



MONASH University

Examining pre-service teachers' preparation for inclusive education in the Pacific region and the Solomon Islands.

Janine Simi

Master of Special Education, Waikato University, New Zealand

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ABSTRACT

This study was designed to examine and gain an understanding about how pre-service teachers are being prepared for inclusive education, with specific focus on pre-service teacher preparation in the Pacific region. The Theory of Planned Behaviour guided this study to examine if participants intention to teach in inclusive classrooms could be predicted from their attitudes, efficacy and concern scores. A Mixed Methods approach was used to gather data for this study, namely qualitative through interviews and quantitative through surveys. The study was conducted in two phases.

Phase one of the study was undertaken to explore the understanding of the deans and principals of teacher education institutions from the Pacific about how well pre-service teachers are being prepared to teach in inclusive classrooms. Nine ($n=9$) deans and principals of higher education institutions and colleges from the Pacific responded to 12 open ended questions. Thematic analysis of the responses indicated that deans and principals had adequate knowledge about inclusive education. They felt that pre-service teachers were not very well prepared to teach in inclusive classrooms. Curriculum reforms in inclusive education and increased opportunities to teach in inclusive classrooms were identified as important in the preparation of pre-service teachers for inclusive education in the Pacific region.

Phase two of the study involved a survey and semi-structured interview schedules. Seventy-eight ($n=78$) pre-service teachers took part in a seven-week university course focussed on the importance of inclusive education. A five-part survey questionnaire was used to collect data. Attitudes to Inclusion Scale (AIS), Intention to Teach in Inclusive Classrooms Scale (ITICS), Concerns about Inclusive Education Scale (CIES) and Teaching Efficacy for Inclusive Practices (TEIP) scale were administered prior to and after completing the

university course. The study also obtained participants' demographic information. A focus group interview was conducted thereafter with two groups of pre-service teachers, each group consisted of eight participants. The focus group interview was employed to triangulate responses in relation to pre-service teachers' perception about their preparedness to teach in inclusive classrooms.

Paired sample *t*-tests revealed that participants' attitudes and teaching efficacy increased significantly following the course as well as their concerns declined. Mixed design ANOVAs revealed that background variables like gender, age, level of qualification and contact with a person with disability showed no significant relationship towards pre-service teachers' attitudes and their teaching efficacy. With regard to their concerns, only one variable found to be significant. Participants who have 'some' contact with someone with a disability showed 'some' level of concerns about inclusion compared to participants with 'no' contacts. Likewise, results from the focus group interviews indicated that completing a course on IE and participating in professional experience had significant and positive impact on pre-service teachers' knowledge and understanding about IE.

The results are discussed and a number of recommendations are made for deans and principals of higher education institutions and teacher educators as well as policy makers involved in the preparation of pre-service teachers for inclusive education in the Pacific region and the Solomon Islands.

Key words – Inclusive education, pre-service teachers, attitudes, concerns, teaching efficacy, Pacific region, Solomon Islands

THESIS FORMAT

This thesis is a result of work written as unpublished text to fulfil the requirement of the Doctor of Philosophy at Monash University. The thesis was written and presented according to the recommended Publication Manual of the American Psychological Association [APA] 6th Edition (APA, 2010). The Reference list includes references used in the thesis. The ideas, development and writing of this thesis were the principal responsibility of me, the doctoral candidate working within the Faculty of Education of Monash University, Australia, under the supervision of Professor Umesh Sharma and Dr. Pearl Subban.

GENERAL DECLARATION

In accordance with Monash University Doctorate Regulation 17/ Doctor of Philosophy and Master of Philosophy (MPhil) regulations, the following declarations are made:

I hereby declare that this thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no materials previously published or written by another person, except where due reference is made in the text of the thesis.

Signature

A handwritten signature in black ink, appearing to read 'Janine Simi', written in a cursive style.

Print Name: Janine Simi

Date: 11th March 2019

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LIST OF ABBREVIATIONS

AIS	Attitudes to Inclusion Scale
AITSL	Australia Institute for Teaching and School Leadership
ANOVA	Analysis of Variance
APA	American Psychological Association
CAR	Collaborative Action Research
CIES	Concerns to Inclusive Education Scale
CoP	Community of Practice
CRDP	Convention of the Rights of Persons with Disabilities
EFA	Education for All
HEIs	Higher Education Institutions
IE	Inclusive Education
ITE	Initial Teacher Education
MEHRD	Ministry of Education and Human Resource Development
OECD	Organisation for Economic Co-operation and Development
PacREF	Pacific Regional Education Framework
PEDF	Pacific Education Development Framework
PICs	Pacific Island Countries
PIFS	Pacific Island Forum Secretariat
PHES	Pacific Heads of Education Systems

SINU	Solomon Islands National University
SOEH	School of Education and Humanities
SPSS	Statistical Package for the Social Science
TEIP	Teaching Efficacy for Inclusive Practices
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
USP	University of the South Pacific

CHAPTER ONE

Introduction

This chapter provides an overview of the composite intention of this research project. This study investigated the perceptions of deans and principals of higher education institutions and colleges and focuses on preparing pre-service teachers to teach in inclusive classrooms in the Pacific region with specific focus on the Solomon Islands, a tiny nation within the region. Insights into the aim and background of the study with a brief introductory support of literature and the key research questions for this study are the focus of this chapter.

1.1 Aim of the study

This study is aimed at examining how pre-service teachers are being prepared for inclusive education practice within Teacher Education Programs in the Pacific region with specific focus on the Solomon Islands. Currently, there is limited study and literature about pre-service teachers' preparation for inclusive education in the Pacific region. The interest in this study grew out of my own experience as a teacher educator involved in the preparation of pre-service teachers for the teaching profession at the School of Education and Humanities (SOEH), Solomon Islands National University (SINU). While this study was initially targeting pre-service teachers in the Solomon Islands, my perceptions changed to include other higher education institutions and colleges in the Pacific region as I progressed through my study. I was interested to find out how other higher education institutions and colleges in the region are preparing their pre-service teachers for inclusive education. While Initial Teacher Education Programs (ITE) are heavily involved in the preparation of pre-service teachers for the teaching profession, I began to question the pre-service preparation programs and courses that are being offered within higher education institutions and colleges. I pondered whether the courses were equipping pre-service teachers with adequate skills and

knowledge that would enable them to meet the challenges of inclusive education and become effective and inclusive teachers at the completion of their initial teacher preparation programs.

