or wrong-doing by the parents (Faamanatu-Eteuati, 2011). However, a study completed by Huer, Saenz and Doan (2001) in a Vietnamese community in America revealed that participants believed that it could not be assumed that disability is a punishment from God.

In conclusion, it is necessary to understand traditional beliefs, attitudes and practices towards disability, whether they are positive or negative, in order to effect change in people’s attitudes (Groce, 1999). Disabled people and their families are affected by the stigma of disability in many societies. Therefore awareness raising and public education are key ingredients to changing attitudes. Awareness of the facts of disability while also taking into account cultural beliefs, support services and what disabled children are capable of could encourage parents to send their child to school instead of hiding them at home (Westbrook, Legge & Pennay, 1993).
Geographical Location

Not all studies of inclusive education directly referred to geography as an obstacle. However, some studies clearly showed that a remote/rural location impedes services for its population (Bull, Krout, Rathbone-McCuan, & Shreffleev, 2001; Williams, Martin & Hess, 2002). Those mainly affected are people living with disabilities.

In some remote or rural societies government services are scarce. Basic infrastructural facilities like bridges, hospitals and roads are often not available or have deteriorated. Many people living with disabilities in these areas face difficulties in accessing basic services. Geographical barriers such as mountains or the distances between their homes and the cities and towns create challenges in providing services for children with disabilities (Williams et al., 2002).

Likewise transportation to and from special schools which are mainly located in towns and cities is often too costly. It is likely that the only type of transportation would be an automobile, which very often are inaccessible for people with disabilities (Reeves, 2003; Gething, 1997; Bull et al., 2001). Teachers in rural schools may be reluctant to practise inclusion because of the limited transport resources. However, interestingly, Deng’s (2008) research on attitudes of teachers towards inclusive education in rural and urban China found that teachers in the rural areas showed positive attitudes towards inclusive education, probably, the researcher thinks, because of the difficulty in transportation to special schools, which are located in urban centres. Moreover, Mapsea (2006) found in his study in Papua New Guinea that 33% of respondents of a questionnaire and eight interviewees said that geography was not an issue. However, a large majority of the participants considered it the reason why many children with disabilities did not attend school. Additionally, a study in rural areas in Guatemala by Grech (2008) found that inadequate roads and school facilities hindered attendance of children with disability, and it was found that no schools in the area were accessible for these children.
In most so-called developing countries resources in rural areas are inadequate and most services are not provided. Mainstream schools in most rural areas are not adequately resourced to cater for the needs of diverse children (Arbeiter & Hartley, 2002). A study in Fiji also saw that schools other than those in the main towns and cities were not adequately resourced to cater for children with disabilities (Daveta, 2009). However, there is not sufficient evidence directly relating to geography as a cause of non-inclusion. Because the literature is scanty conclusions cannot be drawn.

2.6 Papua New Guinea’s Special Education Policy

It is estimated that about 10-15% of PNG’s population have some form of disability (Department of Community Development, 2009). There are a number of international conventions to which the Government has given its support and endorsement. These include: the United Nations Declaration of Human Rights (1962), the United Nations Convention on the Rights of the Child (1989), Education for All (United Nations Declaration 1990), and the Beijing Declaration (1995). In line with these policies the Government of Papua New Guinea has developed a number of policy documents for the country.

One of these is the National Special Education Policy on Disability. The National Special Education Policy on Disability underpins six principles that address the issue of an inclusive society for disabled people. In the National Policy on Disability document (2009) Objective 11 clearly requires “improved access to mainstream education at all levels” (p.41). The Millennium Development Goal 2 of the country intends to “achieve universal primary education the policy calls for inclusive education particularly advocating for access to primary education for all children including children with disabilities” (p.20). Even though these initiatives call for the improvement and access to primary education for all children in schools, “there seem to be gaps in the policy and provision, and disability remains a significant factor in exclusion from schooling” (Bines & Lei, 2011, p. 419).
In Papua New Guinea, primary schools are located within the communities and the government has also made education accessible by having elementary education located right in the villages of each community, thus making education accessible for all children to attend school. However, “access without quality leaves the education system vulnerable, as this would negatively affect access and achievement as well as fail to meet the goals of equity and justice...and children with disabilities continue to be marginalised” (DFID, 2002, as cited in Polat, 2011, p. 53). Though education is provided right at their doorstep, many children with disabilities in Papua New Guinea do not attend school or leave without completing a full academic programme for the year.

2.7 Summary of the Chapter

The literature reviewed provides background information on integration and inclusion. The chapter also outlined the difference between integration and inclusion, defined inclusive education, and presented a brief account of the importance of education. The literature also provides information on the definition of attitudes and why it is important that attitudes of teachers are studied, including the factors that influence teachers’ attitudes towards inclusion of disabled children in regular schools.

Finally, the chapter looked at the policy of special education in Papua New Guinea. Informed with the literature, this research endeavours to examine factors that influence teachers’ attitudes towards inclusion of disabled children in Papua New Guinea’s rural elementary schools. The factors that influence those attitudes are important to be studied as they can provide insights into why the majority of disabled school aged children in Papua New Guinea are being denied education in the mainstream elementary schools.
CHAPTER THREE: 
RESEARCH METHODOLOGY

3.0 Overview of the Chapter
This chapter provides a detailed description of the methodology and methods that were used for this study and describes the process, techniques and procedures used. The chapter is divided into nine sections. In section 3.1 the theoretical framework for the study is presented. Section 3.2 presents the qualitative approach used in the study. Section 3.3 looks at the research methodology and the process. Section 3.4 looks at reliability and validity. Section 3.5 looks at the chronology of the research process. Section 3.6 presents participant selection. Section 3.7 presents the demography of the participants. Section 3.8 discusses the ethical considerations and the chapter concludes with a summary, Section 3.9.

3.1 Theoretical Framework of the Study
A theoretical framework provides focused viewpoint from which to examine an issue. It “is an explanatory device which explains either graphically or in narrative form the main things to be studied key factors, constructs or variables and the presumed relationships among them” (Miles & Huberman, 1994 as cited in Bell, 2005, p. 103). The current study was explored from the viewpoint of critical theory.

Critical theory was established by Marxist theorists (Mažeikienë & Ruškė, 2011; Rexhepi & Torres, 2011). It is concerned with a view of what behaviours to expect in a fair and equal society (Morrison 1995a, as cited in Cohen, Manion & Morrison, 2007). The theory “ holds up to the lights of legitimacy and equality issues of repression, voice, ideology, power, participation, representation, inclusion and interest” (Cohen et al., 2007, p.26). Researchers who use this theory operate under the assumption that knowledge gained from a study will represent an initial step towards addressing social injustice and promoting social change (Onwuegbuzie, Johnson & Collins, 2009). This theory is particularly applicable to promoting solutions to
problems and actually going further by making changes to the society for the good of all.

Various political movements concerned with people’s rights have facilitated the recognition of groups that are discriminated against. Critical theory allows for the empowerment of people with disabilities as it promotes recognition of the rights of all people as a core assumption. Constructing an environment that will suit all people and creating premises for their integration and inclusion in the world is therefore the aim of the critical view (Mažeikienė & Ruškė, 2011). On the basis of critical theory and previous studies on teachers’ attitudes towards inclusion, it was hypothesised that if factors that influenced teachers’ attitudes towards inclusion of students with disabilities were addressed there might be some improvement regarding inclusion of children with disabilities in elementary schools in Papua New Guinea.

Critical theory not only gives an account of the society and the behaviours, considers that a society must be based on equality and democracy for all (Cohen et al., 2007). This includes children with disabilities, who have the same rights as all other children to equally participate in education. The theory offered a lens through which the researcher examined the position of inclusion of disabled students in mainstream schools.

Many students with disabilities are capable of contributing to their own development, their communities and their society, but are not given the chance to do so (Zeller-Berkman, 2010). In terms of education the theory suggests that “education is a process of empowerment that enables citizens to make choices and influence their world… [I]ndividuals gain a sense of freedom, or liberation, from their constricted views of themselves” (Nevin, Smith, Paltz, McNeil, & Orange, 2008, p.1). For all American children, including those with special needs, the well-known Education for All and No Child Left Behind Act has been put in place to give every child the right to education. Papua New Guinea is a signatory to EFA, however, in reality inequality still exists in the country. Critical theory provides a position from which policyholders and stakeholders in education can
investigate educational processes and practices that influence the inclusion of children with disabilities in mainstream educational institutions (Rexhepi & Torres, 2011).

Due in part to the attitudes of teachers towards inclusion, full participation of disabled children in mainstream schools does not always go well. The researcher of this thesis used critical theory not only to understand the situation, but also in the hope that this situation might change (Cohen et al., 2007). For example, the current study is designed to understand, from the teacher’s perspective, what influences attitudes towards including children with disabilities in mainstream elementary schools. It is hoped that as a result of the study those influential factors may be taken into account by higher authorities.

Whenever there is a conflict of interest between stakeholders, agreements on goals are achieved through the exercising of power. Often people in higher authority make final decisions without input from other stakeholders who are less powerful (Rose, 2010). Decisions, at times, are not made in the best interest of other stakeholders. Without a meaningful exchange between all stakeholders, in order to gain new insights and to better understand problems, it is difficult to bring about societal change (Rose, 2010). In regards to inclusive education, the representatives given the power to develop the special education policy did not take into account the views of the teachers, school boards of management, parents, and students (Emanuelsson, 1998). Decisions may be made at the top level, but when it comes to implementing the policy, teachers become the power holders and the students are powerless (Kress, 2011). In this view students are at the bottom level of the hierarchy and most greatly affected by decisions made by education officials and teachers. Others within the education system have a critical role to play if education is to bring hope to students with the disabilities (Rose, 2010).

Critical theory seeks to create change for people who are oppressed by their position of powerlessness (Lincoln, Lynham, & Guba, 2011 as cited in Watson &
Watson, 2011). It is hoped that through this study policy makers, practitioners and other key players in the education system of Papua New Guinea will be able to make fully informed decisions (Segerholm, 2010). Measures have to be taken to get views of all the stakeholders; giving a voice to the powerless may identify new ways of thinking and approaches which can construct alternative possibilities for inclusion (Kress, 2011; Kompridis, 2005, 2007; Mažeikienė & Ruškė, 2011).

3.2 Qualitative Approach
The current study was undertaken using a qualitative methodology. Qualitative research techniques involve an interpretive, naturalistic approach to research. Its subjects are studied closely and their thoughts and feelings are richly described (Denzin & Lincoln, 1994, as cited in Gall, Gall, & Borg, 2007; Mutch, 2005). Research phenomena are studied in their natural settings, from the participants’ points of view, and its very descriptive nature means it does not deal with numbers (Schwalbach, 2003; Gall et al., 2007). The study was conducted among seven teachers in three rural elementary schools, and findings are explained, in detail, in narrative form.

The researcher opted to use a qualitative approach for numerous reasons. Firstly, the participants of this study were human beings, who would express their feelings, views, and beliefs about their experiences in schools regarding inclusion of special needs students (Cohen et al., 2007; Gall et al., 2007; Mutch, 2005; Sherman & Webb, 1988, as cited in Merriam, 1998). Secondly, the sites of this study were three elementary schools situated in rural areas. The researcher went to the settings, observed them and conversed with the participants about their behaviours, thus expanding her capacity to understand the phenomenon under investigation (Merriam, 1998; Denzin & Lincoln 1998a as cited in Yavuz, 2012; Atieno, 2009; Savenye & Robinson, 2005). Thirdly, a qualitative approach provides the researcher with the opportunity of exploring the phenomenon in greater depth; it allows the researcher to develop a conversation with the individuals concerned by asking the how, why, what, and when questions that
help elicit detailed information (Hurt & McLaughlin, 2012; Picciano, 2004; Heck, 2006).

3.2.1 Naturalistic/Interpretive Paradigm

An interpretive paradigm is defined by Erikson (1986) as “the study of the immediate and local meanings of social actions for the actors involved in them” (as cited in Gall et al., 2007, p. 31). It tries to understand the subjective world of the human experience, its concern is the individual, and it begins by understanding an individual and then sets out to understand the world (Cohen et al., 2007; Cohen & Manion, 1994). Qualitative research is frequently referred to as naturalistic, because researchers are at the site where the event of his or her interest is naturally occurring (Bogdan & Biklen, 1982).

The naturalistic/interpretive paradigm used to examine the participant responses in this research falls within this approach. Described by Bunniss & Kelly (2010) as a “set of beliefs and practices shared by communities of researchers which regulate inquiry within disciplines” (p. 360). Naturalistic/interpretive can also refer to the approach or design which guides a researcher’s action (Atieno, 2009; Guba, 1990 as cited in Hunt, 2009).

A naturalistic/interpretive paradigm was considered suitable for the following reasons. Firstly, the study was conducted in schools (natural setting); secondly, it involved teachers who would be giving their views on the phenomenon as subjects; and finally the paradigm was not necessarily concerned with judging, evaluating, or condemning existing forms of social and political reality. This final point is important as the study was not conducted in order to judge the action of the teachers or the education department or the special education resource centres (Greene, 2010). Rather it was carried out in order to look for solutions to address the issues it found.
Interpretive research considers education as a process, and the school as a site of lived experience (Merriam, 1998). In order to identify some of the factors it was necessary that the study be conducted in schools. Conducting studies in natural settings would assist the researcher in trying to make sense of and interpret in terms of the participants’ points of view; the commitment in interpretive research is to understand the phenomenon from the participants’ view (Denzin & Lincoln 1998a, as cited in Yavuz, 2012; Foster, 1999).

3.3 Research Methodology and Processes

Survey, experiment, case study, ethnography, historical research, policy research, action research and programme evaluation are all methods that have been employed in educational research (Mutch, 2005). This study was carried out using a case study approach method. Data were collected using an individual, open-ended, semi-structured interview. A small amount of observation of the setting was also completed.

3.3.1 The Case Study Approach

Case studies are linked to interpretivist approaches in that they enable examination in detail of a setting or a single subject (Heck, 2006; Bogdan & Biklen, 1982). Lodico, Spaulding, & Voegtle (2010) state that case study approaches are used to “investigate processes and to gain insight into an in-depth understanding of an individual, group, or situation” (p. 269). It is a flexible methodology that looks through a broad theoretical lens and uses more flexible ways of data collection (Picciano, 2004; Best, 1981), takes a holistic approach, concentrates on studying and understanding existing phenomena within their natural settings and focuses on an individual rather than a group by itself (Yin, 1989, as cited in Heck, 2006; Willis, 2008; Creswell, 2005). Finally, this approach links well to the critical theory solution-focused lens according to which this research was set up.
The case study approach was selected for the following reasons. Firstly, it gave the researcher the opportunity to study the case exhaustively in its real-life context reflecting the participant’s perspectives (Gall et al., 2007). Secondly, because case studies fit well in professional settings such as schools, it gives the advantage of developing an understanding of what happens at each level (Willis, 2008). For example, in the study the researcher interviewed the Teacher in Charge (TIC), as well as the senior and junior teachers. These views were designed to portray what teachers at various levels thought about inclusion of students with disabilities.

Finally, because case studies generate rich data, it was thought that this approach might provide valuable preliminary data to assist with developing a major research investigation in the future in the area of inclusive education in Papua New Guinea (Burns, 2000). Therefore the case study approach was deemed ideal for this research.

There are advantages and disadvantages in using a case study approach and these were considered before the research was undertaken. The advantages of the approach are that it allows the researcher to carry out a thorough investigation (Schwalbach, 2003). The interview method used in the case study approach enabled the researcher to probe for more information (Best & Kahn, 2006; Best, 1981). Another specific strength is the ability of this approach to bring different types of evidence to bear on a phenomenon (Heck, 2006). Finally, case study approaches may help to design future educational interventions, or permit other kinds of actions in addressing the issue of inclusive education (Gall et al., 2007). The disadvantages of the case study approach are highlighted by Gall et al., (2007) include:

the difficulty of generalising the findings to other situations, although limited generalisation can be made. Ethical problems can arise if it proves difficult in the report to disguise the identity of the organisation or individuals that were studied. Labour intensive, it requires highly developed language skills in order to identify
constructs, themes, and patterns in verbal data and to write a report that brings the case alive for readers. (p. 484)

However, though there are disadvantages to a case study approach the research results remains hopeful that this case study conducted in the three rural elementary schools can contribute significantly to the field of inclusive and special education practices in Papua New Guinea.

### 3.4 Methods

Research methods are described as the “range of approaches used in educational research to gather data which are to be used as basis for inference and interpretation, for explanation and prediction” (Cohen et al., 2007, p. 47), or as the actual tools or instruments used to collect data. In a case study multiple methods such as interviews, observations, and archives can be used to gather data (Ary et al., 2002; Best, 1981).

In this study interview and selective observation were utilised to collect qualitative data from the seven participants. As previously stated, a case study approach using semi-structured and observation method was chosen to undertake the study. Semi-structured questions were prepared after relevant literature on teachers’ attitudes regarding inclusion of children with special needs had been reviewed. Participants were individually interviewed; the interviews were recorded using a digital voice recorder. The individual interviews took on average 10-25 minutes and the observations took 20-25 minutes.

### 3.4.1 Data Collection and Data Analysis

Although there is no single right way of analysing qualitative data, which is heavy on interpretation, qualitative data analysis involves a systematic organisation of the data which includes describing and explaining the data in detail, and noting the themes present in the responses gathered (Cohen et al., 2007). The seven participants in the study were interviewed using one of Papua New Guinea’s
national languages, tok pisin/pidgin. The researcher wrote the interview in tok pisin/pidgin then translated the responses into English. Each day after the interview a preliminary analysis was made to help the researcher see which questions needed more clarification, or which questions needed the assistance of more probing. This also helped the researcher to formulate questions that seemed relevant. After the interview process was completed, data from the interviews were transcribed in detail and the exact words of the participants were retained. Information gathered during the research process was analysed as answers to the research question (Mutch, 2005).

For the purpose of confidentiality and anonymity, names of participants and schools were coded in the analysis process; for example, S1, T1 meant School One (S1), and Teacher One (T1). These codes are also used in the direct quotes in the findings section.