In order to address some of my questions above, this study saw the importance of including deans and principals of HEIs in the Pacific region. It is anticipated that feedback from heads of the institutions will provide more insights on how pre-service teachers are prepared for IE in the Pacific. Likewise, feedback from pre-service teachers in the Solomon Islands will strengthened the development and preparation of pre-service teachers for IE in the Solomon Islands and the Pacific region as a whole.

Throughout time children, youth and adults with disabilities have been excluded from educational opportunities and have faced discrimination in an endeavour to attend school. Teachers were not fully prepared to include them fully (Ahmmed, Sharma & Deppeler, 2012). The early 1990s saw a change of factors that affected the notion of education for those with disabilities internationally. International initiatives were developed to pave the way for inclusive education opportunities for those with disabilities to be educated alongside their peers in regular classrooms.

More than two decades ago, the Salamanca World Conference on Special Needs Education endorsed the concept of inclusive education (UNESCO, 1994). Arguably, the most significant international document that has ever appeared in the Special Needs field, the Salamanca Statement (1994) posits that regular schools with an inclusive orientation are:

'the most effective means of combating discriminatory attitudes, building an inclusive society and achieving education for all'. (p.ix)

Furthermore, it suggests that such schools can:

'provide an effective education for the majority of children and improve the efficiency and ultimately the cost-effectiveness of the education system'. (p.ix)

The Salamanca Statement and Framework for Action on Special Education Needs (UNESCO, 1994) further emphasised that schools should accommodate all children regardless of their gender, race, abilities or disabilities, ethnicity, culture, religion or any other differences. This call supported the World Declaration on Education for all (EFA) (UNESCO, 1990) initiative. The EFA declaration highly encouraged global governments and communities to provide equal access to education for all, including people with disabilities. The Dakar Framework (2000) followed this Action on EFA (UNESCO, 2000) which reviewed the Salamanca Statement (1994) to ensure that governments and funding agencies reflect EFA goals and principles in the legislation and policies that would support inclusive education.

The development of these UN declarations and frameworks had impacted legislations of many countries. The impact of the declarations were evident in the national disability legislation formulated in countries like India, Bangladesh, Indonesia and the countries of the Pacific (PICs). Some Western countries also witnessed changes in their national legislation which were closely aligned to international frameworks. The examples are Disability Discrimination Act (1992) in Australia and the Warnock report in UK (2018) (Sharma, 2018).

Both developed and developing countries throughout the world have embarked on addressing inclusive education within their education systems by initiating policy reforms with legislation to support the goal of inclusive education (Armstrong, Armstrong & Spandagou, 2010; Forlin, 2013). While that may seem to happen more positively in developed countries, awareness and concerns around equal educational rights for people with disabilities are a recent phenomenon within the South Asian region (Forlin, 2008) and the Pacific region (Paumau, 2007; Miller, 2007, Miles, Lene & Merumeru, 2014). There is still a great need for providing access to educational opportunities for those with disabilities in these regions. UNESCO (2010) estimated that there are 650 million children with disabilities

in the world, with over 400 million living in the Asia Pacific Region (APR). As most countries in the APR are poor and the provision of education for children with disabilities is limited, most of them end up not going to school (Sharma, 2012).

Earlier reports such as the United Nations Economic and Social Commission for Asia and the Pacific (2002) reported less than ten per cent of children and youth with disabilities have access to any form of education. This low figure is an indication that most children with disabilities do not have adequate access to education. This report is consistent with the UNESCO report (2003) which estimated that 113 million primary age children, including those with disabilities, are not attending primary school. Of those who are enrolled in primary school, a large number drop out before even completing primary education. More recent reports such as the World Health Organisation (WHO) and World Bank, World Report on Disability (2011) reported an estimation of more than one billion people around the world have and lived with some form of disability with over four in five living in developing countries (International Labour Organisation, 2007). Over 93 million of these children are under the age of 14 who live with a moderate or severe disability (WHO and World Bank Report on Disability, 2011). In another report (UNESCO, 2009) about 62 million children at primary school age have some forms of disability, and 62 million children with disability do not complete primary school education. While these reports provide a global picture of those living with disabilities, there is little evidence to suggest that the situation in the Pacific region and the Solomon Islands is any different. The Pacific Framework for the Rights of Persons with Disabilities (2016) estimated that 1.7 million people in the Pacific are living with a disability. This represents nearly 15% of the total population in the islands. While UNESCO (2009) revealed that children with disability often do not complete primary education and the United Nations Economic and Social Commission Report (2002) for Asia and the Pacific estimated that less than ten percent of children and youth with disabilities

have access to any form of education, the reality of the situation varies across the Pacific region. Most Pacific Island countries have limited data to verify information about people with disability, especially for children and their access to education. This lack of data has affected information about the status of people with disability in the Pacific and the total resources directed to providing education services to children with disabilities. This thus makes it difficult to ascertain achievements made to date. The reasons attributed to the situation range from the lack of coordination on the involvement of multiple ministries and non-government stakeholders in supporting people with disabilities, efforts to aggregate data being limited, to the cultural sensitiveness regarding the level of acknowledgement of the existence of people with disabilities (Pillay et al., 2015). Despite this challenge regarding lack of accurate data on people with disability in the Pacific, most Pacific Island countries are slowly working towards establishing mechanisms within their systems that will help to address the situation. Currently, the annual school census report is the only reliable and regular data mechanism that is in place to capture data on children with disabilities attending schools (Pillay et al., 2015). The annual school census report is made up of data compiled by schools. All schools are expected to send back information to the Ministry of Education within their countries. The data they are expected to capture ranges from annual enrolments of students to number of children with disabilities attending schools. Other initiatives are made by the Ministry of Education (MoE) of each Pacific Island country to ensure that information regarding children with disabilities attending schools is properly recorded and kept. Likewise, the establishment of proper information management systems should be in place that would sustain the data gathering process within countries, especially on information relating to the education of children with disabilities and the services provided for them in schools.

1.2 Study Background

1.2.1 The Pacific Context – Geographical location

The Pacific region is made up of hundreds of small islands and atolls and is sparsely populated, with fewer than ten million people. It is culturally diverse with small countries dispersed across three million square kilometres of the Pacific Ocean – one third of the globe's surface (Cave, 2012). Due to varied colonial histories, there have been considerable variations in the literature about which countries are regarded as being part of the Pacific region, as the region includes independent states, territories, colonies and legal protectorates (Cave, 2012; Miles, Lene & Merumeru, 2014).

The countries in the Pacific region are affiliated with the Pacific Island Forum Secretariat (PIFS). There are 15 Pacific Island countries (PICs) within the forum (Pacific Island Forum Secretariat (2009). On that note, PIFS divided these 15 PICs into three sub-regions based on social, linguistic, cultural and physical characteristics: the four larger Melanesian countries in the west, namely Papua New Guinea, the Solomon Islands, Vanuatu and Fiji; six central Polynesian countries, namely Samoa, Tonga, Cook Islands, Niue, Tuvalu and Tokelau; and five Micronesian countries in the north, which include Kiribati, the Federated State of Micronesia (FSM), the Republic of the Marshall Islands, Nauru and Palau (Miles, Lene & Merumeru, 2014). The geographical location of the Pacific islands has led to a culture of mutual interdependence, essential to survival in the region (Halapua, 2006). The Solomon Islands is one of these nations within the Pacific region.

1.2.2 The Solomon Islands

Situated in the South Pacific Ocean and sharing a political boundary with the nation of Papua New Guinea, the Solomon Islands consists of nine large main islands and a number of smaller islands. According to the Solomon Islands Population Report (2018), the country's population stands at 623, 281. The Solomon Islands was colonised and became a British

Protectorate in 1893, which continued until independence was gained from Britain in 1978. The Solomon Islands is a member of the Commonwealth recognising the Queen of England as the Head of State. The Solomon Islands adopted the British Westminster system of Government. The strong ties with Britain influenced the way the Solomon Islands Government system formulates laws and legislation that governs the country. The current system of government has been responsible to provide basic services in the country in terms of infrastructure and health, with medical and educational services.

In the Solomon Islands, the Ministry of Education and Human Resource Development (MEHRD) is responsible for delivery of educational services throughout the country. Within the education system, the structure consists of primary, secondary and tertiary education. Primary education begins from grade one to grade six, with children's age ranges between seven to 12 years old. Secondary education begins from grade seven to 12. Students in secondary schools are between the age of 13 to 18. Once students complete secondary schools they could either go to a local university for tertiary education or they can also receive Technical and Vocational Education Training.

Education in the Solomon Islands is free but not compulsory for children aged between five to 12 years (MEHRD, 2012). While education is free parents are still expected to pay some fees to help meet infrastructure expenditures of schools. In urban areas, most parents can afford to pay school fees compared to parents who live in rural areas. Such direct cost could be a hindrance to parents thus causing them not to send their children to schools and increasing the probability of children to be excluded from accessing education (Ashley, 2005).

The Ministry of Education and Human Resources Development in the Solomon Islands is also responsible in ensuring that children with special educational needs have access to education. In doing so, MEHRD supports the establishment of the Special Education Development Centre and San Isidro Centre for the Deaf through funding in order to cater for the learning needs of students with disabilities. However, it is important to note that these facilities are located in the Capital City of Honiara and students in other parts of the country may not have access to any form of special schools.

1.2.3 Education system in the Pacific region

The education systems in the Pacific region have been shaped by a combination of influences, colonial histories and post-colonial realities and pressures. For example, Papua New Guinea, Solomon Islands, and Fiji were modelled on the British system, while Guam, Palau, the Marshall Islands and FSM continued to maintain strong educational ties with the United States. Vanuatu has a dual system of Anglophone and Francophone education system while the Cook Islands, Tokelau and the Niue had close ties with New Zealand (Miles et al., 2014). According to a United Nations Report (2000), this fragmentation in the education systems of Pacific Island countries have made it difficult for them to meet the second Millennium Development Goal of Primary Education. Although attendance rates are in the 90% range in all but three countries, there are still significant problems, with a high proportion of children remaining unable to read or write upon completion of the primary school cycle (United Nations Children's Fund UNICEF, 2012). This is an area, which most Pacific Islands countries have yet to address successfully within their education systems.

1.2.4 The context of inclusive education in the Pacific region

The 15 Pacific Island countries are members of PIFS, a body that represents Pacific Island countries in the international arena on issues pertaining to Island states in the Pacific. As in many other countries in the world, inclusive education policies and practices have been

largely shaped by international frameworks. The frameworks include: the United Nation (UN) conventions ranging from the Declaration of the Rights of the Child (1956), the Declaration of the Rights of Disabled Person (1975), the Convention on the Rights of the Child (1989), the Conventions of the Rights of Persons with Disabilities (2006), the UNESCO Salamanca Statement and Framework for Action on Special Needs Education (1994) to the Dakar Framework for Action, Education for All (2000). Further support was drawn by the establishment of the Biwako Millennium Framework, United Nations Economic and Social Commission for Asia and the Pacific [UNESCAP], (2002) and its replacement with the Incheon Strategy (UNESCAP, 2012), aimed to ‘make rights real’ for people with disabilities in the APR over the coming decade. These United Nations conventions are an indication that the UN is concerned with the rights and welfare of all people, including those with disabilities and would like to see a just and inclusive society regardless of the various differences between people. These conventions emphasised the importance of including those with disabilities into the society and ensuring that they are provide adequate care. The term “inclusion’ was used both as a social concept and an educational concept, as it is embedded within key international policies.