3.4.2 Interview

In naturalistic inquiry, data are mainly collected through interviews and conversations, documents and field notes, accounts, notes and memos (Hammersley & Atkinson, 1983, as cited in Cohen et al., 2007). An interview “…is an oral exchange between an interviewer and an individual or group of individuals” (Wiersma, 1986, p. 179). Interviews can be structured, semi-structured or open-ended. All forms are legitimate tools used by qualitative researchers to conduct research (Ary et al., 2002).

Interviews have their own advantages. Several advantages highlighted by Burns (2000) include the following. There is flexibility in an interview procedure, meaning a researcher is able to observe the subject and the total situation in which the participant is responding. Secondly, it is useful for people who would find writing responses impossible due to educational difficulties. In this study, the researcher observed that the participants were able to freely express their views, more so than they would have been in writing their responses. This can be
attributed to the face-to-face interaction between the two parties assisting in establishing rapport and a higher level of motivation among the participants of the study. Finally, in an oral situation the researcher is able to pursue responses from the participant, ask for elaboration or redefinition of the responses if an answer appears incomplete or ambiguous, and if a participant is unsure of the questions she/he can ask the researcher for clarification (Wiersma, 1986).

However, there are also disadvantages to interviews. As Bell (2005) notes, interviews are time-consuming; analysing responses can present problems; and wording the questions to elicit the best response can also be demanding. Finally there is always the danger of bias. Factors to be aware of include research being carried out by a researcher who has strong views about the topic. Educational level, sex and age difference between participants and researcher can also be disadvantaging factors (Bell, 2005; Burns, 2000). For this particular study it might have been that the researcher was unable to avoid a certain bias, given that she had a keen interest in this area, and had strong views of her own about the topic. However, the researcher tried to control these factors by listening closely to what the participants had to say and by showing respect for their views and opinions.

3.4.3 Individual Open-Ended, Semi-Structured Interview

The semi-structured interview, as described by Mutch (2005), is “an interview where a set of guiding questions are used but where the interview is open along the way” (p. 225). Furthermore Mutch states that, “the researcher can make alteration to the order of the questions, overlook some questions, or vary the wording of the questions…, and questions might also be added during the interview to probe unanticipated topics that might arise” (as cited in Lodico et al., 2006). The researcher asks open-ended questions so that the respondents are able to present their perspectives unconstrained by the researcher’s opinions (Creswell, 2005).
The main data collection method used in this study was the individual open-ended, semi-structured interview using open-ended questions (Appendix I). The flexibility of this approach allowed the researcher to gather as much information as possible in a short period of time (Walford, 2005; Gall et al., 2007). The researcher sought to answer the following major question:

What influences the attitudes of elementary school teachers in rural areas towards inclusion of children with disability in mainstream elementary schools?

Additionally, sub-questions posed the following:

i) What are the views of the elementary school teachers regarding the notion of inclusion?

ii) What reasons do teachers give for why children with disabilities may not attend elementary schools?

iii) What are elementary school teachers’ thoughts about integrating children with disability?

iv) How can teachers be motivated to accept and include disabled children in their classes?

v) What is the role of the special education resource centres in assisting teachers to change their views if needed?

These questions guided the study, but further probing questions were also used to deeply understand the phenomenon under study as they allowed the researcher to obtain additional information (Gall et al., 2007).

3.4.4 Non-Participant Observation

The second data collection method used by the researcher was observation. In this part of the study the researcher selected three teachers, one from each school, to observe while they were teaching. The teachers selected for observations were those that mentioned they had a child with disability in their class. The researcher verbally asked for their permission and they agreed to be observed. Each
observation took no more than 20-25 minutes. A checklist designed by Merriam (2008) was used (Appendix K).

Observation is one key method in qualitative studies; it can be either participant or non-participant (Savenye & Robinson, 2005). Observations can make important contribution to more descriptive research. However, a researcher’s past experience of the phenomenon under investigation may also affect the quality of the observation. The researcher may unconsciously tend to overlook things that do not fit conveniently with his or her pre-suppositions (Best, 1981). Furthermore, just by being there the researcher may affect the setting (Savenye & Robinson, 2005). In this case the researcher took precautionary measures against possible bias by making a close recording of exactly what was observed.

Non-participant observation was chosen for these reasons. As an outsider the researcher was not involved in the activities and this enabled her to recognise things which may have become daily routines for the teacher, leading into further understanding of the phenomenon (Creswell, 2005; Merriam, 1998). The things occurring in the natural environment are seen at first hand by the researcher and recorded. Finally, observation was also conducted to triangulate key findings from the semi-structured interviews for the purpose of reliability and validity (Merriam, 1998).

### 3.4 Reliability and Validity

Wiersma (1980) points out that, “the two essential characteristics of measuring instruments that must be considered in establishing the appropriateness and usefulness of the instrument are reliability and validity” (p. 212). Validity as Mutch (2005) simply defines it is “ensuring that a study actually measures what it sets out to measure” (p.226), and Wiersma (1980) states that, “in a word reliability means consistency of the instrument in measuring whatever it measures” (p. 212). For this study the researcher applied strategies to ensure validity throughout the whole process.
Validity is important in both quantitative and qualitative research as it is an important key to conducting an effective research initiative. In a qualitative study, validity may be addressed through these components: honesty, depth, richness, the scope of data achieved, and the participants approached (Cohen et al., 2007). Since the participants were known to the researcher through their shared professional network, she depended entirely on the participants to give honest responses, and where the responses were not clear she asked for elaboration or clarification.

Reliability in qualitative research is the extent to which other researchers would arrive at the similar results if they studied the same case using exactly the same procedure (Yin, 2003, as cited in Gall et al., 2007). In this study the insider view of the researcher, herself a teacher in this area, was seen as contributing to a depth of responses as she would be able to delve more deeply into a response, given her own understanding of the context of the statement given by the participant.

To ensure the validity and reliability of the data, the following additional measures were taken by the researcher. The researcher did a preliminary transcription of the interviews and delivered it to the participants for comments before making the final transcriptions. The researcher used two data gathering
methods, the semi-structured interview and non-participant observation. These were used because using multiple methods would enhance the validity of the qualitative data (Best & Kahn, 2006). This allowed for confirmation of the findings (Gall et al., 2007; Cohen & Manion, 1994; Szyka, 2012). Triangulation contributed to the trustworthiness of the researcher’s findings (Hunt, 2009).

3.5 The Chronology of the Research Process

In order that the researcher and participants were safeguarded if problems should arise, several pre-interview procedures were initiated. To access the research site and the participants it was necessary and important to obtain permission from stakeholders at various educational levels (Creswell, 2005). For this study approval had to come firstly from the Ethics Committee of the University of Waikato. Approval was sought, secondly, from the Director of the National Department of Education Research, Policy and Communication Division Research and Evaluation Section in Papua New Guinea, thirdly from the Assistant Secretary for Education in Goroka, Eastern Highlands Province, and finally from the head teachers and teachers of the participating schools (Wiersma & Jurs, 2009).

3.5.1 Approval from Research Ethics Committee

Firstly an ethics application was completed and submitted by the researcher to the Research Ethics Committee of the Faculty of Education, University of Waikato (UOW). The committee looked through the application and returned it with comments to the researcher. After amendments were made it was re-submitted to the committee and approval was given to the researcher to conduct the study (Appendix A).

3.5.2 Research Branch, Department of Education

The Director of the National Department of Education Research, Policy and Communication Division Research and Evaluation Section in Papua New Guinea
was informed about the study because the Department is responsible for all educational research that takes place in the country. A letter was sent to them as soon as ethics approval was given by the UOW Ethics Committee (Appendix B). The letters clearly explained the purpose of the study, and sought permission to carry out the study in three rural elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea. A copy of the information sheet was attached to the letter (Appendix G). The research was approved by the Director of the National Department of Education Research, Policy and Communication Division Research and Evaluation Section (Appendix D).

3.5.3 Assistant Secretary for Education (Eastern Highlands Province)

Approval letters from the Ethics Committee of UOW and the Director of the National Department of Education Research, Policy and Communication Division Research and Evaluation Section were attached to a letter that was sent to the Assistant Secretary for Education in the province. The letter clearly explained the study and asked for permission to conduct the study in three rural elementary schools in the province (Appendix C). A copy of the information sheet was also attached (Appendix G). Finally copies of the letter and the information sheet were also sent to the Coordinator for Elementary Education in the province. The Assistant Secretary gave permission for the research to be conducted in three schools (Appendix E).

3.5.4 Approval from Schools

Because of time constraints the researcher did not send the letters to the schools (Appendix F) by mail, but went direct to the schools with the letters of approval from The Director National Department of Education Research, Policy and Communication Division Research and Evaluation Section (Appendix D), and the Assistant Secretary of the province (Appendix E). Information sheets for the participants were also given to the Teacher In Charge (TIC) to distribute to teachers at that time (Appendix G).
On the researcher’s visit to each rural elementary school she explained to the participants about the study and during that time they asked questions. Consent forms were also distributed on that day, so that participants could read and sign before they were being interviewed (Appendix H). Participants were informed verbally that care was to be taken that their names and any other information that might give away their identity would be kept confidential.

For Schools One and Two the research was conducted within the vicinity of the schools. Interviews were held in the office of the TIC. Teachers made arrangements among themselves and interviews were conducted within the school hours. Interviews were not conducted during recess and lunch breaks as it was very noisy during that time. Although there were still noises coming from a prep class which was close to the office, this did not affect the interviews. School Three was different because there was only one teacher. The interview had to be conducted after school hours. Generally all interviews went well and after the interviews the teachers kept on talking about inclusive practices and how important it was that they were trained.

3.6 Participant Selection

Since it was a case study research on three schools in similar settings, homogeneous groups were used. Homogeneous sampling is used when the purpose of the study is to focus on a particular subgroup (Wiersma & Jurs, 2009; Lodico et al., 2006).

Participants were randomly selected and no particular criteria were used. However, the study involved teachers who were trained to be elementary teachers. Most of these teachers were aware of Papua New Guinea’s inclusive education policy and had some training in inclusive practices as well. Because elementary schools are located right in the community, teachers were locals from that particular community and had been teaching in those elementary schools for quite some time.
In terms of the research context, the schools that were selected were all elementary schools located within rural settings in the Eastern Highlands Province in Papua New Guinea; furthermore they were all located within the rural part of Goroka District. In all these schools there was a Teacher in Charge, or TIC (the term normally used in the elementary schools), and very few teachers. All schools had volunteers helping from time to time due to teacher shortage. All schools were similar in all substantial aspects, such as: the classrooms were semi-permanent, and did not have enough desks, chairs or tables for all the children. Neither did they have spacious classrooms or even electricity for good lighting. Based on the shared characteristics of both the participants and the school contexts, the homogeneous sampling was appropriate to use for the study (Johnson & Christensen, 2008).

3.6.1 Selection of the Research Participants

A total of seven teachers participated in this study. The initial intention was to interview ten teachers. However, things did not work out the way it was planned. Four teachers were from School Two and they all took part. School One had three teachers. However, one teacher there was a volunteer and did not feel comfortable about being interviewed, therefore only two teachers from that school were interviewed. The third school had three teachers but they did not respond. Another school was selected. Previously it had had three teachers and a volunteer, but unfortunately three of the staff had left and only one remained. This teacher was interviewed.

The schools were selected by the researcher but the participants in the study voluntarily participated after the briefing about the purpose of the study. Not all the elementary school teachers that took part had had experience of working with disabled children, though the schools had records of enrolling disabled children into the school. The reason for selecting not only teachers that had such
experience was because the researcher also wanted to find out the views of teachers who had not worked with disabled children.

Table 3.4 Profile of Participating Schools.

<table>
<thead>
<tr>
<th>Name of school</th>
<th>Number of teachers</th>
<th>Volunteers (not interviewed)</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1 (S1)</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>School 2 (S2)</td>
<td>4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>School 3 (S3)</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

Selection and Description of the Schools

Elementary schools in Papua New Guinea are located in the communities to be accessible for all children. The school caters for children doing elementary preparation and elementary one and two before they can move into primary schools. Most of these schools are located in the rural areas, and are established on a small piece of land that has been donated by someone from the community.

In Goroka, Eastern Highlands Province there is a total of 406 elementary schools. The study was conducted in three rural elementary schools located in rural areas of Goroka, Eastern Highlands Province, Papua New Guinea. The idea behind conducting the study in the rural settings was because much of the PNG population lives in the rural areas, so it would be useful to know if all children are included in these schools, including children with disabilities. To protect the anonymity of the schools and participants, they were coded, using numbers and letters.

School One (S1)

School One is a government school which is located twelve kilometres away from town and thirty minutes’ walk through the village. It has two teachers, a male and a female, and a female volunteer teacher.

Even though the teacher student ratio is 1:30, sometimes the numbers of students exceed 35 or are fewer than 30. Most children that enrol each year are children
with no physical disability; however, usually one or two children with disabilities enrol. It is unlikely that in all classrooms there would be a disabled child. Research for this study was supposed to be carried out in the second week of May, but, it had to be postponed to the following week because a teacher was not present on the day arranged. When the researcher arrived in the third week, all the teachers had to go to a colleague’s funeral. The research was again moved, to fourth week of May, but again the study had to be postponed. The only day participants agreed to be interviewed was on Wednesdays, so there was not much the researcher could do, but wait until the second week of June and conduct the interview on Wednesday. However, despite these disruptions the researcher was able to complete the research.

School Two (S2)

School Two is located thirteen kilometres away from town and another one and a half to two hours’ walk. There are a total of four teachers, of whom three are female and one is male. The research was carried out in the third week of June, on the day appointed. The teachers cooperated well and the research went well.

School Three (S3)

School Three is located 10 kilometres away from town, just beside the main highway. The school had had three teachers and a volunteer teaching there in the previous year. When the researcher went to do the study there was only one teacher left as other teachers had moved to other locations. With the teacher’s approval the study was carried out in that school on the second week of July.

Since there were not many teachers in each school the researcher was able to conduct the study in a day or two. Interviews were conducted in pidgin/tok pisin as the researcher saw that it was appropriate to use pidgin/tok pisin as it would help the participants to feel relaxed and to express themselves more openly. At the end of each week’s interviews preliminary transcriptions of the audio-taped interviews were made.
3.7 Ethical Considerations

Investigations into any subject must be conducted in an ethical manner (Merriam, 1998). All research involves ethical decisions, and with it comes responsibilities that are placed on the researcher. For a qualitative researcher it is essential to consider the ethical issues, as qualitative studies involve human beings (Klatch, 1988 as cited in Walford, 2005; Lodico et al., 2006). Ethical issues can put researchers in moral predicaments which may at times appear insoluble.

Therefore, regardless of the type of study undertaken, research ethics is an important consideration, to protect research subjects and avoid legal problems (Lodico et al., 2006; Tomal, 2010). Wellington (2000) defines ethics as “a moral principle or a code of conduct which actually governs what people do (as cited in Mutch, 2005, p. 218). Ethical issues may stem from the kind of problem investigated, or the methods used to gather data. Therefore protocols must be followed to protect the participants as well as the researcher (Cohen et al., 2007; Cohen & Manion, 1994). Researchers are faced with dilemmas such as: matters of privacy, anonymity, confidentiality, betrayal and deception (Bell, 2005; Cohen & Manion, 1994; Lodico et al, 2006).

3.7.1 Access to Participants and Informed Consent

A fundamental ethical principle of a research study is that of informed consent. The principle of informed consent is, Smith (2010) states, “based on the rights of individuals to give consent to participate once they have been informed about the project and believe that they understand the project” (p. 103). Researchers should not proceed without the consent of the participant. Thus participants have to sign the consent forms in order to be part of the study. They should not be coerced to participate, their participation is voluntary, and they have the right to withdraw from the study without repercussions (Lodico et al., 2006). There are two important things in informed consent. Firstly, subjects must agree voluntarily to participate, that is, without physical or psychological coercion. Secondly,
agreement must be based on full and open information about the research topic (Smith, 2010).

Though the participants in this study were known to the researcher through her professional network, they were not coerced to participate; their participation was voluntary. Appropriate procedures were followed to gain access to the sites and participants. Participants were given consent forms a day in advance so that they had enough time to read and understand before signing the form. The forms were not sent with the letters; instead the researcher delivered them personally, which gave her an opportunity to verbally explain the research and also to go through the informed consent forms with the participants.

3.7.2 Anonymity and Confidentiality

The code of ethics insists on safeguards to protect people’s identities and those of the research locations; therefore anonymity and confidentiality are important (Cohen & Manion, 1994).

Anonymity means that the study does not require the participants to provide any information that may identify individuals. It also means that the researcher will not know the respondents or participants and that information given by the participant should not reveal that individual’s identity (Lodico et al., 2006). Confidentiality, on the other hand, means the participants will not be identified or presented in identifiable form, even though the participant is known to the researcher (Sapsford & Abbott, 1996 as cited in Bell, 2005; Cohen & Manion, 1994).

Although it is important to maintain the anonymity of the participants, as well as keep all information about the participants and research sites confidential, in qualitative studies it is not always possible to guarantee anonymity (Cohen & Manion, 1994). Anonymity and confidentiality in qualitative research are very difficult to protect when the study depends on rich descriptions, often best provided when researchers and participants are at ease with each other. However,
in most cases many of the aspects of these principles can be achieved by use of pseudonyms and through exclusion of revealing information (Burns, 2000; Brown & Dowling, 1998). For example, the researcher in this study knew the participants and the sites, thus care was taken to ensure that participants’ names were not mentioned and that codes were used to refer to participants and schools. The researcher made sure that information given was not disclosed to other people. Responses were stored in a safe place and interview recordings kept in the researcher’s computer protected by a password.

3.8 Summary of the Chapter

This chapter presented in detail the methodology used and methods that were applied to collect the data. It also described the theoretical framework that guided the study, the process of participant selection and the research process. The next chapter will present the findings of the study.
CHAPTER FOUR: DATA ANALYSIS AND RESEARCH FINDINGS

4.0 Overview of the Chapter
This chapter provides a summary of the key views of seven elementary school teachers about the inclusion of disabled children in mainstream schools that were collected through individual semi-structured interviews and non-participant observation. The taped individual semi-structured interviews isolated participants’ knowledge of special and inclusive education, and also their ideas, feelings, and concerns about inclusion of children with special needs in mainstream schools.