Recent policy changes have seen a convincing prominence in addressing and implementing inclusive education across the Pacific. In 2009, PIFS developed the Pacific Education Development Framework 2009 – 2015 (PEDF). The PEDF is a framework formulated to guide the progress and development of education in the Pacific region through coordinating regional activities and providing advocacy and leadership role in policy dialogue at the regional level. This framework was grounded on two sets of imperatives. This relates to the commitments made by Pacific Island Countries to the global call for actions towards the agenda and goals of Education for All (EFA), the Millennium Development Goals (MDGs), the United Nations Literacy Decade and the UN Decade of Education for

Sustainable Development. Secondly, the framework is a national and regional response to the specific needs and challenges in respect of education in the Pacific region (PEDF, 2009 – 2015). As a response to the specific needs and challenges in the education sector in the region, inclusive education was identified as an area of priority that needed the attention of Pacific leaders and teacher educators so that students with disabilities could be provided with better education in the region.

The PEDF defined inclusive education in terms that are familiar within the international literature and UN frameworks. The PEDF states that it will address ‘the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalisation and exclusion’ (PIFS, 2009: 17). The development of the Pacific Education Development Framework 2009 – 2015 is a step forward in the process of having a clear and coherent regional strategy on the education of children with disabilities throughout the region. However, what seemed lacking from this framework is a coherent and sustainable plan of action for the development of education systems, which are inclusive across the region (Miles et al., 2014). Additionally, essential elements of inclusive education continue to be lacking, such as appropriately trained teachers, inclusive education strategies and policies, specialist equipment and accessible school environments (Miles et al., 2014; Sharma, Loreman & Macanawai, 2016). On that note, inclusive education was identified as an important regional priority with the commitment to provide quality education, training and access to education for all citizens including those with special needs.

In 2014, Pacific Island Forum Education Ministers endorsed the development of an Inclusive Education Framework (2014), which can be conceptualised and adopted to provide education for children with disabilities in inclusive settings (Forum Education Ministers Meeting, 2014). Teacher preparation and development was emphasised as an important factor to achieve that goal. The Pacific Education Development Framework, 2009 – 2015 and

Inclusive Education Framework (2014) both recognised inclusive education as a regional priority and believed that teachers need adequate training, preparation and ongoing professional development on inclusive education to ensure that the inclusion of students with special needs is happening in schools within forum countries across the Pacific.

A review done on the Pacific Education Development Framework, 2009 – 2015 and the Inclusive Education Framework (2014) led to the development of the Pacific Regional Education Framework (PacREF), 2018 – 2030, a more recent document that incorporated the goals and objectives of the two former frameworks. Therein the recent document (PacREF), emphasised the implementation of inclusive education programs and pathways that include special training for teachers, teacher assistants and those working within the sphere of inclusive education. Considerations further focused on alternative pathways for out-of-school children, girls, youths at risk and persons with disabilities. This framework (PacREF, 2018 – 2030), developed by the Pacific Heads of Education Systems (PHES), promotes a human rights approach to education and seeks to empower Pacific Islanders to fully enjoy, without barriers, the benefits of education. Many PICs in the region have signed and ratified the Convention on the Rights of Persons with Disabilities (CRDP). This implies that their governments within the region are obliged under the treaty to implement inclusive education policies and practices within their countries. Until recently, the implementation of inclusive education varied across the Pacific region. Countries like Fiji and Samoa are quite ahead in their progress towards implementing inclusive education. Other countries are pursuing inclusive education but at a slower pace due to various challenges faced within their countries (Sharma, Armstrong, Merumeru, Simi and Yared, 2018). The challenges include lack of clear policies on inclusive education, lack of funding to support inclusive education within the education system and the lack of political will to support inclusive education from Governments within the region (Sharma et al., 2018).

1.2.5 The Context of Inclusive Education in the Solomon Islands

The concept of inclusive education is relatively a new concept in the Solomon Islands. The Solomon Islands government, being a signatory to the United Nations Conventions on the Rights of the Child and the United Nation Convention on the Rights of People with Disabilities, has a responsibility to the children of the nation, including those with disabilities. These United Nations Conventions are linked to the goals and aspirations of the Salamanca Statement (UNESCO, 1994) and the World Declaration on Education for all (EFA) [UNESCO,] 1990). The implication is that the government needs to be providing education for all children. As a response to these international initiatives, the Solomon Islands Government developed the Basic Education Policy that supports the education for all children. This was evident in the Solomon Islands Education Strategic Plan 2004 – 2006, which states that one of its outcomes is to “provide equitable access of service to all regardless of sex, ethnicity, ability or disability, location, economic status or age and that education must be made available to all regardless of gender, ethnicity and socio-economic background of all citizens” (p.4). In particular, education must be made available and be accessed by all children in the Solomon Islands (Education Strategic Plan 2004 – 2006). More recently, the National Education Action Plan 2010 – 2015 (NEAP) was introduced to support this endeavour. Despite such initiatives, the government is progressing slowly in providing adequate access to education for all children including those with disabilities.

The Solomon Islands education system was established under the National Education Act (1981) but it was not compulsory. The National Education Act of 1981 states that the Ministry of Education shall ensure that education is provided to all citizens in the country. The Solomon Islands Government, through the Ministry of Education and Human Resource Development (MEHRD), has a vision that all Solomon Islanders will develop as individuals and gain skills, knowledge and attitudes needed to earn a living and to live in harmony with

others within their environment (MEHRD, 2004 - National Education Action Plan, 2004 – NEAP). Through education, the government would like to see a united and progressive society in which all can live in peace and harmony with fair and equitable opportunities for a full and better life (NEAP, 2004). In essence, the MEHRD is obliged and responsible under the National Education Act (1981), for coordinating and monitoring services pertaining to the delivery of education in the country. Education for children begins from Early Childhood Education, to Primary and Secondary Education.