The chapter firstly details the demographic characteristics of the participants. Then five themes emerging from the data are listed and explored, using quotations from participant interview responses. The first two themes are concerned with teachers’ views, the third with what influenced their views and the final two focus on the context surrounding inclusive practices, as follows: Section 4.2: Elementary teachers’ perceptions of special and inclusive education concepts. Section 4.3: Teachers’ views on the right to education and the importance of education. Section 4.4: Factors that influence teachers’ attitudes. Section 4.5: Geographical factors. Section 4.6: Parental and community awareness. The chapter concludes with a summary of the main ideas gained from the interviews and observations.

4.1 Demography of the Participants
The focus of the study was to find out the factors that influenced teacher attitudes towards inclusion of disabled children in mainstream elementary education. It was therefore important that demographic details were collected so any relationships between these variables and the interview data could be established. Information from participants was collected using a personal information sheet which the researcher gave out to each participant to fill (Appendix J). Some information was also gained through the interview process. To keep all participants’ identities confidential their own names have not been used. In the table below, the
researcher has used “T” for teacher and “S” for schools. Beside the “T” the numbers shown represent the order in which they were being interviewed. Beside “S” is the number of the school.

**Table 4.1 Demography of the Participants.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Age range</th>
<th>Gender</th>
<th>Numbers of years teaching</th>
<th>Experience in teaching child with disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1, S1</td>
<td>36-40</td>
<td>F</td>
<td>6</td>
<td>No</td>
</tr>
<tr>
<td>T2, S1</td>
<td>36-40</td>
<td>M</td>
<td>12</td>
<td>Yes (a child with hearing impairment)</td>
</tr>
<tr>
<td>T1, S2</td>
<td>36-40</td>
<td>M</td>
<td>12</td>
<td>Yes (problems with sight and hearing)</td>
</tr>
<tr>
<td>T2, S2</td>
<td>20-25</td>
<td>F</td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>T3, S2</td>
<td>36-40</td>
<td>F</td>
<td>3</td>
<td>Yes (problems hearing)</td>
</tr>
<tr>
<td>T4, S2</td>
<td>26-30</td>
<td>F</td>
<td>12</td>
<td>Yes (problems with sight and hearing)</td>
</tr>
<tr>
<td>T1, S3</td>
<td>26-30</td>
<td>F</td>
<td>4</td>
<td>Yes (Intellectually disabled)</td>
</tr>
</tbody>
</table>

4.2 Theme One: Elementary Teachers’ Perception of Special and Inclusive Education Concepts

The elementary school teachers interviewed gave their views about what special and inclusive education meant to them. Participants conversed briefly about what they understood about the terms and their comments revealed that they held diverse views.

Some participants had been introduced to both terms during their teacher training or in-service programmes, and those who were working with officers from the resource centres had a clearer view about the meaning of the terms than participants who had not. Comments reveal that the former category of participants
were aware of the terms and the concepts behind the terms. For example, a participant (T1, S3) who had had no training but who had been working closely with personnel from Mount Sion Resource Centre said:

“Spesol education em skul blo ol aipas, iapas ol longlong pikinini, ol dispela kain ol pikinini (disabol pikinini) yet save stap na skul.... Inclusive education em we olgeta pikinini (able na disabol) mix na stap na skul wantaim” Special education is a school for the visually impaired, the hearing impaired and for children with mental problems. This is where such children (children with disabilities) attend school.... Inclusive education is where there is a mixture of children (abled and disabled) who attend the same school together (T1, S3).

This response is similar to one given by another participant (T1, S2) who said he was trained by officers from the resource centre in inclusive practices. He said:

“Lo special education mi ting olsem em blo ol pikinin we igat hevi lo bodi na apart from normal pikinini, mi ting olsem spesol education em blo ol pikinini we igat hevi tasol...Inclusive education nau em olsem ol pikinini we igat hevi lo bodi bai go skul wantaim ol narapela gupela pikinini insait lo ol skuls we stap insait lo ples blo ol” I think that special education is for the children who are disabled apart from the normal child. I think that special education is only for the children with disability.... Inclusive education is when children with and without disabilities are to attend school together in schools in their community (T1, S2).

Some participants believed that special education was only for children with special needs, others thought inclusive education meant that *all* students, including disabled students, should be taught in the same schools. Still other participants were not sure. They had a fair idea of what special education meant but were confused by the word ‘inclusive’. This point is illustrated in the responses of two participants as below:
“Spesol education, yes, mi save liklik olsem em blo ol disabol pikinini.... Inclusive education nogat, mi no save” Special education, yes, I know a little about it, it is for the disabled children. Inclusive education is something I don’t know about (T3, S2).

“Lo trenin blo mi ol bin tokim mipela olsem spesol education em skul blo ol pikinini wantaim hevi lo bodi” During my training they told us that special education was for children with disability (T2, S2).

However, when T2, S2 was asked if she knew what inclusive education meant she just said: “Nogat” No, meaning that she did not know about the term inclusive education.

The participants above (T3, S2 and T2, S2) were introduced to the term special education during teacher training, but maybe the term inclusive education was not mentioned at that time. Therefore, they were unable to say anything about inclusive education. Another participant was introduced to the term special education during training, but not inclusive education. This is illustrated in her response, where she said:

Okay, nau yu tok inclusive education dispela taim blo trenin ol tok spesol education na ol tokim mipela lo hau lo tritim ol pikinini wantaim disability.... Olsem mipela mas treatim ol different lo ol gutpela pikinini, na mipela mas givim moa taim lo ol dispela kain ol pikinini (disabol pikinini)” Okay, now you are saying inclusive education, during our training they said special education, and they taught us how to treat children with disabilities....They told us that they must be treated differently from the normal child (approaches used to teach them), and we must give more time to these children (children with disabilities)(T4, S2).

Overall, participants’ understanding of what constitutes ‘special’ and ‘inclusive’ education, and any difference between the two terms, was diverse. Responses depended on whether the teachers concerned had been introduced to the words, how they had been exposed to the terms and how this process had been managed.
Though ‘special education’ trainers were trying to introduce the concept of inclusion, they were not mentioning the term inclusion directly, thereby causing confusion for the participants.

4.3 Theme Two: Right to Education and the Importance of Education

Though participants had limited knowledge about the concepts of special and inclusive education, they were very much aware that every child had the right to be educated. Some participants had much to say about it. Moreover they were aware that education was just as important to a disabled child as it was for a child without disability. Two sub-themes, ‘right to education’ and ‘importance of education’ emerged from the interview data in this area. These are explained in the section below.

Right to Education

Participants were aware that children with disabilities had the right to be educated. They were very vocal about it, because they were most aware that people with disabilities were human beings similar to themselves. The only difference was the disability, as can be seen in the statements below.

“Em ol (disabol sumatin) man tu ya, em ol wankain olsem mipela tasol ol gat dispela bagarap lo bodi nau em tasol wokim, bikpela samting em ol man. Em igat olgeta raites olsem mipela ol gutpela manmeri tu, so lo dispela tingting na save blo mi, mi ken tok olsem em mas kisim save” They are (children with disabilities) human beings, they are similar to us but it is just that they are disabled. The main thing is that they are human beings. They have all the rights as normal people, so with this thought and the knowledge that I have I can say that they have to be educated (T2, S1).

Participants’ belief that God has made every human being, so it is the duty of mankind to share and help those in need, was also stated. Papua New Guinea is known as a Christian country, because of the fact that everyone believes in God.
Being a Christian meant participants had a duty to help the unfortunate. As participant T1, S2 stated:

"Mi olsem TIC mi bai hamamas lo kisim ol (pikininin waintaim disability) ya, becos mi tu mi lotu man tu ya na mipela mas givim opportunity lo olgeta, because God creatim ol tu ya, na yu save God bai kotim mipela ya, so why not mipela wokim gut tu lo ol. Em (disabol pikinini )gat spesol talent, na spesol skills tu. Why na yumi luk daun lo ol...? Yumi save olgeta man igat fair, equal raites" 

As the teacher in charge (TIC) I will be happy to include them (children with special needs), because I am a Christian...We must give opportunity to everyone, because God created them as well and you know God will judge us, so why not help them and treat them well. They (the child with disability) have special talent and special skills too. Why do we classify them so low...? We know that every human being has fair, equal rights (T1, S2).

Participant T1, S3 further added:

"Ol wankain olsem mipela, tasol diference em olsem ol han na lek nogut, ol disable, tasol yumi wankain tasol, big man em wokim yumi wankain tasol” They are similar to us, but the difference is that they are either handicapped or crippled, they are disabled, but we are all the same, God made us all the same (T1, S3).

These beliefs encouraged some participants to look beyond the disability and regard everyone as a creation of God and therefore to be treated as equal to a person without disability. However, they recognised that less fortunate human beings are deprived of the right to be treated as equal to someone without a disability.

A few participants stated that as Papua New Guinea is a democratic country no one should be restricted from receiving an education. Participant T3, S2 emphasised that:

"Yumi olgeta mas balancim lo kisim save na stap, ol (disabol pikinini) noken stap lo haus ol yet. Kountri bilong yumi em democratic kountri olsem na yu mi olgeta

68
mas kisim save” We all must receive education; they (children with special needs) must not be left at home. Our country is a democratic country so we all must receive education (T3, S2).

Living in a democratic country means that people were seen as having rights and being free to make choices. In this view, students with special needs have the right to choose any school to attend; however, unlike their normal peers they are not being given the freedom to choose. T4, S2 clearly indicated that:

“Ol (disabol pikinini) mas skul tu na kisim dispela save we ol normal pikinini tu kisim.... Ol tu ol gat rait long live antap long dispela graun na tu em right bilong ol long go skul” They (children with special needs) must attend school and receive the same knowledge as the normal children....They have the right to live in this world and it is also their right to go to school (T4, S2).

From these responses it can be seen that interviewees were aware of the policies on human rights and rights of people with disabilities. Being human means individuals have rights and education is one of those rights. Participants expressed that children with special needs, like every other child, had the right to be educated. Furthermore those who were Christians lived by the church’s moral principles and belief that human beings are created by God, thus all people should be seen as equal and therefore receive equal treatment and respect, regardless of gender, ethnicity, or ability.

**Importance of Education**

Participants in the study considered education to be an important aspect of people’s lives. This was revealed in the data concerning the education of children with disability. Education was said to open up new possibilities in people’s lives, afford greater opportunities for people to live a good life and was important for people’s survival. What participants had to say about the education of disabled children included the following point made by T1, S3:
“Education blo ol em important....em birkela samting becose ol dispela pikinini nidim. Wampela taim lo laip blo ol, ol bai kamaap sampela birkela lain (important manneri) na ol mas kisim save lo sapotim ol yet” Their education is important....Education is a big thing because these children need it, they may one day in life become a prominent person, and they also need to receive education in order to support themselves (T1, S3).

This view was supported by two other participants. T2, S2 said:

“Nau taim yumi stap we education em wok lo kamap birkela samting ya ol stap lo ples ya em bai hard. Laip bilong ol bai hard tru so ol tu nid lo go lon skul olsem ol narapela gutpela pikinini lon ol bai earnim living bilong ol” We are living in a time where education is becoming important. Their life will be difficult so they need to attend school like the other children and work to earn their living (T2, S2).

T3, S2 stated:

“Mipela stap lo wanpela kain taim we moni em wok lo kamap birkela samting, em dispela tu na em ol nid lo kisim save na lukautim ol yet” We are in a time where money is becoming important, that is why they need to be educated in order to take care of themselves (T3, S2).

Participants acknowledged the benefit of being educated. Education provides a solid ground to stand on in terms of finance and being able to take care of oneself in the future. Regarding the education of children with special needs, participants were very concerned, because in the villages children with disability lived with their parents, and were heavily dependent on them. This was of great concern to one female participant, who said:

“Save em ol nidim lo stap life.... Wampela taim ol papa mama or husait we ol lukautim ol ya ol bai die... na sapos ol no kam skul na kisim save hau bai ol survive.... Ol mas skul tu na kisim dispela save we ol normal pikinini tu kisim....
Ol tu mas kisim save lon stap life” They need to be educated to live…. One day their parents or their caregiver will pass away…. and if they do not attend school and become educated how are they going to survive? They must come to school and receive the education that normal children receive….They need to be educated inorder to survive (T4, S2).

Fears about what would become of disabled children in the event that their caregivers passed away were included in participants’ responses. Though the participants were from rural areas where most people are subsistence farmers, they still saw the need for educating children with disabilities. T4, S2 remarked:

“Ol tu man ya, olsem ol mas go lo skul na kisim dispela save ol normal pikinin kisim tu ya. Nau em kain olsem yumi live lo graun we ol manmeri nid lo go skul lo stap laip” They are human beings, that is why they must go to school and receive education as with the normal children. We are living in a world that people need to be educated in order to survive (T4, S2).

In summary, both female and male participants knew of every child’s right to be educated, and were able to confirm that education was important in the lives of every human being. Six out of the seven participants’ whole heartedly supported the idea that children with disabilities needed to be educated. From their views it was noted that for one to be able to survive one must at least have some form of education, so that one may be able to fend for oneself.

4.4 Theme Three: Factors Influencing Teachers’ Attitudes
While all participants were keenly aware of the notion of human rights and spoke highly of education as being imperative in this economic world, the data collected identified several factors that also shaped participants’ attitudes towards including children with disabilities in mainstream schools. They included: teacher training, teaching experience, infrastructure and school environment, type of disability, time (workload and class size), resources and materials, lack of adequate support
from the government, and the role of the special education resource centres. These factors are discussed below.

4.4.1 Teacher Training

Training was identified by all seven participants as a central issue regarding accepting students with special needs in regular classes. Their views indicated the strong influence training has on the attitudes of teachers towards including children with disability in mainstream elementary schools. The data revealed both the negative impact of not having access to training and the positive impact of having had training in inclusive/special education practices.

**Negative Impact of Not Being Trained**

Participants who had not received training had similar views, that the lack of training constrained them from including children with disabilities. Without appropriate knowledge teachers did not know where to begin to engage a student with a disability in quality learning. This is indicated in the response below:

“Mi nogat idea how bai mi skulim ol pikinini wantaim disability, mi no kisimtrenin and ol no in servicim mipela” I do not have any idea on how to go about teaching a child with disability, I have had no proper training and or in-service as well (T2, S1).

This statement was supported by T1, S1 who said:

“Mi no ting bai mi inap lo skulim wanpela dispela pikinini tu (disabol pikinini), becoste mi no gat wanpela idea lo dispela tu (inclusive practices), mi no kisim trenin, em bai hat tru lo mi....Mi no inap hamamas lo skulim ol (disabol pikinini)” I do not think I would be able to teach one of these children (children with disability), because I do not have any idea (of inclusive practice), I have had no
training. It would be very difficult for me.... I won’t be happy to teach them (children with disability) (T1, S1).

Their responses reveal that they are were totally against the idea of inclusion but they were concerned that they had not received training to assist them. As this participant said:

“Sapos mipela tisa igat liklik skul lon skulim ol (disabol pikinini) em bai orait.... Em hat lo mipela bai skulim ol” It would be all right if we the teachers had some training in teaching students with disabilities. .. It is hard for us to teach them (T2, S2).

Some participants were neither interested nor willing to teach a child with disability because they knew that they were not prepared for it. One participant, T1, S1, believed it was to the benefit of everyone that all disabled children be taught in special schools. She said:

“Gutpela olsem ol (ol sumatin waintaim disability) nid lo stap lo wampela hap grup na ol treined tisa bai skulim ol em bai moa gutpela. So mixim ol insaite lo main streamed skuls ino gutpela” It is good that they (students with disability) should attend special schools where specialised teachers can teach them. With that I think that including them into mainstream schools is not such a good idea (T1, S1).

The consequence of not being trained led to participants judging themselves as incapable, and therefore hesitant to say that they would include disabled children. Since participants are locals they knew a lot of children with disabilities living in the communities who were not receiving any education. They knew neighbours, friends and relatives of some of the children who are disabled. Participant T3, S2 remarked:
“Olsem dispela trenin mipela laikim becose lo wanwan hauslaine ol kain pikinini stap (disabol pikinini)…. Papamama blo ol sampela em ol yangpela lain ol bai laikim olsem pikinini bai go skul na kisim save na mipela nidim trenin” We want this training because in each village there are such children (children with disabilities)…Some of the parents are young and they would want their child to attend school therefore we need to be trained (T3, S2).

This view was supported by another participant, who included the fact that resource centres were too far away to provide the help they needed. As T1, S3 said:

“Mi no gat dispela trenin lo wok wantaim ol dispela pikinini (disabol pikinini)…. Mipela gat planti pikinini wantaim bagarap lo bodi stap lo hausline so mipela nidim trenin. Resource senta em long we so ol papa mama kam putim ol (ol disabol pikinini) lo hia na planti taim mipela no save mipela bai wokim wanem waintaim ol” I have had no training in teaching these children (children with disabilities)… We have many disabled children in the villages, so we (teachers) need to be trained. Because the resource centre is too far, parents bring their child (with a disability) to attend school here and most times we do not know what to do with them (T1, S3).

These data reveal that training for teachers in schools in the rural settings is vital. It is necessary that the teachers are trained in inclusive practices since the majority of children with special needs live in the villages. Though the data revealed participants’ reluctance, it also revealed that with training they would be far more willing to include students with special needs.

Positive Impact of Training
Those who had received at least some form of training were more willing to include children with special needs. Out of the seven participants only two had received training in inclusive practices. During these sessions participants had
been given practical advice on how to be of assistance to children with special needs. As T4, S2 said:

“Em (trenin) halivim mi gud tru. Ol tisa long Mt.Sion (Resource senta) ibin skalim mipela planti lo dispela saite na ol ibin tokim mipela lo putim ol lo front na klostu lo mipela yet na paim more attention lo ol (disabol pikinini), olsem na mi save mekim olsem” It (training) has helped me a lot. The teachers at Mount Sion (Resource Centre) taught us a lot and they have told us to put them (children with special needs) in front and close to our self, and pay more attention to them, so that’s what I do (T4, S2).

Though the training may not have been extensive, the little she had acquired was of much assistance to her. Psychologically, training helped to maximise their interest in working with disabled children, as one of the male participants stated:

“Mipela bin go tru lo trenin blo spesol education... na mipela bin wokim wanpela trip lo resource senta lo lukim ol (ol wokmanmeri na sumatinwaintaim disability)...wantaim dispela trenin mi ken wok wantaim ol” We went through training in special education... and we took a trip to the resource centre to see them (staff and students with disability at the resource centre)... With the training I had I can work with them (T1, S2).

As illustrated in the response of these two participants, training can positively influence teachers’ attitudes towards inclusion. Because of the training the two participants concerned had increased self-confidence in their own ability. Unlike their counterparts they were willing to include and teach pupils with special needs.

4.4.2 Teaching Experience

Teaching experience plus exposure to children with special needs contributed to the positive attitudes held by some participants towards inclusion of these children. However, not all experience and exposure had had a positive impact. The data
revealed that teachers gained ‘confidence through experience and exposure’ yet it also revealed an ‘effect of teachers’ negative experience’ response that impacted on participants’ teaching careers in this area.

**Confidence through Experience and Exposure**

Three participants noted that prior teaching of disabled children influenced their attitude towards including children with special needs. Two participants (T4, S2 and T1, S2) who had experience of working with students’ with special needs and who were also into their twelfth year of teaching stated that they were willing to include students with special needs. Because T4, S2 had so much experience working with disabled children, she confidently said:

“Insait lo twelvepela yia mi tise stap mi skulim ol pikinin wantaim disability, mi bai hamamas lo wok wantaim ol... even sapos ino gat materials” In my twelve years of teaching I have been teaching children with disability. I will gladly continue to include them in my class and assist them in their learning... even if there are no materials (T4, S2).

Similarly T1, S2 said:

“Mi tise twelve pela krismas na lo dispela taim mi wok wantiam ol pikinini we ol gat hevi lo ai na ia, tasol olsem mi teach twelve pela yia na mi pilim olsem mi inap lo wok waintiam ol (disabol pikinini)” I have been teaching for twelve years and I have been working with children that have hearing and sight problems, as I have been teaching for twelve years I have this confidence in myself that I am able to work with children with disabilities (T1, S2).

A female participant who has only been teaching for three years and is currently working with a child with hearing problems said:

“Mi bai kisim ol...mi gat wanpela wantaim problem lo ia stap. Wanem samting mi pilim olsem em orait mi save usim lo halivim em” I will accept them.... I have a
child with a hearing problem in my class. I apply whatever teaching approach that I feel is appropriate for the child. I help her in whatever way I can (T3, S2).

These responses clearly show that length of teaching career can be influential, but also that just enrolling a child with disability could also have a great influence on individual teachers’ attitudes of acceptance. Exposure and positive experiences helped participants gain self-confidence, and therefore be willing to include children with disabilities.

**Effect of Negative Experience**

Not all experiences were as positive as the examples listed outlined above. Other participants had different opinions based on more negative experiences. For example: a male Teacher in Charge (TIC) of an elementary school who had had experience in working with a hearing impaired child and who had been teaching for twelve years, said:

“Mi bin skulim wanpela ia pas, em bin hat stret lo mi, mi yet mi train best lo wokim ol sign language blo ol..., but en go hat nau mi no save em pilim olsem wanem na em lusim skul lo namel blo yia. Mi no inap skulim ol pikinini wantaim disability inap mi kisim trenin” I have taught a hearing impaired child, but it was very difficult for me. I tried my best in doing sign language…but it was difficult and I do not know why the child left school in the middle of the year. I won’t teach children with disabilities unless I am trained (T2, S1).

He thought he had done all he could to assist the child but the child had decided to leave school. The participant may have felt that it was partly his fault. Another participant suggested that:

“Taim yumi mixim gutpela (normal pikinini) wantaim dishabol, ol dishabol bai pilim daun yet, ol bai kisim kainkain tingting olsem ol bai winim mi ya, mi no fit lo katch up wantaim ol. Ol (dishabol pikinini) still bai kisim kain tingting na bai ol no inap lo lanim samting gut” When we have a mixture of normal and disabled
children, the disabled children will feel out of place, they will have this thought that the normal children will do better than me, I cannot catch up with them. This thought will discourage special needs children from attending schools and giving their best in learning (T1, S1).

These statements suggest that years of experience do not necessarily positively affect teachers’ attitudes towards including disabled children.

4.4.3 Infrastructure and School Environment

The data also revealed that general infrastructure and school environment can hinder inclusion. Through observation the researcher noted that the general infrastructure and school environment were not inclusive. Classroom spaces were very small and in some classrooms there were no desks, tables or chairs for children. Participants had different views about the impact of school infrastructure and the school environment. A participant said:

“Skul em ol wokim blo ol normal pikinini ino blo ol abol, planti samting lo skul em ino inap lo ol... klasrum em ino nap lo ol (ol sumatin wantaim disability )”

The school is made for the normal children, it is not for students with disabilities, a lot of things in the school are not meant for them... The classroom does not suit them [children with disabilities] (T1, S3).

Practically, the whole structure of the buildings and the layout of the schools were not welcoming to disabled students. Modifications in regards to virtually everything were recommended in elementary schools in the rural areas in order for them to practise inclusion. A participant said:

“Ol nidim bikpela space na yu lukim kain population lo hia ya em bai nogat space blo dispela pikinini stretn, klasrum tu em liklik na kain samting tu wokim na playing field tu liklik, nau ol pikinini tu stap ya, em no fitim ol tu” They need bigger space and just see our population in the school now, we would not have
enough space for these children [children with disabilities] and the classroom space is even too small, and even the playing field is too small (T4, S2).

In thinking about inclusive school environments, many participants thought about children who were visually impaired or who were wheelchair users. With these disabilities in mind they saw that the whole school environment, let alone the classrooms, was too small to include them. As T2, S1 suggested:

“Klasrum space em liklik, na ol aipas ol save usim stik so ol bai bamim diwai, stone, ples ino open tumas lo ol” The classroom space is too small, and the visually impaired use sticks, so they will bump into trees and stones. The place is not too open for them (T2, S1).

Teacher One in School Two (T1, S2) and Teacher Three in School One (T3, S1) also said that classrooms were too small plus the school environment and space was not able to cater for children with disabilities. The small area in the community that had been allocated for elementary school was unable to accommodate bigger buildings. If the school expanded there would not be playgrounds for children, as T1, S1 commented:

“Samting we em wokim hat lo ol gutpela pikinini na disabol pikinini lo mix wantaim na skul lo mainstream skuls em olsem environment em ino inap lo ol because ol bai nidim bikpela more space...Ol nidim ples were klia na klin na igat footpath” The thing that will make it difficult for non-disabled and disabled children to attend mainstream schools together is that the school’s environment (space) is too small. They [students with special needs] need bigger space...They need a place where it is clear, clean and has footpaths (T1, S1).

Facilities in the schools needed to be modified to suit all children. In this regard T1, S1 mentioned that:
“Wanwan ol (disabol sumatin) kam ol save lusim skul na go because environment em no gutpela lo ol. Ol bai kam tasol still ol bai lusim skul na go yet” The few [students with special needs] that come leave school and go because the environment is not applicable to them. They can come but they are still going to leave school (T1, S1).

One female participant made specific mention of the school toilet, since schools in the rural areas have pit toilets. This participant said:

“Ol bai kam tasol wanpela samting em toilet em no septic or em no safe” They can come to school, but one thing is that we do not have septic tanks…. It is not safe (T3, S2).

T1, S1 said:

“Wokim separate skul blo ol dispela disobol pikinini, wantaim olsem gutpela environment we em gutpela blo ol na igat planti samting we ol bai nidim lo usim. Lo normal pikinini em orait tasol lo disobol pikinini em hatwok tru, so ol nidim spesol area” Build separate schools for these disabled children, with a good environment where it is good for them, and where many things which they need to use are provided. For a normal child it is all right, but for a child with disability it is very hard work, so they need a special area (T1, S1).

Data revealed that because of the very limited knowledge participants had about the different types of disabilities they were thinking primarily of visually impaired children and children who were wheelchair users. They were not considering the possibility of including children who might have intellectual disabilities but who were otherwise physically able. Participants’ comments also suggest that without proper infrastructure and with an already crowded environment, they would not be keen to include disabled children.
4.4.4 Types of Disability

Teachers had pre-conceived ideas about which disability might be easier to include and work with. Six out of seven participants gave their opinion on this.

*Physical Impairments*

Two preferred teaching children with physical impairment rather than students with sensory impairments. From their point of view they considered wheelchair users as being less stressful for them. Teacher Three in School Two (T2, S2) said: “Wheelsia em isi bikos ol ken lukluk na understandim mi. Usim het na paim close attention” Children who use wheelchairs are easy to teach, because they would understand me and use their heads [meaning be able to think] and are also able to pay attention (T 2, S2).

In line with T2, S2, participant T1, S3 said:

“Ol dispela kain we ol save raun lo wheelsia em isi becose ol pikinini ken pusim ol go kam lo skul” Those that use wheelchairs would be much easier because children would be able to push them to school, and it would be easier to teach them.

But she further said:

“...na em bai isi lo teachim ol sapos yumi gat assistant tisa, ol bai helpim ol” It would be much easier to teach them if we have an assistant teacher, they would help them (T1, S3).

Though she sees wheelchair users as being much easier to work with, she also mentioned a need for an assistant teacher. This may imply that her acceptance of a child using a wheelchair would also depend on having an assistant present. From the participants’ viewpoint a wheelchair user is less demanding to work with than children with other disabilities. For them a wheelchair user may mean that the
person has problems only with their legs. They did not consider that those wheelchair users may also have other disabilities.

**Sensory Impairments**

Other participants accepting of including students with disabilities spoke of preferring students with disabilities that they had had prior experience working with mainly students with sensory impairments. For instance T4, S2 said:

“Mi no experience lo han or lek dispela kain, ai na ia ya mipela wok waintaim each yia, so mi hamamas lon helpim lo side blo ia na ai problem... mi no confident lo wok wantaim ol narapela disability” I have not had any experience working with children who have problems with their hands or feet [physical impairment]. I have only worked with children who have hearing or sight problems [sensory impairment] so I will be happy to work with them.... I am not confident in working with other disabilities (T4, S2).

Because they had constantly facilitated they become experts at it, and they did not want to leave their comfort zone. These teachers had “learned on the job” by working with children with one kind of disability and didn’t trust their ability to work with different kinds For example, a participant who currently teaches a hearing impaired child said:

“Ol iapas em olsem mi gat wanpela lo klasrum blo mi we mi wok lo wok wantaim na mi pilim olsem mi ken wok wantaim ol iapas ol narapela em bai hat true lo mi bai wok wantaim ol... em bai hat true” I have a child with a hearing problem in my class whom I am currently teaching, and I feel that I could work with children who have problems in hearing, but for other disabilities... it is going to be difficult for me (T3, S2).

Most participants who were already working with sensory impaired children agreed only to work with them. One participant, however, saw that inclusion in
mainstream schools for the sensory impaired would be difficult, therefore felt they needed to attend a special school. She said:

“Ol aipas, iapas… em hard tru, yumi nidim ol tisa we ol trenin lo skulim ol or ol ken go skul lo spesol education resource centre (SERC)” Pupils with visual, hearing impairments…would be too difficult, we need teachers who are well trained in teaching them or they can go to the Special Education Resource centre (SERC) (T1, S3).

Overall, participants’ responses revealed that most preferred working with disabilities they had had previous experience working with - mainly children with either hearing or vision problems. However, one participant regarded specially trained teachers and resources centres as providing a more suitable learning environment for children with sensory impairments. However, again, acceptance still depended on knowledge of specific disabilities, as this participant, a Teacher in Charge (TIC) of an elementary school, stated:

“Em mi no gat wanpela trenin lo wok wantaim ol disabol pikinini so mi no save which ones em isi lo wok wantaim, olsem mi wokim tok piksa lo iapas mi no gat save lo sign language but mi train lo helpim em nau yet em mi nonap acceptim wanpela inap mi kisim save lo wok wantaim ol” I have had no training to work with disabled children so I do not know which ones are easy to work with, like I have said about the hearing impaired I have no idea of sign language but I have tried to help the child. I won’t accept any unless I have had training in how to work with them.

However, he then went on to say:

“Iapas mi ting em bai alraite lo wok wantaim tasol aipas em bai hat stret” I think I can work with the hearing impaired, but visually impaired would be difficult (T2, S1).
That is, he first says he will not accept any child with a disability, but in his next statement he says cautiously that he thinks he would be able to work with hearing impaired children.

In contrast, another Teacher in Charge (TIC) of an elementary school, who is a Christian, was more than willing to include children regardless of their disability. He said:

“Mi yet mi pilim olsem mi ken includim ol, mi yet mi stap lo lotu tu na twelvepela years mi teach ya, mi pilim olsem mi ken wok wantaim ol kainkain disability” I feel that I can include them, as I am a Christian and I have been teaching for twelve years, I feel that I can work with different disabilities. (T 1, S2).

Overall, participants had many mixed feelings and thoughts about which type of disability they felt capable of including and teaching. It seemed that they were willing to include children that used wheelchairs, and those with disabilities that they had had previous experience working with. Others were not willing to include any child with a disability unless trained, while one participant, being a Christian, was more than willing to include any child with any disability. Because of the very limited knowledge that teachers have about types of disability, their responses were primarily limited to disabilities that included hearing and visual loss and physical disabilities associated with wheelchair use.

4.4.5 Time (Workload and class size)

Through observation, the researcher could see that though the teachers moved from one child to another time spent with each child was limited. Participants saw inclusion of a child with disability as extra work for them in a situation where they already had many children to cater for in their class. They thought they could not spend quality time with both abled and disabled children. All participants shared similar views.
T1, S3 said:

“Mi gat twentifor pela pikinin insait lo klasrum na tupela em ol disabol wantaim twentifor pela mi still panim hat lo wok gut wantaim olgeta pikinini, mi no gat taim na em wokload stre, yeah, wantaim liklik namba mi bai helivim ol gut tru bai mi inap lo spendim more taim wantaim ol na ol normal pikinini tu” I have twenty-four children in the class and two are disabled, with the twenty-four I still find it quite hard to work with every child, I do not have time and it is a big workload.... With a smaller class size I will be able to help all and will have time to spend with both the normal and disabled children (T1, S3).

In relation to that T1, S1 said:

“Em bai problem because planti taim em bai wokload lo mipela. Taim mipela laik doublim ol gutpela na disabol pikinini em bai wokload na mipela bai nogat inap taim lo attend lo olgeta” It will be a problem for us because it will be an extra workload. When we want to take on both able and disabled children it will be a bigger workload and we will not have enough time to attend to all the children (T1, S1).

With their professional duties and extra-curricular activities, T1, S1 thought a child with disability brought just too much work.

“Oh tisa we igat heart na bel lo halivim tasol ya bai ol halivim na sampela tisa we ol inogat gutpela bel na tingting lo helpim ol disabol ya ol inonap lo halivim ol. Ol bai bisi lo kipim record blo skul stap antap” Teachers who have the heart will help the disabled child, but for some teachers who do not have the heart they will not help them. They will be busy keeping the school record up (T1, S1).

Another participant had a similar view to T1, S1. This one said:
“Mi save lukim olsem taim mipela gat kain pikinini insait lo klasrum, ol tise no save tingim ol tumas, ol treatim ol olsem normal pikinini, ol tise ol no care sapos pikinini kisim or nogat. Ol lukim olsem em wokload” I see that when we have such children in the classrooms teachers do not pay much attention to them, they treat them as any normal children, they teach away and do not care if the disabled child is following or not. They feel that it is an extra workload for them (T4, S2).

A female participant in her early twenties further suggested that with a smaller class they might be better able to include disabled children. She pointed out that:

“Namba blo pikinin lo klasrum mas liklik wantaim liklik namba em bai mipela inap igat taim lo helivim ol geta” There must be smaller number of students in the class, with less numbers of children in each class we would have enough time to help them all (T 2, S2).

However, a participant in School Two said that including a child with disability would be fine. She stated:

“Insait lo education polici em tok 30:1 na lo hia mipela gat les lo 30 olsem na em bai orait....” In the education policy it says 30:1; here it is all right as we have less than 30.

However, she agreed that it would require time and also would be an additional workload.

“Tasol em true olsem wanpela disabol pikinini em nidim moa taim na em bai planti wok lo mipela ol tisa” However, it is true that a disabled child would require more time and it would also mean extra work for the teachers (T3, S2).

All participants considered that inclusion would not be possible with a large number of children in each class. Participants were concerned about the additional work and the effect it would have on them. For these participants, giving enough time to each child was important and for them it would not be fair if they would
not be able to give each child quality time. It was apparent that when there is too much for the teacher to do, they sometimes do not pay much attention to a child with disability in class, because of the large numbers of children per class and the extra duties they have to perform apart from teaching, developing teaching aides and preparing lesson plans.

4.4.6 Resources and Materials

The data revealed that all seven participants considered having suitable materials and resources vital to implementing an inclusive education policy. It was evident from the interviews and observations that the lack of materials and resources were major concerns for the teachers.

One participant said:

“Ol ken kam tasol mipela nogat materials lo wok waintaim ol” They may come to school but we do not have materials that we can use to work with them. (T3, S2).

Teacher Two of School Two (T2, S2) supported this statement, stating:

“Samting bilong lainim stap (material) em bai orait liklik” It would be all right if we had the materials to use to teach them (T2, S2).

Another participant who had received training was concerned that there were no adequate or proper materials. She had to improvise to teach children with special needs.

She said:

“Mipela kisim training, tasol lo skul mipela nogat inap material lo usim lo helpim ol, so mi save putim ol lo front na klostu lo mi. Mi usim liklik save mi kisim lo trenin na wanem samting mi tingim em orait me usim lo teachim ol so bai ol klia” We have received the training, however, in the schools we do not have enough
materials that we could use to help them. So what I normally do is I keep them in front and close to me. I use the little knowledge that I have gained through training and whatever I think it is proper to do and make sure they understand whatever I teach (T4, S2).