In a recent AusAid report, the Solomon Islands is noted as one of the countries in the Pacific that has the poorest performance in terms of providing equal access to education for children with disabilities (Sharma, 2012). According to the Ministry of Education and Human Resource Report (2013), it is estimated that only two percent of all children with disabilities have access to any form of education in the country. A National Disability Survey report (2005) found that children with disabilities were not gaining equal access to education although many of the children with disabilities that participated in the survey have expressed a desire to go to school. The percentage of children with disabilities enrolled in schools in 2006 was 1.9% females and 2.3% males. In 2011, the percentage was 1.8% females and 2.2% males, showing a small reduction for both genders. Students with disabilities are enrolled mainly in the primary schools, with few making progress to secondary school (MEHRD, 2013). Those who continued to secondary schools tend to stay for only a few years. There are various reasons why students with disabilities tend to stay only for a few years. The reasons include: parental fears, lack of resources at schools to cater for the learning of children with disabilities, poor school environment, and teachers' negative attitudes due to lack of knowledge and training to teach children with disabilities (UNICEF Pacific Report, 2012). Additionally, the Ministry of Education and Human Resource Development Performance Assessment Report (2013) has highlighted limited access to schooling, shortage of qualified

teachers and overcrowded classrooms in urban areas as other issues affecting quality of education for children in the Solomon Islands. While the government strives to provide quality education in the country, the challenges affecting this endeavour have remained. Both the UNICEF Pacific Report (2012) and MEHRD Performance Assessment Report (2013) mentioned lack of qualified teachers and teachers' negative attitude to inclusion due to lack of knowledge and training about how to teach children with disabilities in an inclusive regular classroom as significant challenges. Furthermore, weak school administration and limited resources were identified as other limiting factors that affect the provision of quality education. While these challenges relate to providing quality education for Solomon Islands children, there are limited structures in place at the national, provincial and community level that provides support for children with special needs to access education (Sharma, Forlin, Marella & Jitoko, 2017; Sharma et al., 2018).

Additionally, there is still a gap between the urban and rural areas in terms of gaining access to limited services and information that is available for those with special needs (Simi, 2008), which can only be found in the urban centres. The provision of education for children with disabilities in the regular classroom is an agenda that the Solomon Islands Government is yet to address adequately within its education system. Various reports from MEHRD (2013) and UNICEF Pacific Report (2012) signify the important areas that the government through MEHRD, can take into consideration for improvement. Equally important is the preparation of teachers around inclusive education and practices that will support the delivery of quality education for Solomon Islands' children including those with disabilities. This is also in line with the goal of the Pacific Education Development Framework 2009 – 2015 and the recent Pacific Regional Education Framework 2018 - 2030. This objective in regard to the provision of education for children with disabilities can be met through adequate preparation of pre-service teachers, who will go out to teach in schools and classrooms across the country.

The reality of inclusive education in the Solomon Islands is still a challenge. The MEHRD is still in the process of developing an inclusive education policy that will provide the support the implementation of inclusive education within the education system of the country (MEHRD, 2004). However, despite not having that policy, it has been suggested that a few children with special needs are already entering the regular classroom, especially those with hearing and vision impairment, with a lot of other students with special needs expressing their desire to go to school and get an education (National Disability Survey Report, 2005; MEHRD Performance Assessment Report, 2017). Many school leaders and principals have revealed that because of no clear directives from MEHRD to accommodate students with disabilities and special needs into the mainstream classroom, schools within the country are hesitant to accept those students (Sharma, 2012).

Historically, education in the Solomon Islands has always been managed by churches until after gaining independence that the national government started to subsidise these church - run schools. To date, the Government funds almost all schools in the country, as it serves its commitment to the nation in ensuring that all citizens have access to education. The strive to ensure that inclusive education is achieved within the education system still remained a challenge for the government to address. Currently, in the country there are only two special schools, one being operated by the Solomon Islands Red Cross Society and the other one being managed by the Catholic Church, which mainly provide education to students with hearing impairment.

1.2.6 Preparing Pre-service Teachers for Inclusive Education

While numerous studies related to pre-service teachers' preparedness for inclusive education have been conducted in western countries, there have been limited studies undertaken in the APR with specific focus on the socio-cultural context of the Pacific region.

A few studies conducted in the APR suggest that the implementation strategies for inclusive education within developing countries in the Asia Pacific region differs from those in the Western context (Forlin, 2008; Sharma, Forlin, Deppeler & Guang-xue, 2013; McDonald & Tufue - Dolgoy, 2013). These studies reported that the differences were related to cultural factors such as the beliefs and attitudes of pre-service teachers' acceptance of children of different backgrounds into classrooms, and the level of pre-service teachers' confidence to facilitate educational reforms in schools. The European Agency for Development in Special Needs Education (2012) posits that successful implementation of inclusive education in schools and classrooms depends on teachers and their preparedness for this endeavour. The optimum time for such an undertaking is during pre-service teachers' ITE Programs when pre-service teachers can be equipped with positive attitudes, knowledge and skills about inclusive education practices.

1.2.7 Teacher Education in the Pacific region

In any education system, teachers and students are the core of the process, engaging in the teaching and learning process. In any jurisdiction, the preparation of both pre-service and in-service is important if Pacific education systems are to produce quality learning outcomes coupled with students' desire to attain and complete their education successfully. It must be acknowledged that education systems within the Pacific region had inherited the ideologies, physical structures and mediums of instructions from their colonial past. This has become a challenge in teacher education especially in dismantling these constructs and finding alternatives that are contextually appropriate for the Pacific region (Puamau, 2007). Likewise, the colonial mindset has also translated into the Teacher Education Programs for pre-service teachers whereby the curriculum, pedagogical approaches, assessment methods, western theories of learning and teaching continued to permeate throughout the teacher education programs. Additionally, teaching practices were deemed as models imported from a western

context that is culturally insensitive to the Pacific context, thus emphasising the need for a culturally sensitive pedagogy in teacher education programs. This view has been shared and echoed by a few Pacific scholars (McDonald & Tufue-Dolgoy, 2013; Miles, Lene & Merumeru, 2014), who posit education in the Pacific should embrace Pacific values with curriculum that is contextually appropriate and culturally sensitive to the Pacific way of doing things.

On that note, ITE programs need to take heed of these expectations and develop teacher education programs that are relevant to the context of the Pacific. The interpretation of a curriculum that is contextually appropriate to the Pacific context is one that reflect Pacific values, cultures, traditional knowledge and skills that draws on the land where all Pacific people live and exist and the ocean that surrounds and binds them all as one people. Likewise, learning should be inclusive in all forms of development amongst children, using teaching and learning pedagogy that are rights-based, sensitive to gender equality, flexible, responsive and can be adapted to new learning opportunities (PacREF, 2018 – 2030).