Further, this participant said that the materials in her class were meant only for the normal children, and they did not have materials and resources that had been adapted to meet the needs of children with disabilities:

“Blo ol disabol em mipela nogat, mipela nogat because mipela nogat planti disabol pikiini, blo ol normal pikiini em stap na mipela save usim dispela. Mipela skulim ol tasol... na ol kisim or nogat mipela ino save tu, mipela tise tasol”

We do not have materials for children with disabilities; we do not have them because we do not have a lot of disabled children. We only have materials that are applicable to the normal children. We teach every child using these materials, I do not know if the disabled child understands or not, I only teach (T1, S1).

To counter teachers’ negative attitudes towards inclusion and to boost their interest in it, appropriate materials and resources need to be made available. These would help children in their learning, as T1, S2 stated:

“Firstly yumi nidim material, sampela materials were mipela usim em ino inap lo usim wantaim disabol pikiini... so mipela mas igat gutpela materials lo helvim ol. Materials mi meanim olsem lo sait blo buks braille, olsem ol samting mipela ken usim lo teachim ol” Firstly we need materials; some materials that we use are not suitable for children with disability... so we must have good materials to help them. Materials, I mean brailled books or anything that we can use to teach them (T1, S2).

As one participant mentioned, this form of exclusion went as far as the guiding material itself:
"Curriculum blo mipela tu ino includim ol (spesol nid pikinini), so gavman em nid lo senisim curriculum lo includim ol disabol pikinini." Our curriculum does not even include them (children with special needs), so the government needs to change the curriculum to include children with disability (T2, S1).

Participants’ responses suggest that lack of suitable materials and resources, especially when working with a disabled child, presented a barrier to inclusion. Without enough or proper materials respondents felt that inclusion of children with special needs in mainstream classrooms would be less effective. They could include students with special needs in their classes, but if the school curriculum is not inclusive, then it is doubtful whether disabled children could participate in all activities.

4.4.7 Support from the Resource Centre and the Government

Support from the resource centre and the government was one of the things that all participants mentioned. They saw that if collaboration between the resource centre, government and the schools did not work then it would cause a failure of the inclusive education programme.

Resource Centre

Data revealed that six participants out of the seven interviewed had different opinions about how resource centres should work in collaboration with schools in order to make implementation of the inclusive programme successful. Examples of the variety of responses gathered are shown below. Some participants thought that the resource centres were not assisting them enough. For example, Teacher Two in School One (T2, S1), said:
“Ino gat wanpela halivim lo (resource senta) ol tu, em mipela stap tasol, mipela bisi tasol lo ol gutpela pikinin tasol stap” There is no help from them (resource centres); therefore we are concentrating only on the normal children (T2, S1).

Assistance from the centre in terms of sharing ideas, skills and knowledge through in-services and training was required. A female participant in her mid-twenties who had been working with an intellectually disabled child said:

“Ol sud wok gut wantaim mipela, tasol sampela taim olsem ol no save kam visitim mipela ....Kain olsem mipela gat kain sumatin (disabol sumatin) lo skul blo mipela, ol lain lo resource senta sud kam na lukim mipela, because ol gat trenin lo dipela (spesol/inclusive education trenin) na mipela nogat” They should be working well with us but sometimes they do not come and visit us.... When we have such children [disabled] in our school, the people from the resource centre should come and visit us as they are trained in this area [special/inclusive education] and we are not (T1, S3).

The lack of visits from resource centre personnel affected some participants’ interest in working with a disabled child, especially when inclusion was a new practice for the teacher. This participant in her mid-thirties had a clear view of what she expected the resource centres to do:

“Firstly, the resource senta (wokman/meri lo resource senta) sud trenim ol elementri skul tisa, secondly ol (resource senta staff) sud raun na lukluk lo olgeta skul we igat ol disabol pikinini” Firstly, the resource centre (officers from the resource centres) should train all the elementary school teachers. Secondly, they (resource centre staff) should be at least travelling to all the schools that have children with disabilities (T1, S1).

This participant thought that resource centre personnel should be visiting all schools and communities and promoting awareness of the programmes they have
and the services they provide. In the province, only certain areas where the officers at the resource centre visit are aware of the services they provide.

Another male participant stated:

“Mi ken tok ol no wok gut, olsem lo raun lo skuls na visitim ol skuls, recently...through ol band grup blo Mount Sion... ol planti wok lo luk save olsem igat special education centre lo Goroka..., so ol nid lo go lo olgeta schools na toksave olsem igat kain helivim ol bai ken givim lo ol skuls or sumatin” I can say that they are not working well with us, like going to schools for visits, recently... through the band group from Mount Sion ...a lot of people have come to know that there is a special education resource centre in Goroka... so they need to go to all schools and make known to everyone that they can help schools or children with disabilities (T1, S2).

Participants’ main concerns were that they needed the support of specialists from the resource centre in terms of training. Those who were teaching disabled children wanted daily visits from resource centre personnel. However, two female participants had contradicting views. From these participants’ points of view, it was the schools that should be making the first move instead of waiting for officers from the centre to come to them. This idea is illustrated in the responses below:

“Mipela yet no open up lo ol, mipela yet pilim olsem mipela fit. Inogat dispela wok bung tasol mipela yet in go lo ol” We are not opening up to them, we have this thought that we can do it by ourselves. There is no co-operation because we are not going to them (T4, S2).

In support of T4, S2’s view, T3, S2 said:

“Skul bilong mipela na resource senta ino wok bung waintaim. Tasol em helpim ol lain we papamama go putim ol (pikinini waitaim disability) lo hap, mipela lo hia em long way na em hat lo mipela lo ol bai go putim ol (pikininin waintaim disability) lo hap so ol stap tasol” Our school and the resource centre are not

91
working together. But I see that the resource centre only helps those children with disabilities whom their parents enrol them into the centre, for us here it is far and it is difficult for us to take them [disabled students] to the resource centre so they keep them at home (T3, S2).

These comments reveal that some participants saw that communication was a two-way process where centres provided help and teachers sought advice.

**Government**

Not only did participants think that resource centres should be working with the schools, but the government was also seen to have a role to play. The majority of the participants in the study had similar opinions regarding what assistance they thought was needed from government. Most respondents were concerned with the development of the special education policy.

This participant, in his mid-thirties, from his experience saw that the government was not doing enough to support the policy. He said:

“Gavman putim dispela polici na polici after polici em save putim tasol lo saite bilong inclusive education mi no ting em sapotim dispela polici (spesol education polici)... For example ... mipela igat wanpela survey book blo skul em i askim tu lo ... hamas pela disabol mipela igat lo wanwan klas... mipela filim na salim go... sapos ol kisim dispela information nau ol mas mekim sampela samting... taim ol lukim olsem igat disabol pikinini lo dispela skul ol mas givim helvim na sapotim mipela gut” The government has been putting policy after policy and I do not think that for inclusive education it has been supporting it.... For example... in schools we have a survey book for the school which asks for... how many disable children we have in each class....We fill it and send it....If they receive the information they must do something about it... If they see that we have such children they must support us well (T1, S2).
Other participants had different thoughts about the policy. Two were for the policy, others had reservations about it. These are illustrated in their responses. T1, S3 said:

“Gutpela olsem gavman em wokim tu (spesol education polici) becos taim ol skul wantaim mipela bai ol pilim olsem mipela tu human being.... Taim ol stap ol yet bai ol pilim out off ples na pilim olsem ol narapela kain” It was good that the government developed the policy[special education policy], because when they attend school with other able students they will feel that they are human beings.... When they are by themselves they will feel out of place and feel that they are different (T1, S3).

However, she further added that:

“Gavman sud givim ol sapot becose ol no kain olsem ol normal sumatin we ol bai nidim ol pensol na buk tasol. Ol bai nidim ol narapela samting lo usim tu, kain olsem ol material blo ol yet, ol ken providim kam lo ol skuls so ol tisa ken usim lo teachim ol dispela kain ol pikinini(pikinini waintaim disability )” The government should give them [schools with children with special needs] support because these are not children who are normal and only require a pencil and a book, they need other things to use as well, like their own materials, they can provide this to the schools and the teachers can use these materials to help them teach these children [children with disability] (T1, S3).

Similarly, participant T2, S1 said:

“Em gutpela olsem gavman blo mipela em putim dispela polici, but bipo lo em putim em sud providim olgeta materials na mekim gut ol ples nau em can kamapim dispela polici ya, pastaim ol (pikinini waintaim disability) stap lo Faniufa lo resource senta em oraite tasol nau mi harim olsem ol rausim ol pinis na em dispela em problem em mi ting olsem mipela elementri skuls truaaut lo country bai mipela bai facim problem blo skulim ol disable pikinini, mi no ting ol
“wok lo skulim ol dispela pikinini” It is good that the government has put in place this policy, but before putting it in place it should have provided all the materials and fixed the place and then it can develop the policy. When they [children with disabilities] were in Fanuifa at the resource centre it was all right, but I heard that they have done away with that and that is a problem. I think that we elementary school teachers throughout the country will face problems in teaching children with disability. I do not even think that they are actually teaching children with disability (T2, S1).

He further went on to say that:

“Gavman em putim polici nating tasol na em no follow up by putim ol sampela treined lain or mentors lo treinim or inservicim mipela lo sampela skills or educatim mipela lo skulim ol pikinini, ol nid lo treinim mipela gut pastaim lo sampela basic skills pastaim mipela can putim ol insait lo skul taim mipela treined” The government has only made the policy and has not monitored the programme. It should follow up by putting trained people or mentors to train or in-service us on some skills or educate us to teach these children, they need to train us properly on some basic skills first, then we can include them if we are trained (T2, S1).

From the participants’ view the policy was imposed on teachers to be implemented without proper groundwork having been carried out. This female participant said:

“Gavman mas lukluk go bek na lukluk lo graun pastaim lo wanem samting wok lo kamap na behind em ken wokim dispela polici em no ken just kalap lo window em no save wanem samting wok lo kamap lo graun stap, em mas stremim olgeta samting lo graun go antap olgeta olsem from elementri igo antap lo primary bipo em kamapim dispela polici” The government should have looked back to the schools and seen what is actually happening, then it can develop the policy, it should not have just jumped through the window, the government does not know
what is happening on the ground. It must fix things starting from the elementary schools right through primary schools before endorsing the policy (T1, S1).

The policy was developed; teachers were expected to implement it. However, participants felt that teachers still lacked vital skills and knowledge, resource materials were non-existent or inadequate and the infrastructures of the schools were not prepared to include children with special needs. As this participant stated:

“Gavman kamapim dispela polici tasol em no go na lukim wanem samting wok lo kamap lo ol skuls” The policy has been developed by the government; however, it has not made an attempt to go to schools and see the real situation as a lot of things are not working out well (T4, S2).

T1, S1 suggested that the government and resources centre work together:

“Wokim wanpela klasrum blo ol (ol pikinini waintaim disability) lo ol skuls na trenim ol tisa so ol ken igat gutpela skills lo halivim ol.... Ol nid lo givim ol elementri skul tisa gutpela trenin na providim spesol trenin senta so that ol tisa can go trenin lo skulim ol disabol pikinini” Build one classroom for them (for children with special needs) in all schools and train teachers so that they have good skills to help them….They need to provide the elementary school teachers with good training and provide special training centres so that all teachers can go there to train in order to teach children with disabilities (T1, S1).

The development of the special education policy in Papua New Guinea is a very worthwhile idea as there are many children with special needs in the country. However, the participants’ main concern, that the policy makers should have developed the policy after taking into consideration the problems teachers face in the schools, is seen as having hindered the implementation of this worthy goal. They considered that problems they have in regard to training, infrastructure, materials, or financial issues should have been addressed before the policy was developed.
4.5 Theme Four: Geographical Factor
The interview data and the observation of the physical environment revealed that geography was another factor having an effect on inclusion. Because of the geography and the road conditions parents were reluctant to send a child with disability to school. Four female participants mentioned the geography as a barrier to inclusion. For example, Teacher One of School One (T1, S1) said:

“Ples blo mipela em wokim na em hat streit, ples blo yumi em up and daun tumas, ples em no streit na flate blo pikinini wantaim wheelsia na aipas bai panim hat tu becose nogat gutpela rot” Our village even makes it difficult for disabled children to attend school…. Our village is not flat and straight for a child who is using a wheelchair and even a visually impaired child will have difficulty in travelling to school because there are no proper roads (T1, S1).

This issue was also mentioned by another female participant. She said:

“Mi ting olsem ples bilon yumi inogat gutpela rot, ples em gat planti maunten tumas na papamama ol ino karim ol (disabol) pikinini kam (lo skul)” I think our village does not have proper roads, the place is mountainous and for these reasons parents are not bringing their [disabled] children [to school] (T2, S2).

Her view was supported by T3, S2 and T4, S2. T3, S2 said:

Ples bilong mipela igat planti maunten na ino gat gutpela rot olsem na planti papa mama no laik salim ol pikinin kam lo skul” Our area is too mountainous and there are no proper roads therefore many parents do not want to send their child with disability to school (T3, S2).

Additionally T4, S2 said:

“Ples maunten nogat gutpela rot na papa mama bai apim ol (pikinini wantaim disability) na putim ol lo backssait na kam ya em hat wok na bai ol les tu” The
place is mountainous and we do not have good roads, parents will not want to
piggy-back their child [with the disability] every morning and evening back and
forth from school (T4, S2).

The responses of these four female participants give evidence of the areas that
they come from, and also that as women and mothers they were concerned about
the children’s safety. Rural districts lack basic infrastructures such as proper
bridges or sealed roads, at times causing accessibility to school to be quite
difficult. Moreover, some parents are concerned about the safety of their child
with a disability going to school alone, while others just do not have the time to
walk their child to and from school.

4.6 Theme Five: Parental and Community Awareness

Finally, participants believed that in most rural areas awareness about the right of
disabled students to attend school had to be raised because as many parents are
uneducated they are not aware of their child’s right to an education. Furthermore,
some people in the community are still attached to their cultural beliefs, so that
many disabled children are hidden away due to their parents’ shyness.

**Parental Awareness**

Interview data revealed that parents need to be made aware of their children’s
rights. The respondents in the study were concerned that many parents had not
been made aware of the policy of inclusion. For instance, this participant said:

“Mipela mas mekim planti awareness em bai orait, ol planti papa mama ol lukim
tasol disability blo pikinin na ol give up” It would be good if we could raise a lot
of awareness among the people; Most parents who have a child with a disability
see the disability and give up hope (T4, S2).

For many parents the fear that they have is that their disabled child may be made
fun of by non-disabled children. They therefore tend to protect them by isolating
them from their peers, which in turn causes the disabled child to be excluded from school. As a participant said:

“Papamama ol ting olsem ol gutpela pikinini bai discribim ol; ...so ol pilim shame na haitim ol. Tasol mi ting olsem sapos ol wokim awareness lo hausline em bai gutpela” Parents think that other normal children will mimic their child so they feel ashamed and hide them away, but I think that if awareness is carried out in the villages then it would be much better (T1, S2).

This participant was aware that all children had the right to be educated and believed that parents needed to be made aware of this. This is illustrated in her response:

“Lo ples em ol educated manmeri tasol ol luk save lo raits blo ol pikinini. Na bai ol train best lo go lusim ol lo Resource Senta. Ol manmeri lo ples ol no klia lo raites blo pikinini” Educated parents in the village are aware of children’s rights, and they will try their best to enrol the child in a resource centre. Other parents in the village are not aware of children’s rights (T1, S1).

Participants realised that parents may not be comfortable sending their child with disability to school, because they will think that, as T3, S2 suggested: “Ol poro blo ol bai ol tok bilas lo ol” Their school mates will make fun of their disability and tease them (T3, S2).

T2, S2 also supported this view and stated that:

“Taim ol (pikinini waintaim disability) kam lo klasrum bai ol narapela pikinini bai tok bilas long ol so ol bai pilim hevi long skul” When they [children with special needs] come to school other children will make fun of them, so they will feel out of place and that is why they may not want to come to school (T2, S2).
Participants believed that awareness of disability issues would bring to light the many doubts people have about disability, and prepare them to be more accepting towards people with disability. If programmes relating to the issue were presented in the villages, parents and other community members would become aware that it is the right of a child with disability to attend school.

**Waste of Time and Money**

Participants suggested that parents who did not send their child with a disability to school may view sending the child as a waste of their resources and time. Participant T4, S2 said:

“Wanpela em olsem ol papa mama yet ol save just tok maski lusim... maybe because ol lukim (bagarap lo bodi blo pikinini) tasol na ting olsem ol bai wastim taim or wastim moni long skul fee or kain olsem” One reason is that parents just do not care….maybe because they see their disability and have this thought that it would be a waste of time and money on school fees (T4, S2).

Similarly participant T2, S1 also said:

“Na ol papamama tu shame lo salim ol (disabol pikinini) kam lo skul. Planti mamapapa ol nogat idea lo dispela polici na ol tu ting olsem dispela pikinini em bai inno nap o skul na kisim wanpela save tu.Ol ting em wastim taim na moni lo salim ol go lo skul larim ol stap olsem..., planti gat dispela kain tingting” The parents are also ashamed to send their child (child with special needs) to school. Many parents do not know about the policy and they think that this child (child with a disability) is not able to attend school and won’t be able to learn anything, They think it is a waste of time and money to send them to school, let them be at home...., many parents do have this thought (T2, S1).

This way of thinking means that disabled children would be left at home while their siblings who are normal are sent to school.
Cultural Implications

Raising awareness and changing attitudes about inclusion is important specifically in rural areas. Many children in PNG live in rural villages; some parents are still uneducated and have not changed their beliefs about the causes of disability. This is what a participant said:

“Traditional bilip blo mipela tu em strong tumas ol save tok ol go lo ples we ino blo go or kaikai kaikai ino blo kaikai taim ol bel tu na kain hevi olsem save kamap”

Our traditional beliefs are too strong, they say that they went to a place where they were not supposed to go or ate food that the mother was not supposed to eat while pregnant and this thing happened (T2, S1).

Parents still think that their child was born this way because of a mistake they made so they keep them away from the rest of the community. As T1, S1 said:

“Sampela em mipela save bilip tumas lo samting blo ples olsem mipela save tok ol tewel, ples nogut meri em bel yet na em go, poison, bilip blo ples nogut na mama taim em bel em kaikai ol kaikai we em tambu lo eml. Ol save bilip lo kain samting na gat faith na em save kamap. Bipo em mipela save tok dispela samting em bagarapim ol” Some believe too much about things in the village, we say it is done by a spiritual human being, or the woman during pregnancy going to a restricted area, or eating certain restricted foods while pregnant, and also through sorcery. They believe in these things and have faith in it that it happens. In the past we say that these things are the causes of disability (T1, S1).

However, she went on to further say that this mindset is slowly fading. She said:

“Tasol now wantaim save mipela gat mipela wok lo start lo lukim olsem disability ino kamap lo wanem samting mipela save bilip bipo” But today with the knowledge that we have we are beginning to see that disability is not caused by what we used to believe in the past (T1, S1).
Cultural beliefs still affect special needs children’s inclusion in the mainstream school system. Parents are very concerned about comments other community members might make so they keep their disabled child at home. However, with these convictions slowly weakening or ‘dying out’, more parents are now enrolling their disabled child in mainstream schools.

4.7 Summary of the Chapter
This chapter presented the results of the data that were collected from seven teachers in the rural elementary schools. The study examined their perspectives on the inclusion of children with disabilities in mainstream educational settings. The findings revealed a number of factors that have an influence on teachers’ attitudes. Both the male and female participants in the study revealed their concerns and anticipations for children with disabilities and the inclusive education programme in Papua New Guinea’s elementary schools.

The next chapter will discuss the findings of this research. The chapter also presents the limitations, implications and recommendations of the study.
5.0 Overview of the Chapter

The objective of this study is to listen to and record the hardships that teachers have in including disabled children in schools. Through the interviews and observations, possible barriers to inclusion were identified. The identified barriers determined the attitudes of teachers towards inclusion. Therefore it is of great importance that their views are understood and taken into consideration as it will assist in improving inclusive education programmes in Papua New Guinea.

This chapter discusses the major elements that emerged from this study. These key elements will be discussed under the same themes identified earlier in Chapter Four.

5.1 Theme One: Elementary Teachers’ Perception of Special and Inclusive Education Concepts.

The study revealed that participants had limited knowledge and understanding of the concepts and disciplinary environment in the field of special/inclusive education. This was reflected through their definitions of the terms. Because of the lack of comprehensive knowledge about special/inclusive education the definition of the terms seemed complex that teachers defined the terms depending on which students they consider as being qualified for special education measures (Persson, 1998).

Firstly, for the participants special education meant a school intended only for those children with disabilities. Most participants were unaware of how resources centres function. Therefore the dominant view they had of the centres was that they were schools intended specifically for children with disabilities. One participant, for example, mentioned that “this is where such children [children with special needs] attend school” (T1, S3). Children with disabilities were
thought of as abnormal students who would need specialised people to work with them; accordingly they defined special education as for children with disabilities who should receive education in special education centres rather than mainstream schools.

The literature reveals that while general education focuses on groups special education focuses more on the individual. In special education all children have access to the general education curriculum, but a variety of teaching pedagogies are used to address each individual child’s learning requirements for example, sign language for the hearing impaired, social skills for the child with emotional or behavioural disorder (Bryant, Smith & Bryant, 2008) therefore making certain that all children with disabilities receive appropriate education to the maximum extent, like their normal peers (Obiakor, Harris, Mutua, Rotatori, & Algozzine, 2012).

Secondly, two participants seemed to have a reasonable knowledge of inclusive education, and defined it as meaning that normal and disabled children are able to attend the same school together, with disabled students therefore accessing the standard curriculum with their normal peers (Bryant et al., 2008). Their knowledge was the result of their having been previously introduced to the term and practices. As stated earlier, the move towards inclusion was motivated by a desire to include in regular classrooms children with special needs who were once discriminated against and segregated from the mainstream education system.

The movement placed the responsibility on education departments and schools to create schools that were responsive to facilitating the educational needs of all students (Kavale & Forness, 2000; Singh, 2010). What the participants did not appear to consider is that inclusive education is not just about being included; rather, it means getting children with disabilities into and through school by developing schools that are responsive to each child’s particular needs. Its primary focus is on children having access to and receiving high quality education (Winter, 2006; Singh, 2010; Angelides, Sawa & Hajisoteriou, 2012). In addition to that,
inclusion must also incorporate the quality of the experience in school, and how far children with special needs are helped to achieve and participate fully in their education, rather than simply attending classes in mainstream schools (DfES, 2004, as cited in Winter, 2006). In many instances, children with disabilities though included are not being offered quality education.

The findings indicate that teachers were not familiarised with the terms and concepts of special and inclusive education concepts during teacher training. As a consequence, their lack of knowledge will greatly affect inclusion. Furthermore it may also influence their attitudes towards certain groups of children; for example, a child with a learning difficulty may not be regarded as requiring special education, because according to their definition a child with a learning difficulty does not fit their category of disability. It may also be speculated that the failure to establish an adequate and widely accepted definition of inclusion can present implementation problems (Choi, 2008).

5.2 Theme Two: Rights To Education and the Importance of Education

The study showed that although participants had limited knowledge about inclusion and inclusive practices they strongly believed that special needs children had the right to be educated. They believed that education is a need to which all human beings are entitled. For children with disabilities to participate in education was seen as a matter of equal opportunity and empowerment. Through education they would be able to live an independent and economically self-reliant life (Mayat & Amosun, 2012).

In line with what had been revealed in the literature, the study’s participants also viewed education as being of importance in this fast growing economic world (Miles & Singal, 2010; Kingston et al., 2003). For individuals to equally participate in knowledge building of the nation, firstly the nation and each community should develop an inclusive society. An inclusive society will provide opportunity to all individuals who have been previously marginalised to participate in the various activities from which they were once excluded, for
example, education, employment, sports, and decision-making in both government and non-government sectors (Singh, 2010).

Singh (2010) states “Education is the potential enabler for the social participation of all individuals in the society; hence it must reach to all without exception” (p. 78), because intelligence belongs to all individuals and not only a privileged few (Kress, 2011). However, children with disabilities are one of those groups that are denied an equal opportunity to education. Thus their quality of life is compromised. It is sad to know that, while education could give these children access to fulfilled lives, they are at times excluded (Singh, 2010; Nevin et al., 2008), by factors which block their inclusion in mainstream education systems.

The development of inclusive education, as Wade and Moore (1992) state, “has become influenced by and part of an argument for human rights and for equality of opportunity” (p. 1). It is “interwoven with issues of educational equality and social justice, human rights and prejudice reduction” (Sawa & Hajisoteriou, 2012, p. 76). It appears to be a step towards creating a society that respects and addresses the concerns of all human beings. The participants were aware of human rights; therefore they agreed that children with special needs had the right to be educated. The literature reveals that human rights belong to everyone who is categorised as a human being (Griffin, 2008; Mckenzie & Macleod, 2012); and education is fundamental human right. However, many poor and disabled children through no fault of their own are deprived of this right.

This study also discovered that participants’ belief in God required them to make moral decisions based on their faith. Some participants reasoned that disabled individuals must be treated equally with normal individuals because God created us all the same. Because Christianity is a common practice in PNG, it is accepted as common knowledge that humans are created by God. “One’s right lies in the belief that human beings have been created according to the image and likeness of God” (Mažeikienë & Ruškė, 2011, p.21). Because “we are created in God’s own image, he gives every individual a unique yet equal value and dignity. Beneath
our natural differences there is an equality of worth which outweighs them all” (Wren, 1986, p. 43). For that reason all humans are important, and margins should not be drawn between human beings.

The findings show that the teacher participants were sympathetic to and mindful of children with disabilities. In addition, Christianity placed an obligation on them to be considerate of all people. However, there were also obstacles that limited teachers’ acceptance of children with special needs when it came to including them fully in their schools and classes.

5.3 Theme Three: Factors that Influence Teachers’ Attitudes

Inclusion has become a significant component of educational reforms. However, problems impede the principal goal, which is to educate all students with disabilities in the least restrictive environment (Hsieh, Hsieh, Ostrosky & McCollum, 2012; Praisner, 2003). As most teachers are unfamiliar with effective teaching strategies they have the tendency of pushing away disabled students (Buswell & Schaffner, 1995). Children with special needs face many difficulties in obtaining quality education because of their teachers’ attitudes (Faamanatu-Eteuati, 2011). The study revealed several contributing factors, and each is discussed below.

5.3.1 Teacher Training

As teaching skills and knowledge in inclusive practices is central to how well inclusive education is implemented, a major focus should be on training (Forlin, 2010b; Giangreco, Carter, Doyle & Suter, 2008). It has become very challenging for the educators to work in a diverse environment; all seven participants were very vocal about training as the whole notion of inclusion is a formidable one. Several factors support the participants’ view that teacher training in inclusive practices is important.
Willingness (or otherwise) to include students with disabilities

Of the seven participants, only two went through inclusive practice training and therefore were willing to include and work with students with disabilities. For a teacher to successfully include a child with special needs in class, being “willing” appears to be a key factor. Gaps may still exist in teachers’ willingness to include and work with special needs children if teacher preparation programmes are not consistent and effective (Winter, 2006).

Though components of special education courses were included in elementary teacher training in 1998 (Aiwa, 2006), it was interesting to find that some of the teachers had not been trained or in-serviced; for example, a teacher who was into her third year of teaching and a male teacher in his twelfth year of teaching mentioned they had not received any training in inclusive practices, unlike another teacher who was into her twelfth year of teaching, but had received such training. The conclusion that may be drawn from these responses is that there is inconsistency in special/inclusive education training during elementary teacher training.

Delivery of Lessons

Special education courses taken during pre and in-service training would enable teachers to explore the different types of disability and introduce them to pedagogies which they could use to address each child’s educational needs (Faamanatu-Eteuati, 2011). The lack of such training presents difficulties for them in preparing and imparting lessons appropriate for all learners. Participants noted that without the relevant training it was difficult for them to teach children with disabilities. If they had acquired inclusive skills during training they would be able to deliver lessons to the diverse learners they have in class, but without such knowledge they felt incompetent.
Training for Teachers in Rural Areas

Local teachers usually know all the inhabitants of their village, either as neighbours or as relatives (Opdal et al., 2001). The participants were aware of disabled children who were not receiving education. With this concern two participants in the study said that they needed training because many children with disabilities lived in their villages and the resource centre was located far away. The resource centres, as earlier stated, are located in the major towns and cities of PNG. Those who live near or in the towns and cities are able to enrol disabled children at these centres and receive help from the officers but for those who live in remote rural areas it is difficult. Some parents move into the towns and cities to enrol their children into schools near the centre so that they can receive support from the resources centre. Training of teachers during teacher training would help counter the problem, and children with disabilities in the rural parts of the country would be able to receive education within in their own communities.

Training for the Heads of Schools

Over the years the demands on school leaders have increased as their job has become more complex, less predictable, less structured and more conflict prone. Pressure is placed on them to make decisions within the school organisations, and now that there are matters relating to racial, ethnic, gender and disability issues in the education system they have to be equipped with new knowledge and skills in order to lead and manage their schools (Beachum & Dentith, 2004; Begley & Johansson, 2003; Childs-Bowen, 2005).

This study discovered that the TIC of School Two welcomed disabled students into the school and was willing to include and work with them because he was trained, unlike the TIC of School One. The attitudes of TICs in elementary schools are essential to facilitating inclusive practices in schools. They become primarily responsible for change; in fact they are the agents of change (Cook et al., 1999; Barnett & Monda-Amaya, 1998). Successful implementation of the inclusive programme requires attitudinal, organisation and instructional change to take place. The major player in the change process is the school principal (Barnett
& Monda-Amaya, 1998). As the major players, school leaders must be equipped with the knowledge and skills required for inclusive practice, if they want to create an inclusive atmosphere and guide their teachers (Murtadha-Watts & Stoughton, 2004).

Leading a school means being responsible for activities that happen in the institution that is meant to educate future generations. When the TICs of elementary schools, who often act as the gatekeepers or the gate openers, are not equipped with the necessary skills it is most likely that they will be resistant towards inclusive education (Moos, Möller & Johansson, 2004). Though the TICs of elementary schools may not become experts in inclusive practices, it is essential for them to have the knowledge and skills needed to perform special educational leadership tasks. Their attitude to inclusion is absolutely critical to the success or failure of inclusive education (Cook et al., 1999; DiPaola & Walther-Thomas, 2003).

It is unquestionably important that regular educators need to learn the appropriate skills as well as to understand the ideology of inclusive practice. The type of professional learning they engage in will determine the success of inclusion. Teacher training should be continuous through in-service or professional development courses in schools. This then increases the challenge to the teacher educators who are key players, seeing that they are responsible for educating those new to the teaching profession (Buell et al., 1999; Winter, 2006).

5.3.2 Teaching Experience

The study revealed that experience with disabled children could contribute to both positive and negative attitudes to inclusion (Khochen & Radford, 2012). The points that were drawn from this aspect of the research are discussed below.
Experience in Teaching a Child with Special Needs

The responses of the participants were significantly related to prior teaching experience with disabled students; five out of the seven had had such experience (See Demography of Participants, Table 4.1). As indicated in the literature, some teachers who have had experience working with children with special needs have positive attitudes to inclusion (Opdal et al., 2001; Ernst & Rogers, 2009). It has been suggested that to improve teacher attitude teacher preparation programmes should provide greater opportunity for teachers to engage with disabled children. It is claimed that the actual experience develops educators’ abilities in educating a heterogeneous group of children (Parasuram, 2006), that the opportunity to interface with the children will have an affirmative impact on teachers, and that it builds teacher confidence in inclusion (Forlin, 2010a). One participant in the study had worked with special needs children during his training felt that he therefore had a positive attitude to inclusive programmes.

However, the study also found that not all participants had had positive experiences in their interactions with special needs children and therefore were uncertain about inclusion. Some participants who had taught children with disabilities during their teaching careers expressed positive views, but a male participant who had had an unfavourable experience was reluctant.

Teachers’ Confidence in Inclusive Practice

Educators without experience with disabled children are likely to lack self-confidence, as was revealed in the responses of some of the study’s participants. It has been argued that the best way to increase such teachers’ confidence is by making them aware of their responsibilities towards children with diverse learning needs (Forlin & Chambers, 2011) while also imparting to them the skills and knowledge needed to teach their disabled students. Hands-on experience will likely enhance their confidence.
**Teaching Experience, Gender and Age**

In terms of years of teaching experience, the study showed that of the three teachers who were into their twelfth year of teaching two had positive attitudes towards inclusion, while those that had taught between three to six years hesitated in including children with disabilities, except for one participant who had been teaching for three years. The study seems to support Buell et al.’s (1999) contention that experience will at least tend to lead to a sense of efficiency in inclusive practices.

The age of participants ranged between 20 and 40 years. A female participant in the 20-25 years age range was reluctant to include a child with disability. It may be that she felt neither competent nor confident in her own ability, which occasionally occurs when teachers are just starting their careers (Winter, 2006). However, this young female teacher was not the only one reluctant to include children with special needs; older teachers between the ages of 36 and 40 years were also unwilling. In fact the study found no significant differences in attitudes of younger and older teachers, or those that had served longer in educating students in elementary education. Nor could a relationship between attitudes and gender be verified.

To summarise, findings reveal that experience, exposure, confidence, teaching experience, gender and age all correlate in one way or another. They also reveal that the experience of teaching disabled children in schools does not necessarily develop positive attitudes in teachers, though it may develop confidence in one’s ability. Moreover, age and number of years one has been teaching in schools also do not necessarily give all teachers the confidence to accept students with disabilities willingly. Supportive attitudes depend upon other factors as well.

**5.3.3 Infrastructure and the School Environment**

Inclusive education does not require individual students to adjust to the schools’ settings, but schools to adapt to individual students’ needs. In other words, the
school’s infrastructure and the environment should be accessible for all children (Angelides et al., 2012). The participants of this study had concerns about the infrastructure as well as the school environment. In their view the infrastructure and school environment were not convenient for children with disabilities.

A participant mentioned that a lot of things in the mainstream schools are not designed in a way to cater for special needs students. For instance, from the participant’s point of view (and also as observed by the researcher) the classroom spaces were too small and were overcrowded. These would make inclusion impossible for pupils with physical impairments to move about freely. Their physical placement in the mainstream environment would not mean much if schools did not make adjustments to other areas of schooling, such as pathways, toilets, etc. (Forlin, 2010b; Mapsea, 2006). One participant raised concerns about the overall school environment, particularly the school playing field, being too small, meaning that students with disabilities, specifically those that were visually impaired, might bump into large objects. Participants suggested that this is one of the many issues that need addressing in most elementary schools in rural remote areas if schools are to be inclusive practically both in and out of the classroom.

Having been allocated a small piece of land in the community, schools are unable to do much in terms of extending the school yard or building bigger classrooms. They just have to make do with what they have been offered by the landowner. This then raises another issue for the community, teachers and the education departments to investigate and resolve.

The study reveals that the concept of inclusion places increased pressure and expectations on the governing bodies of the schools to create schools that are accessible to and can accommodate children with disabilities. For that reason a significant restructuring of the infrastructure and environment is highly recommended in regular elementary schools for them to be able to cater for children with diverse needs (Winter, 2006; Barnett & Monda-Amaya, 1998).
5.3.4 Type of Disability

The other factor that influences teacher attitudes is the type of disability. All special needs children regardless of the type of disability should be considered in one way or another as capable of learning (Dizdarević, & Ibralić, 2011); however, in accordance with what had been noted in the literature (for example, see Khochen & Radford, 2012; Kim, 2011), the attitudes of the participants varied according to the type and severity of the disability. The views of the teachers in this study revealed that they had their own reasons why they wanted to work with certain disabilities.