Currently, in the Pacific region, the University of the South Pacific (USP) is the leading institution in offering teacher education programs for pre-service teachers. The university also offers a Bachelor degree course in Special Education for pre-service teachers with elements of inclusive education embedded within the program. The recent document (PacREF, 2018-2030) identified low levels of education and in particular the lack of adequate access to quality education, and low levels of numeracy and literacy at early childhood, primary and secondary levels as major impediments for social and economic development in the Pacific region. Thus, quality education and training were deemed important fundamentals that will enhance the capacities of Pacific Islands people towards the gaining of knowledge and skills that will enable them to live and thrive in technology-driven societies.

The University of the South Pacific (USP) has been identified by the Pacific Island Forum Secretariat to take the leading role as a higher education provider in the region that will create pathways for Pacific Islanders to access quality education. Similarly, it is an institution providing training that will enhance skills and capabilities of Pacific Islanders to participate and engage in social and economic activities that will enhance their livelihoods. Likewise, it is anticipated that the university will commit to providing quality of teachers through teacher preparation programs across the Pacific region. On that premise, USP is expected to liaise and form a network with other higher education institutions in the region to ensure that quality education is delivered through the ITE programs of institutions within the region (PacREF 2018 – 2030)

On this premise, it can be said that Teacher Education in the Pacific has come a long way in addressing teacher preparation of pre-service teachers for the profession. Teacher preparation programs vary across the Pacific however, all institutions share the same visions of equipping pre-service teachers with teaching pedagogies, knowledge and skills to teach in the classroom. With the recent focus on inclusive education, it can be said that teacher education programs in the Pacific have tried to address that within the teacher education programs. This is evident through incorporating an inclusive education curriculum within (ITE) programs of pre-service teachers either through a stand-alone model or through an infusion model depending on the nature and structure of their ITE programs.

1.2.8 Understanding pre-service teachers' attitudes, concerns and teaching efficacy about inclusion is important.

In this regard, gaining an understanding about teachers' beliefs and attitudes towards inclusive education is vital. This assertion was reinforced by the Organisation for Economic Co-operation and Development [OECD] (2009) study which proposed that understanding

teachers' beliefs and attitudes is important if we wish to achieve improved status of inclusion in the education system. Likewise, gaining an understanding about pre-service teachers' beliefs and attitudes about inclusion during teacher education preparedness is critical, as beliefs formed during the early pre-service stage of training can have an impact on pre-service teachers' attitudes towards inclusive education thereafter (Ahsan & Sharma, 2018; Bandura, 1997).

Numerous research studies on attitudes have shown that pre-service teachers' attitudes towards inclusive education are a strong predictor of their practice (Ahmmed, Sharma & Deppeler, 2012; Ahsan, Sharma & Deppeler, 2013; Ahsan & Sharma, 2018; Costello & Boyle, 2013; Subban & Mahlo, 2017). Pre-service teachers with positive attitudes towards inclusive education appear to be more confident to teach in inclusive classrooms, (Ahsan 2014; Ahsan & Sharma, 2018; Costello & Boyle, 2013; Goddard & Evans, 2018) and more welcoming towards children with disabilities (Sharma & Sokal, 2013, Varcoe & Boyle, 2013). The findings of these studies (Ahmmed et al., 2012; Ahsan et al., 2013; Ahsan and Sharma, 2018; Costello and Boyle, 2013; Goddard and Evans, 2018; Sharma and Sokal, 2013; Subban and Mahlo, 2017; Varcoe and Boyle, 2013) indicated that understanding attitudes can be useful in support of curriculum reform and shaping of education policies pertaining to inclusive education.

Several studies have shown that the period during pre-service teacher education is the best time for teachers to develop confidence and positive attitudes towards inclusive education (Ahsan & Sharma, 2018; Goddard & Evans, 2018; Beckham & Rouse, 2012; Forlin, 2010; Sharma & Sokal, 2013; Sokal & Sharma, 2017; Varcoe & Boyle, 2013). These studies further revealed that teachers, who participated in a pre-service program that includes components of inclusive education, demonstrated more confidence and optimism in their ability to teach children with disabilities in inclusive classrooms. Conversely, although there

have been reports of substantial reform in teacher education programs other studies have found that some teachers felt less confident to teach in inclusive classrooms (Forlin, Loreman, Sharma & Earle, 2007; Kim, 2011). Additionally, Slee (2010) argued that teacher education programs for pre-service teachers about inclusive education should focus on helping pre-service teachers to gain knowledge and understanding with practical experiences about inclusion. Through having such components in teacher education programs, pre-service teachers will develop more confidence in their ability to include children with diverse learning needs in inclusive classrooms (Slee, 2010).

Pre-service teachers' concerns about inclusive education are another factor considered as important in order to gain an understanding about their concerns regarding inclusive education. Several studies (Forlin & Chambers, 2011; Loreman et al., 2005; Kuyini & Mangopo, 2011; Sokal & Sharma, 2017; Woodcock, Hemmings & Kay, 2012) showed that pre-service teachers do have concerns about inclusive education. Pre-service teachers' concerns can influence their attitudes and perceived teaching efficacy about inclusive education. Studies showed that as pre-service teachers participated in a course on inclusive education, their concerns declined. Their attitudes and level of perceived teaching efficacy towards inclusive education had improved (Forlin & Chambers, 2011; Loreman et al., 2005; Sharma & Sokal, 2013; Sokal & Sharma, 2017). Researchers have noted that several background variables (i.e. age, gender, level of qualification, previous training on inclusive education, contact with person with disability and more) can influence pre-service teachers' concerns about inclusive education. Similar findings were noted and observed with attitudes and perceived teaching efficacy towards inclusive education.

Pre-service teachers' self- efficacy is another important factor that can have an impact on their attitudes towards inclusive education. Self-efficacy is a "perceived" belief, as it is used within the Theory of Planned Behaviour and is not a representation of "actual" efficacy.