Firstly, two participants of the study preferred working with children with disabilities that would be less demanding, and therefore they preferred wheelchair users, saying that the child’s academic inclusion would not be a problem. What they did not consider is whether the whole environment and infrastructures are inclusive for wheelchair users. Furthermore, they did not consider the fact that a wheelchair user may also have other disabilities.

Secondly, participants preferred working with disabilities with which they had had previous experience. Most participants were willing to work with students who had either hearing or vision problems, as they had already been exposed to such children and had been working with them for some time. They did not feel comfortable or confident to include children that had other disabilities.

There was a participant who did not choose to work with either physical or sensory impaired students. The participant was reluctant to include any child with any nature of disability as she had had no relevant training. Her lack of knowledge about disabilities was influential in her not accepting children with special needs. However, another participant was willing to include children with any type of disability because he was a Christian and believed that it was his Christian duty to help others, even though he might not be knowledgeable.
As stated previously, the literature revealed that a favourable attitude to inclusion depends on the severity of the impairment (Avissar et al., 2003; Cook, 2001, 2004), and that teachers prefer teaching children with mild or moderate disability to those with severe disabilities (Scruggs & Mastropieri, 1996; Taylor et al., 1997). The participants in this study did not take the latter distinction into account. Therefore these findings illustrate their lack of knowledge about disabilities. How they might react to children with severe sensory or physical disability would be another issue.

Overall, a clear conclusion cannot be drawn from this study, as participants had their own thoughts about disabilities and inclusion. As in previous studies there is inconsistency in their attitudes towards inclusion of students with certain disabilities.

5.3.5 Time (workload and class size)

If teachers are to be able to interact with each child in a constructive way class sizes need to be reasonable, as the amount of quality time spent with each child is very important. Including and working effectively with pupils with special needs, especially in mainstream schools where teaching skills, infrastructure, support from stakeholders and resources and materials are inadequate, has made inclusion a time-consuming and difficult process (Khochen & Radford, 2012: Batsiou et al., 2008).

It may also be assumed that without adequate teacher training and appropriate support it adds to teacher workload (Kugelmass, 2004). As in other studies (Vuran & Varlier, 2006; Lambe & Bones, 2008), participants in this study had concerns about their workload and class size, and this has resulted in teachers treating pupils with disability as normal children. A participant has observed that when there are children with disability in a classroom they are sometimes treated exactly like normal children. Therefore she assumed that because teachers feel that having a disabled child in the class brought an extra work, they tend to have
this “I don’t care” attitude as it would seem to be a waste of time when they have other children to think about and so much to do.

Then there are others who are so concerned with their school’s performance that they do not have the time to attend to children with special needs. One participant said that only those that have a heart for these children will assist them, regardless of the workload, class size, or time; others were unsympathetic, and would not bother, as they regarded teaching disabled students as time-consuming.

Such a revelation brings to one’s attention the fact that teachers already have a full plate with their professional and extra-curricular duties. On top of all this they consider themselves lacking in skills and knowledge. To include a student with disability will only heighten their problem. Therefore it may be suggested that in the best interest of teachers school leaders take the initiative to reduce the number of children in a class that have disabled students.

5.3.6 Resources and Materials

Not only is inclusion difficult because of the additional workload; the matter of resources and materials also caused teacher negativity. Just like previous studies, this one revealed that teacher attitude is affected by the availability of suitable and adequate resources (Ching et al., 2007; Memisevic & Hodzic, 2011).

As the researcher noted, schools did not have adequate or proper materials or resources for children with disabilities, a concern also raised by the participants. Without appropriate resource materials a number of problems arise.

Firstly, children with special needs are excluded from participating fully in the activities of the school. A participant was worried that the children may come to school but they would not have materials that would be appropriate for them. Teachers believe they have materials that are applicable to normal children and fear that they may not be imparting quality knowledge to a child with disability. A participant who was trained in inclusive practices mentioned that when they
returned to the schools after their training they realised that suitable materials, for example, brailled books or assistive technology devices, were not available. Therefore, she said, she keeps the special needs child in front of her and then does whatever is necessary to assist in the child’s learning. This can be considered a good start, but how long the teacher will have the patience to do it is a concern.

Inclusive education does not mean just enrolling a child with disability without adequate or proper teaching resources and materials; it should not be a sink or swim situation (Giangreco et al., 2008). For learning to be meaningful, resources are very important. Good resources and materials can also remedy insufficient knowledge teachers have on inclusion and help them engage special needs children in quality learning (Buswell & Schaffner, 1995).

This finding implies that those teachers that are trained in inclusive practices are determined to assist disabled students, and are curious and excited to implement what they have learnt; however, the lack of sufficient and appropriate materials discourages them. This calls for a dialogue between the educational authorities and school leaders to address the issue.

5.3.7 Support from the Resource Centre and the Government to Implement Inclusive Education Programmes

Much support is needed from the government through the education department and the resource centres in terms of training, materials and finance. Teachers in the study raised concerns that there was not much support from the government. In many countries, organisations both non-governmental and governmental work collaboratively towards developing programmes and opportunities for special needs children (Faamanatu-Eteuati, 2011); however, though it may be working well in some parts of the world, in others it is not.

Firstly, the study found that there is a lack of assistance from the special education teachers. A participant who teaches a child with disability said that she was not
visited as much as often. She was visited only once or twice in a month by the resource centre staff. This has caused her to ignore the child with special needs because she had run short of ideas. Other participants raised similar concerns; but in most situations it is not the fault of the staff from the resource centres, it is because there is a chronic shortage of fully certified special education teachers (Brownell, Ross, Colón, and McCallum, 2005), so that they are unable to visit all schools. The ratio between teachers from special education resource centres and special needs students is often quite unrealistic, meaning there are too many children that require help and the number of staff in the resource centres is too small. For example, when the researcher was working in the resource centre in Goroka, East Highland Province, there were only about nine teachers who were actually working with teachers and children with disabilities, making it impossible to cover the whole province and visit all schools.

Secondly, a participant suggested that resource centre staff should be involved in training elementary school teachers. Because teachers in the special education resources centres are thought to have all the expertise on special education, teachers in mainstream schools depend heavily on them for instructional techniques, professional development and resources (Obiakor et al., 2012). This means that if the resource centre officers do not provide assistance the elementary teachers are unlikely to accept children with special needs, or to teach them well if they do accept them. Elementary teacher trainers are responsible for training elementary teachers and, as stated earlier, there are appointed trainers in inclusive practices. But from what the data have revealed it is uncertain whether the trainers are conducting effective trainings.

However, other participants considered that it was the schools that were not opening up and inviting the special education resource centre officers onto their premises. It is only upon requests from the people concerned in elementary training that officers from the special education resource centre conduct training. In regard to in-service training it is mainly the schools’ responsibility to request an in-service as much resource centre attention is diverted to schools that have
informed the centre that they have special needs children and require assistance and training. This shows that there is a lack of communication between the professionals, resulting in disabled children missing out on education.

In regard to the government, few teachers have made their opinions and views known about what they think the government should do or should have done before actually developing the policy on inclusive education. Participants voiced their concern about the policy, because putting it into practice is quite a challenge. The top-down decision has had a negative impact on the teachers, and the innocent students with disabilities are feeling the effects. Though the policy was attempting to eradicate inequality in education (Redley, 2009), participants in the study thought that policymakers had overlooked some factors that may work against the policy having its desired effect (Winter, 2006).

The first of these is the conditions of the schools. When such policies were developed too little attention was given to understanding the conditions that the mainstream school teachers work under and the difficulties that mainstream schools are facing. As they would be the key players in implementing the policy, policy makers needed to work with them, and obtain their views and opinions before developing such policies (Winter, 2006). As one participant put it, “They should not just jump through the window” (T1, S1). Furthermore, they should make sure teachers are equipped to include and deliver quality lessons to special needs children. The policy will be hard to achieve with teachers facing barriers such as lack of access to information (Goodman & Burton, 2010).

A second concern is budget. Without financial back-up, how will the policy be implemented. The special education programme will be facilitated when support for inclusive education is backed up by a budget which takes into account students with disabilities (Singh, 2010). Concerns were raised that the government was not doing enough to support the inclusive education policy; though participants did not directly mention the term ‘money’ there is no doubt that
educational institutions need financial assistance from the government. Budgets should be allocated with consideration for students with special needs.

The key players in the education department make decisions that are at times not in the best interest of other stakeholders. For instance, the special education policy was developed and approved by the government to be implemented but, as this study found, some teachers do not approve of the policy, while others approve but with reservations. They have these mixed emotions because they personally know that they are not prepared with the skills and knowledge to teach special needs students, and furthermore there are many issues in the schools that need addressing before they are able to include those children. It may be assumed that if the government and the policy makers had approached the schools before developing the policy it would be more probable that inclusion could be successful.

According to what the findings have revealed, the government has made the attempt to include special education courses in training institutions to address the issue of a shortage of certified special education teachers. However, as previously mentioned, the teachers are not implementing what they have being taught. Everything has been thrown back to the officers in the centres and this has made it very difficult for the officers.

The study also reveals a lack of communication between the resource centres, schools and the education departments. It must be noted that the problem will probably only worsen when there is a lack of constructive communication between the stakeholders.

5.4 Theme Four: Geographical Factors
The local topography may not be an issue in some developed countries, but for developing countries like Papua New Guinea, it is. The natural features of Papua New Guinea have an effect on inclusion, and this was revealed in the study. Inclusive education was introduced into Papua New Guinea to provide access to education for children with disabilities, including those who lived in rural and
remote communities. The responses of the participants revealed, however, that the location of some rural communities makes it impossible for disabled children to travel to school. Road conditions, unsafe bridges, or having to travel through mountains have discouraged parents from sending their children to school. Parents are concerned for the safety of their child and would prefer them living at home where it is safer (Arbeiter & Hartley, 2002; Daveta, 2009; Grech, 2008). Some participants mentioned that they had children with hearing and vision problems attending school. These may be children with mild or moderate impairments who are able to travel to school without much assistance, or who live near the schools.

Implementation of inclusive education in the rural remote areas firstly suggests that the government needs to improve road conditions in the rural areas so that there is easy access to schools through the use of motor vehicles or by walking. Proper roads would enable teachers to transport materials to schools, because sometimes learning materials are delayed because of transportation issues. The results show that the local topography affects not only the inclusion of a student with disability; it also affects other services in the community which would assist in the inclusive education programme.

5.5 Theme Five: Parents and Community Awareness
In Papua New Guinea inclusion is a recent concept and most individuals still believe that children with disabilities belong in the resource centres or are not supposed to be in school. However, with the current changes people are slowly coming to see that children with disabilities have the right to attend mainstream schools. In a country where people are attached to their cultural beliefs and practices it is a challenge to introduce new concepts. Therefore in order for societal shift towards greater acceptance of people with disabilities in Papua New Guinea there needs to be increased understanding of disability in each community (Kay, 2011).

The participants identified that increased awareness can change people’s mindset towards inclusion and for rural areas it is important that this public education is
carried out in the communities. Awareness of disabilities and understanding the capabilities of students with special needs will improve attitudes of teachers, parents and the community and ultimately create access to education for students with disabilities (Watson, 2009; Miles, 1996; Westbrook et al., 1993). The participants are part of the community and have seen what parents of disabled children think and how they act towards their children, and from their perspective they believe that greater awareness is needed.

Participants said that most parents consider not sending their child with disability to school because it would be a waste of their resources, and they also fear the reactions of teachers and non-disabled children in school. As was also mentioned by a few participants, parents are concerned about their child being teased by peers, and worry about how their child will perform academically. The participants also noted that children are sometimes hidden because the parents are too scared or ashamed to let their children out (Alur, 2010; Wade & Moore, 1992).

Participants held multiple beliefs. For example, one said that some of the traditional beliefs are slowly fading away. Belief systems change over time, though they are usually interwoven into many aspects of the local culture, and when western ideas and traditional systems intersect, there is a gradual change in a culture’s belief systems, with western ideas tending to modernise traditional thinking (Groce, 1999). It is coming to be accepted that the causes of disability are either biological or, environmental; for example, a participant mentioned that children do not take care when washing in the rivers and end up getting ear infections which gradually cause hearing loss (Bryant et al., 2008).

The burden of inclusion should be carried not only by teachers, special education resource centres, and the education departments. Everyone in the community, which includes the parents, school board members, other stakeholders and other community members, should be involved in the whole process. Increased awareness of disabilities issues in schools and communities would likely increase consensus building among all individuals (Obiakor et al., 2012; Angelides et al., 2012).
5.6 Implications, Recommendations and Limitations

This section discusses the implications of the study and then provides recommendations for further research that may help improve inclusive education programmes in Papua New Guinea. It also examines the limitations of the research done.

5.6.1 Implications

The results of this study call attention to attitudinal barriers that exist in the mainstream elementary schools of PNG. Teachers are the implementers of the policy and their views are to be respected. Their attitudinal barrier is therefore a challenge. Addressing such a change in their attitudes has implications for:

Inclusive/Special Education Teacher Training

The future of inclusive education depends on the ability of teachers to respond to the diverse learning needs of children (Wolger, 1998). Pre-service and continuous in-service training for teachers is without doubt fundamental to creating a teacher who is capable of supporting and moving the inclusion programme (Forlin, 2010a; Tait & Purdie, 2000; Bennett, Deluca & Bruns, 1997). Therefore general education teachers need to be qualified in regard to educating a child with disability, and teachers need extensive knowledge about different pedagogies applicable to each disability (Bryant et al., 2008). This does not necessarily mean that the fundamental skills they have are not suited for educating a student with disability. The teaching and learning principles remain, but they may be applied differently or systematically. With ongoing teamwork and staff development, a qualified classroom teacher who possesses an inclusive attitude can be expected to be successful in educating pupils with disability (Giangreco et al., 2008).

As in other developing countries, assistive technology devices are limited or nonexistent in PNG schools; therefore a teacher will depend mainly on what is
available. For developing countries like PNG, the topics covered during training should incorporate as much as possible the significant and functional strategies that are practically applicable to the local school context.

The knowledge, skills and experiences gained through training and professional development courses are central to creating an inclusive classroom. The knowledge gained may enable teachers not to be confined to one teaching style, and allow them to adapt the curriculum and instruction to fit all the learning styles of all children (Kugelmass, 2004).

**Visits from the Resource Centre**

The human resources that regular teachers have available are officers from resources centres, and teachers in regular schools look to them for valued advice and support. However, because resource centres have limited staff frustration is felt by teachers who have a disabled child in class and require advice and help but have not been visited as often as they had expected. In such situations in-service training is crucial. Because resource centres are located in the main towns and cities and it is quite difficult for people at the centre to attend to all elementary schools scattered all over the country, it might be a wiser use of resources if in-services were funded by the government and were conducted at the centre where representatives of each elementary school could attend. Working together they would be able to address the educational needs of the diverse students they have in class (Giangreco et al., 2008). Collaboration and planning between the teachers and officers from the resource centres would improve teaching skills as they learn from each other (Wolger, 1998) and is an important key to coping with diverse learners.

**Financial Support from the Government**

When it comes to top-down instructions educators are, not surprisingly, suspicious. Children who were once educated in special centres or schools are now required to attend school in the regular schools. It is being questioned, however, whether the government is fully supporting the special education policy in terms of
providing extra funds for schools (Kugelmass, 2004). Schools need funding in order to modify their facilities and where necessary purchase materials and equipment for students with disabilities. Teachers’ attitude to inclusion may change if they see that the government is giving schools financial support to implement inclusive education, and that there is close monitoring of the programme.

Awareness

Because there are many illiterate people in Papua New Guinea appropriate way of educating parents and other members of the community about disability matters, specifically in rural remote communities of Papua New Guinea, should be considered. Negative attitudes of parents and members of the wider community are a significant challenge to overcome. Awareness could change people’s mindset and lead them to envision a bright future for these children.

5.6.2 Recommendations

These implications suggest recommendations for education providers, policy makers and resources centres. Therefore:

1. The elementary teacher trainers in inclusive education need to collaborate with staff from resource centres and plan practical lessons for the trainees.
2. Training in inclusive practice should be informative, especially on the types of disabilities, so that teachers are clearly aware of the different types of disability.
3. In-service training programmes in urban schools on inclusive education should be conducted in schools each term. It should be an ongoing training,
4. Where teachers practise what they have learnt in their classes and discuss the difficulties and successes they have met.
5. For schools located in rural and remote areas it would be more practical if representatives from each school were financially supported by the government to go to the centres for training. To be sure that they are
practising what they have learnt and are conducting training among their school colleagues, a proper monitoring system should be put in place.

6. Government through the education departments should provide financial assistance for schools to purchase proper and adequate materials to support the learning of disabled children, and also improve their facilities so that schools are accessible to all children.

7. Public education programmes to raise awareness of all aspects of disability should be carried out in every rural and remote community and school.

5.6.3 Limitations of the Study

Although this study has provided some valuable insights, it also had several limitations. They are outlined below.

Firstly, the timing was poor. Because the researcher went to collect data during PNG’s national election period, it took a while to get approval from the Education Department of the Province. Furthermore, teachers were involved in the election and were distracted by events taking place which caused hold-ups, resulting in constraints on time.

Secondly, only seven participants were involved in the open-ended, semi-structured interviews. In addition to that there was not fair representation of genders. For these reasons the information provided by them may be unrepresentative, therefore rendering it difficult to generalise the findings.

Thirdly, the researcher could have interviewed some parents of children with disabilities, in order to draw fair conclusions of reasons why they have not enrolled their child into the mainstream elementary schools.

Fourthly, the study was conducted in one district in Goroka, Eastern Highlands Province (E.H.P.). It would have been better if it was conducted in the other rural districts, including the coastal areas, as well, so that a wide range of views from a
number of districts could be presented. However, the findings are based on the experience and views of elementary teachers in the rural area of Goroka District only, and thus might not exemplify the views of teachers in mainstream elementary schools nationally.

Finally, the researcher acknowledges that her inexperience as a researcher was a limitation to the study.

**5.6.4 Suggestions for Future Research**

The study articulated views and perspectives of seven participants from three rural elementary schools. Through their views and sharing of their experiences generalised comparison was made with other rural elementary schools in rural and remote areas of Papua New Guinea. Since not much research has been executed in inclusive/special education in Papua New Guinea, there are suggestions for potential research topics in this area.

1. Further study could be carried out on inclusion from the perspective of parents of both normal and disabled children.
2. Research could examine programmes offered in inclusive practices in teacher training institutions, specifically the elementary training courses.
3. Further study could explore the views and perspectives of children with disabilities who are currently attending mainstream schools.
4. A study could be carried out in the resources centres to present a fair view of their programmes, their successes and the problems that they face.
5. Study should be carried out in schools to see if the curriculum is inclusive.
6. Research could investigate whether disability awareness training does change attitudes.
7. A study could also be carried out in the Special Education Department in the National Department of Education (NDoE) on the inclusive education policy and on monitoring of the special education programmes in PNG.
5.7 Conclusions
The findings in this study reveal that the special/inclusive education programme in Papua New Guinea is far from being implemented in all schools. There is a high risk that not all children with disabilities in Papua New Guinea have the opportunity to attend a school. The Department of Education should therefore take appropriate steps to address these factors so that teachers may change their negative views about inclusion.

The policy has been endorsed and it is here to stay. The government through the Education Department has an important role to play to make sure that the policy it endorsed is being implemented and supported financially. Steps have been taken to implement the policy, but as yet there is no proper monitoring of the programme. Inclusion, as can be seen, requires commitment, from the government, education department, teachers in regular schools, resource centre personnel, parents and everyone in the wider community.

The findings justify further research into teachers’ attitudes towards the inclusive education programme in the elementary education sector. It is hoped that this project has provided insights for the National Government of PNG, the Education Department and the policy makers, allowing them to take teachers’ opinions into account. Being able to contribute to decision making relevant to inclusive education will encourage teachers to take seriously their responsibility to educate their special needs students.
REFERENCES


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153


APPENDICES

Appendix A: Letter of Approval from the University of Waikato

MEMORANDUM

To: Colleen Witik
cc: Dr Carol Hamilton
     Dr Gerry Hulme

From: Associate Professor Linda Mitchell
       Chairperson, Research Ethics Committee

Date: 5 April 2012

Subject: Supervised Postgraduate Research – Application for Ethical Approval (EDU092/12)

Thank you for submitting the amendments to your application for ethical approval for the research project:

Determining the attitudes of elementary school teachers towards the inclusion of children with disabilities: A case study of three elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea

I am pleased to advise that your application has received ethical approval.

Please note that researchers are asked to consult with the Faculty’s Research Ethics Committee in the first instance if any changes to the approved research design are proposed.

The Committee wishes you all the best with your research.

Associate Professor Linda Mitchell
Chairperson
Faculty of Education Research Ethics Committee
Appendix B: Consent Letter To The National Department Of Education In Papua New Guinea.

Colleen Winis
4/236 Old Farm Road
Hamilton East
Hamilton
New Zealand

10 May 2012

The Director
National Department of Education
Research, Policy and Communication Division
Research and Evaluation Section
P.O.Box 446
WAIGANI
National Capital District
Papua New Guinea

Dear Sir/ Madame,

Subject: Seeking consent to conduct research in three schools in Goroka, Eastern Highlands Province, Papua New Guinea.

My name is Colleen Winis and I am a Master of Education student at the University of Waikato in Hamilton, New Zealand. As part of my study, I am required to undertake a research project which is being planned to be conducted in three elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea. This letter; therefore, serves to formally seek your consent for the execution of the study in Goroka, Eastern Highlands Province, that is to be carried out early in May and June, 2012.

The research is entitled: Determining the attitudes of elementary school teachers toward the inclusion of children with disabilities: A case study of
three elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea.

Objectives of the research

1. To identify teacher’s attitudes, beliefs, and practices related to including children with disabilities in the rural elementary schools.
2. To identify the practical challenges that teachers may face to fully include children with disabilities in the elementary schools.
3. To find out how best teachers can prepare, so to be able to include all children with disabilities in their classrooms.

This study is aimed at investigating the factors that influence teacher’s attitudes towards inclusion of disabled children in the regular schools. This will be done by way of investigating the classroom teachers’ views and experience. The need for this study has risen from my personal experience working as a resource teacher for disabled students in Goroka, Eastern Highlands Province. Challenges and difficulties are encountered by teachers in understanding and implementing the inclusive education policy. Therefore, this study is dedicated to discovering ways of improving the practice of full inclusive education in the elementary schools.

During the study, only one method of data collection will be used. Teachers will be interviewed on individual basis using an open-ended semi-structured interview schedule. The individual interviews will take about 30 minutes. During the entire research process, the participating schools and the research participants will be respected. That means individual name(s) of the schools or the participants will not be mentioned in the write-up, but pseudonyms will be used. Teachers’ will not be coerced to participate in the study. Only those who wish to be part of the study will be interviewed at a time appropriate for them. After the data collection, the participants will have an opportunity to look through their transcribed data and make amendments if they wish too.
I believe the research will make a positive contribution to the special education programmes and practices in the country. If you approve of this study you could contact me as soon as possible through these following addresses;

Email address: cw180@students.waikato.ac.nz
or mail it to this address:
Colleen Winis
4/236 Old Farm Road
Hamilton East
Hamilton
New Zealand

If you require further information concerning this study please do not hesitate to contact my supervisor.

Dr. Carol Hamilton
Email address: hamiltca@waikato.ac.nz
Phone: (62)07-838-4466 (8578)

Find enclosed is the University of Waikato Ethics Committee approval letter for the research, and other information related to the study.

Thank you for taking your time in reading this letter.

Yours faithfully,

........................

Colleen Winis (Ms)
Master of Education student
Phone: (64) 02108291294
Appendix C: Consent Letter to The Provincial Education Advisor, Eastern Highlands Province.

The Provincial Education Advisor
Eastern Highlands Provincial Education Division
P.O. Box 240
GOROKA
Eastern Highlands Province
Papua New Guinea

Dear Sir/ Madame,

**Subject: Seeking consent to conduct research in three schools in Goroka, Eastern Highlands Province, Papua New Guinea.**

My name is Colleen Winis and I am a Master of Education student at the University of Waikato in Hamilton, New Zealand. As part of my study, I am required to undertake a research project which is being planned to be conducted in three elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea. This letter; therefore, serves to formally seek your consent for the execution of the study in Goroka, Eastern Highlands Province that is to be carried out early in May and June, 2012.

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During the study, only one method of data collection will be used. Teachers will be interviewed on individual basis using an open-ended semi-structured interview schedule. The individual interviews will take about 30 minutes. During the entire research process, the participating schools and the research participants will be respected. That means individual name(s) of the schools or the participants will not be mentioned in the write-up, but pseudonyms will be used. Teachers’ will not be coerced to participate in the study. Only those who wish to be part of the study will be interviewed at a time appropriate for them. After the data collection, the participants will have an opportunity to look through their transcribed data and make amendments if they wish too. I believe the research will make a positive contribution to the special education programmes and practices in the country. If
you approve of this study you could contact me as soon as possible through these following addresses;

Email address: cw180@students.waikato.ac.nz

or mail it to this address: Colleen Winis  
4/236 Old Farm Road  
Hamilton East  
Hamilton  
New Zealand

If you require further information concerning this study please do not hesitate to contact my supervisor.  
Dr. Carol Hamilton  
Email address: hamiltca@waikato.ac.nz  
Phone: (62)07-838-4466 (8578)

Find enclosed is the University of Waikato Ethics Committee approval letter for the research, and other information related to the study.

Thank you for taking your time in reading this letter.

Yours faithfully,

............................

Colleen Winis (Ms)  
Master of Education student  
Phone: (64) 02108291294  
E-mail: cw180@waikato.ac.nz
Appendix D: Approval Letter from the Department Of Education in Papua New Guinea

Ms Colleen Winis  
Waikato Faculty of Education  
The University of Waikato  
Private Bag 3105  
Hamilton, New Zealand

Dear Ms Winis

Subject: APPROVAL OF RESEARCH PROPOSAL AND PERMISSION TO CONDUCT STUDY

Your research proposal title "Determining the attitudes of elementary school teachers towards the inclusion of children with disabilities: A case study of three elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea" has been approved in principle prior to the Monitoring, Evaluation Research Steering Committee (MERSC) meeting next month.

The approval in principle is given due to the importance of your study. Use this letter as an approval for your data collection in your appointed province, district and institution in Papua New Guinea.

While your research is approved in principle to collect data in educational institutions/s, it is also subject to approval by Provincial Research Committee (where applicable) and/or the Provincial Education Advisor or the principals or head teachers of your nominated schools and institutions. It is your responsibility to ensure such is obtained prior to the field work.

In serious case of breach of ethical issues and Department of Education (DoE) research guidelines the DoE reserves the right to inform your home institution or sponsors directly and take necessary actions as deem necessary. Failure to observe the above conditions may lead to the withdrawal of research approval.

I thank you and wish you good luck.

Yours sincerely

LUKE TAITA  
Deputy Secretary-Policy & Corporate Services  
Chairman-Monitoring Evaluation & Research Steering Committee
Appendix E: Letter from the Provincial Education Advisor in Goroka, Eastern Highlands Province.

Eastern Highlands Provincial Administration
Division Of Education

P.O. Box 240
GOROKA, 441
Eastern Highlands Province

Telephone (675) 732 2242
Fax (675) 732 2242

Date: 09/05/2012

The TTC
Mateho, Menake and Akameku
Elementary Schools
PO Box 240
GOROKA, EHP

SUBJECT: REQUEST TO CONDUCT RESEARCH PROJECT

This is to advise your school that an officer from the University of Waikato in New Zealand will be conducting a Research Project in your school from May to June, 2012.

Your assistance in ensuring that the officer is given every opportunity to conduct the research will be very much appreciated.

Yours faithfully,

[Signature]

DAVIS GUNUIGEI
a/Advisor
Appendix F: Letter of Consent to Schools.

Colleen Winis
C/o Dr. Hamilton
Department of Human Development & Counselling
University of Waikato
Private Mail Bag, 3105
Hamilton, 2001
New Zealand

The Head teacher
_________________ Elementary school.
P.O. Box _____
Goroka, Eastern Highlands Province
Papua New Guinea

Dear Sir/ Madame

Re: Requesting To Conduct Research In Your School

My name is Colleen Winis, and I am currently at the University of Waikato doing a Master’s programme in special education. As part of my programme I have to complete a small research study.

I am interested in conducting my research study in Eastern Highlands Province; therefore, I am writing to you to ask if I can talk to teachers in your school.

The research is entitled: Determining the attitudes of Elementary school teachers toward the inclusion of children with disabilities: A case study of three elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea.

Objectives of the research

1. To identify teacher’s attitudes, beliefs, and practices related to including children with disabilities in three rural elementary schools.

2. To identify the practical challenges that teachers may face to fully include children with disabilities in the elementary schools.
3. To find out how best teachers can prepare, so to be able to include all children with disabilities in their classrooms.

Information that teachers will provide will remain confidential. I hope that it will help elementary education trainers to prepare teachers to be equipped with the necessary skills and knowledge needed to implement full inclusion of disabled children.

I have also enclosed information sheets for you to distribute to the staff in your school. If your school would like to be part of the study you can email me or send a letter to me on these following addresses.

Email address: cw180@students.waikato.ac.nz

or mail it to this address: C/o Dr. Carol Hamilton
Department of Human Development & Counselling
University of Waikato
Private Mail Bag, 3105
Hamilton, NZ

If you have any further questions about the study you can contact my supervisor Dr. Carol Hamilton.

Email address: hamiltca@waikato.ac.nz
Phone: (62)07-838-4466 (8578)

Thank you for taking the time to read this letter.

Yours faithfully

..........................

Colleen Winis
Phone: (64) 02108291294
Email: cw180@students.waikato.ac.nz
Appendix G: Information Sheet for Participants.

**Project name:**
Determining the attitudes of elementary school teachers toward the inclusion of children with disabilities: A case study of three elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea.

**Central question:**
What influences the attitudes of elementary school teachers’ in the rural areas towards inclusion of children with disability in mainstream elementary schools?

**Background:**
This research aims to create a better understanding of why inclusion might be difficult for children with disabilities in mainstream elementary Schools. Through this research I hope that it will contribute to a better understanding of your view of inclusive education in the rural centers of the country.

Special Education Resource Centers have been in the country for quite a while. It has always being the trend in the past that children with disabilities are sent to resource centers to be educated. Recently the notion of ‘inclusive education’ was introduced into the country to be implemented in the mainstream schools. To achieve education for all, the government introduced changes at the teacher training level. Basic ideas about inclusive education were taught to student teachers, but there are still issues about inclusive education. As teachers who are in the classroom you have your reasons and opinions about inclusive education. If you choose to be part of the study then you will be involved in an interview taking no longer than an hour. The interview questions will explore your views and opinions about inclusive education in the rural elementary schools in Papua New Guinea.

**What participation would mean:**
Your participation in this study will contribute to knowledge about inclusive education in elementary education in the rural areas of the country. As implementers of elementary education in the rural areas of the country we need to
explore your views and opinions on inclusive education from your experiences, so that we understand any barriers that you might face in including children with disabilities in the elementary schools.

Through your contributions I hope that elementary trainers may take into consideration your views, so that they prepare elementary teachers well in regard to accepting children with disabilities. It is also hoped that through this study the Department of Education may look into elementary schools located in rural areas where the majority of people reside in.

**Invitation to participate:**
You are; therefore, kindly invited to participate in this study that would be conducted in your school. Please note that:

- Your involvement in the study is voluntary, you have the choice of whether to participate or not.
- Only upon your verbal approval that you want to be part of the research will you be given a consent form to sign.
- Each interview should take no more than an hour.
- Your transcribed interview will be sent to you by mail in order for you to make any changes to it if you wish to.
- You have the right to withdraw at anytime from the study.
- You have the right to withdraw any data that you are not comfortable with, but not after you have returned to me your amended transcripts.
- All information gathered during the study will principally be used as the basis for my Master of Education.
- You will be informed how to access the Thesis once it has been passed.
- Audio tapes and transcripts will be kept in my room in a safe location, and electronic files protected by my password for a period of five years then destroyed.
- Care will be taken to ensure that your name will not be mentioned, or anything that may make you identifiable is published in the Thesis.
The study might be of benefit to the Education Department, the Resource Centers, and all implementers of the elementary school curriculum. Your participation in the study will be highly appreciated as it will make a great input into the education system.

For further information:
Please contact me if you need more information about the study;
Colleen Winis
Mobile number: New Zealand 6202108291294, Papua New Guinea 71865559
Email address: cw180@students.waikato.ac.nz

For any further information please contact;
Dr. Carol Hamilton
Email address: hamiltca@waikato.ac.nz
Appendix H: Informed Consent Form

Project name: Determining the attitudes of elementary school teachers toward the inclusion of children with disabilities: A case study of three elementary schools in Goroka, Eastern Highlands Province, Papua New Guinea.

Student Researcher: Colleen Winis
Email Address: cw180@students.waikato.ac.nz
Phone: New Zealand 6202108291294, Papua New Guinea 71865559

My name: ____________________________

Please tick each part to show that you have understood and willing to be part of the research.

☐ I understand that my participation in this study is voluntary.
☐ I understand that the researcher will not identify me personally in any presentations or publications reporting the study.
☐ I have read the information sheet and have asked questions I want to about the research project.
☐ I understand that I can withdraw from the interview process at any time
☐ I understand that I can be able to remove, change, or add to the transcripts of the interviews
☐ I agree to having my contributions during the interview audio taped.
☐ I agree to having the researcher collect and analyze my comments.
☐ I understand who I can contact if I have any concerns that I feel are unable to be resolved by speaking with the researcher directly.
☐ I would like to be informed about any publication of the research material.
I have read and understood all that is to be known and I agree to participate in this study. I also agree that the information that I give will be analyzed and published as a Thesis.

Student Researchers signature: ______________________ Date: ___/___/2012
Participants signature: ___________________________ Date: ___/___/2012
Appendix I: Range Of Interview Questions

1. What do you think is the difference between the words Inclusive education and Special education?
2. What experience have you had in teaching disabled students?
3. Have you had any training in teaching disabled children? If yes, how did the training you had help the child?
4. How do you think the special Education Resource Centers should work with you?
5. Do you think the government was right in developing a policy on including children with disabilities in all the mainstream schools? What worked well?
6. What did not work well?
7. What do you suggest should be done about disabled children’s education?

Probes

1. Could you give me an example…?
2. Do you think that …?
3. Could you elaborate on what you mean by…?
4. Why do you think that…?
Appendix J: Personal Information Sheet

Name: _____________________

Age.

<table>
<thead>
<tr>
<th>Age range</th>
<th>Tick your appropriate age range.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25 years old</td>
<td></td>
</tr>
<tr>
<td>26-30 years old</td>
<td></td>
</tr>
<tr>
<td>31-35 years old</td>
<td></td>
</tr>
<tr>
<td>36-40 years old</td>
<td></td>
</tr>
<tr>
<td>41+ years old</td>
<td></td>
</tr>
</tbody>
</table>

Grades Taught.

<table>
<thead>
<tr>
<th>Grades</th>
<th>Place a tick beside each grade you have taught.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elememtary Prep:</td>
<td></td>
</tr>
<tr>
<td>Elementary One</td>
<td></td>
</tr>
<tr>
<td>Elememtary Two</td>
<td></td>
</tr>
</tbody>
</table>
**Appendix K: Check Lists Of Elements Present During Observation.**

Observation Table
Observation #:____
Time:__:__ - __:__
Date:__/__/2012

<table>
<thead>
<tr>
<th>Elements</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical setting</td>
<td></td>
</tr>
<tr>
<td>The participants’</td>
<td></td>
</tr>
<tr>
<td>Activities and Interactions</td>
<td></td>
</tr>
<tr>
<td>Conversations</td>
<td></td>
</tr>
<tr>
<td>Subtle factors</td>
<td></td>
</tr>
<tr>
<td>Researchers behaviour</td>
<td></td>
</tr>
</tbody>
</table>

Source: Merriam, 2008