Several studies (Hofman & Kilinio, 2014; Savolaini, Engelbrecht, Nel & Malinen, 2012; Sokal & Sharma, 2017; Weisel & Dror, 2006) reported that pre-service teachers' self-efficacy is a powerful predictor of their attitudes towards inclusive education. In addition, teachers with a high level of self-teaching efficacy often have greater confidence in their ability to teach in inclusive classrooms, conduct more practical lessons in class with students and are more responsive to the learning needs of all students (Mergler & Tangan, 2010; Tschannen - Moran, Woolfolk & Hoy, 1998). Further studies reported that factors such as age, gender, grade level of teaching, previous training, teaching experience, contact with person with disabilities, knowledge about inclusive education policies and more (Forlin & Chambers, 2011; Romi & Leyser, 2006; Tait & Mundia, 2014; Woodcock et al., 2012; Lancaster & Bains, 2010) can have an impact on pre-service teachers' teaching efficacy for inclusive education.

1.2.9 The impact of Demographic Variables on Pre-service Teachers'

Preparedness for Inclusive Education

Research has revealed that background variables can have an impact on pre-services teachers' attitudes, concerns and teaching efficacy in relation to inclusive education. Background variables include: demographic status of pre-service teachers, gender, age, level of qualification, contact and knowledge of someone with a disability, the amount of exposure to the education of students with disabilities and the level of confidence in teaching students with disabilities in a regular classroom. Several studies have shown that female pre-service teachers are found to be more receptive and positive towards inclusive education than their male counterparts. For example, comparative studies by Forlin, Loreman, Sharma and Earle (2009) and Loreman, Sharma, Forlin and Earl (2005) conducted in Australia, Canada, Hong Kong and Singapore found that female pre-service teachers showed more positive attitudes towards inclusive education. Other studies (Kuyini & Mangope, 2011; Romi & Leyser, 2006;

Woodcock, 2008) also reported similar findings. Studies also showed that having previous interaction and experience with people with disabilities can have a considerable impact on pre-service teachers in developing positive attitudes towards inclusive education (Forlin, 2010; Kim, 2011; Romi & Leyser, 2006; Carroll, Forlin & Jobling, 2003). Other studies found that younger pre-service teachers tend to have more positive attitude towards inclusive education than older counter parts (Ahsan, 2014; Avramidis & Norwich, 2002; Tait & Purdie, 2000). It was also noted that the level of qualification of pre-service teachers could have an impact on their attitudes towards inclusive education. For example, a study by Sharma, Moore and Sonawane (2009) revealed that pre-service teachers with high levels of previous education (e.g. postgraduate qualification) showed relatively more positive attitudes towards inclusive education than those with a lower level of education (e.g. diploma and bachelor degree qualifications). Additionally, primary pre-service teachers hold more positive attitudes towards inclusive education than secondary pre-service teachers (Forlin et al., 2009; Woodcock et al., 2012). The length of the pre-service teacher education course was also perceived as a factor that can have an impact on pre-service teachers' attitudes towards inclusion. For example, completing a teacher education course over two semesters has been found to have a more positive impact on pre-service teachers' attitudes than completing a course in one semester (Forlin, 2010; Sharma & Sokal, 2013).

The impact of these demographic variables on pre-service teachers' preparedness for inclusive education mentioned above is generally consistent. However, other studies have found and concluded that variables such as gender (Carroll et al., 2003), experience with people with disabilities (Forlin & Chambers, 2011) and length of pre-service teacher education course (Tait & Purdie, 2000) does not influence pre-service teachers' attitudes towards inclusive education (Ahsan, 2014). The trend of the inconsistency in these findings indicates that further investigation is needed into the impact of the variables on pre-service

teachers' attitudes towards inclusive education. Moreover, further investigation is needed to explore whether there are any socio-cultural and contextual factors that may have an influence on Solomon Islands pre-service teachers' preparedness for inclusive education.

1.3 Teacher Preparation Programs

Global research over the past two decades has suggested that teachers play a crucial role in the success of inclusive education (Chambers & Forlin, 2010; Turner, 2003; Mintz, 2007). Efforts have been reported by scholars and universities to identify competencies and develop training programs for pre-service teachers in preparing them to meet the challenges of inclusive education (Romi & Leyser, 2006). This means, training of pre-service teachers should be reformed to address teacher's preparedness for inclusive education. Teachers need to gain knowledge and understanding on the philosophy of inclusive education and to develop the necessary skills, values and attitudes that will enable them to become effective inclusive teachers (Sharma, Loreman & Forlin, 2012; Loreman, Deppeler & Harvey, 2010; Sharma & Nuttall, 2016). In line with that proposition, the need for this study is crucial in the Solomon Islands. This was supported by findings from the United Nations International Children's Fund (UNICEF) Report (2012) and the MEHRD's Performance Report (2013), both of which identified teachers' lack of training and knowledge about inclusive education as a major barrier to the provision of quality education in the Solomon Islands.

In response to both these reports, the Ministry of Education and Human Resource Development through the National Education Action Plan (2013 – 2015) highlighted inclusive education as one of its goals, and prioritised pre-service training of teachers on inclusive education as a mean to achieve the goal. It states that, "By the end of 2015, pre-service teachers trained at SOEH, will meet MEHRDs' National Professional Standards, including effective teaching strategies for children with special needs in regular classrooms"

(NEAP 2013 – 2015, p.18) and was supported with the more recent document (MEHRD, NEAP 2016 – 2020). It further reiterates the importance of preparing pre-service teachers for inclusive education.

1.4 Importance of the Study

The context of the study is highly relevant as it is the first of its kind to be conducted in the Pacific region and the Solomon Islands on preparing pre-service teachers for inclusive education. The knowledge gained through findings from the study would contribute to the existing body of knowledge and practices around pre-service teacher preparation for inclusive education in the Pacific region and in the Solomon Islands. The findings of this study would further contribute to and support the work on inclusive education that PIFS advocated for Pacific Island countries through the development of the Pacific Education Development Framework 2009 -2015 and more recently through the Pacific Regional Education Framework 2018 - 2030. In essence, this study was based on the fundamental belief that all children should learn together despite the difficulties and differences they present, and with schools providing for the needs of all students regardless of their ability or disability (UNESCO, 1994). It means that students with disabilities can be educated alongside their peers in regular schools and classrooms and students' learning should be supported with instructions that will effectively meet their educational needs. More specifically, inclusive education is about schools adapting, developing and designing classrooms, programs and activities that will facilitate the learning of all students including those with disabilities (UNESCO, 1994).

The success of inclusive education depends upon many factors and requires revisions and changes in policies, regulatory systems and administrative structures, and availability of resources (Fraser, Moltzen & Ryba, 2005; Forlin & Chambers, 2011). In particular the

cooperation and commitment of those most directly involved, that is the teachers, is critical (Beckham & Rouse, 2012; Winter, 2006). This notion increases the challenge for teachers in regular settings who must be equipped not only with positive attitudes towards inclusion but also with necessary knowledge, skills and characteristics to make it work in regular schools and classrooms formed the foundation of this study.

1.5 Key Research Questions

The momentum for the study evolved from recognising the need to prepare teachers for practising inclusive education. This study is based on the assumption that when teachers are prepared for inclusive education, they will develop characteristics and attitudes that support the endeavour to teach and include students with disabilities in regular classrooms. Furthermore, teachers will acquire knowledge and skills that will enable them to become effective inclusive teachers. The main aim of the study is to understand:

To what extent do current teacher education programs prepare pre-service teachers for inclusive education in the Pacific and more specifically in the Solomon Islands?

The aim of the study was driven to answer the following research questions:

- 1) What are the perceptions of the deans and principals of higher education institutions in the Pacific about the preparedness of pre-service teachers to teach effectively in inclusive classrooms?
- 2) What attitudes do pre-service teachers in the Solomon Islands have towards inclusion and do their background variables influence their attitudes?
- 3) What concerns do pre-service teachers in the Solomon Islands have towards inclusion and do their background variables influence their concerns?

- 4) What level of teaching efficacy do pre-service teachers in the Solomon Islands have towards inclusion and do their background variables influence their level of teaching efficacy?
- 5) Does participation in a course in special education influence pre-service teachers' attitudes, concerns, teaching efficacy and intentions to inclusive education?
- 6) Does professional experience prepare pre-service teachers for their roles as inclusive educators in the Solomon Islands?
- 7) Can pre-service teachers' intention to include student with disabilities be predicted by their attitudes to inclusion, their level of teaching efficacy and their level of concern about including students with disabilities in regular classrooms?

1.6 Thesis Overview

This thesis is organised into six chapters.

- Chapter One provides a general introduction, conceptual framework and research questions of the study, and presents the structure of the study.
- Chapter Two provides a critical review of the research literature related to pre-service teachers' attitudes, concerns and teaching efficacy towards inclusive education.
- Chapter Three describes the methodology for the two phases of the study including participants, instruments and tools applied, data analysis procedures and ethical consideration undertaken in this study.
- Chapter Four presents the results gathered from the two phases of the study.
- Chapter Five presents the discussions on the findings from this study in light of the existing literature.

- Chapter Six presents the conclusion of the study with recommendations and implications for future research on inclusive education in the Solomon Islands.

1.7 Conclusion

Inclusive education should be the responsibility of all stakeholders within the education fraternity. This study considers inclusive education in the Pacific context as extremely important. Likewise, preparation of pre-service teachers to meet the standard of inclusion in regular classrooms is equally important. That is the paramount reason why pre-service teachers need skills and knowledge about inclusive education that will empower them to become effective inclusive teachers. This will be the focus of the next chapter where literature pertaining to inclusive education and pre-service teacher preparation will be explored in detail.

CHAPTER TWO

This chapter presents a review of literature about inclusive education which is the focus of this study. The chapter is divided into the following sections:

2.0 Introduction

2.1 Theoretical Framework of the study

2.2 Defining Inclusive Education

2.3 Early concept of inclusive education

2.4 Legislation and Conventions supporting Inclusive Education

2.5 Historical background of teaching students with disabilities

2.6 The positive impact of inclusive education on students' learning

2.6.1 Challenges to inclusive education

2.6.2 Factors that can contribute to success of inclusive education

2.7 The significance of pre-service teacher preparation

2.8 Defining Attitudes

2.9 Roles of higher education institutions in pre-service teacher preparation

2.8.1 Teachers' Professional Standards

2.9 Deans and principals as leaders providing support to inclusive education

2.9.1 Challenges that institution face in preparation of teachers for inclusive education

2.10 Attitudes of Pre-service Teachers towards Inclusive Education

2.10.1 The importance of preparing pre-service teachers for inclusive education

2.10.2 Variables influencing pre-service teachers' attitudes towards inclusive education

2.11 Concerns of Pre-service Teachers towards inclusive education

2.11.1 Variables influencing pre-service teachers' concerns towards inclusive education

- 2.12 Teaching Efficacy of Pre-service Teachers towards inclusive education
 - 2.12.1 Variables affecting pre-service teachers' teaching efficacy
- 2.13 Professional experiences of pre-service teachers in inclusive education
- 2.14 Predicting pre-service teachers' intentions to include students with disabilities into regular classrooms
- 2.15 Approaches used to prepare pre-service teachers for inclusive education
 - 2.15.1 Content Infusion Model
 - 2.15.2 Concerns about the Content Infusion Model
 - 2.15.3 The Stand - Alone Model
 - 2.15.4 Concerns about the Stand - Alone Model
 - 2.15.5 Development of partnership between universities and schools
- 2.16 Implications for Teacher Education
- 2.17 Inclusive Education Curriculum
- 2.18 The 3H Framework
- 2.19 Conclusion

Introduction

The movement to provide equal and adequate access to education for all students has gained momentum. This has resulted in school systems adapting the schools' structures and environment to facilitate this new trend now known as Inclusive Education. The accommodation of students with disabilities into the regular classrooms is the hallmark of this trend (Foreman & Arthur – Kelly, 2017; Smith, Polloway, Patton, & Dowdy, 2004). The emphasis was placed on students with disabilities learning together with other children in regular classrooms. Teachers are seen as responsible stakeholders who can facilitate inclusive education in the classrooms. Secondly, this study focused singularly on inclusive education as this was the goal of the investigation. However, as with most investigations of this nature, there are other elements that impact on the outcomes related to inclusive education. These factors are included in the “Limitations” section of this study. On that note, this chapter reviewed a range of literature about inclusive education.

This literature review focused on inclusive education and sought to identify studies in peer – reviewed journals, educational periodicals, reports, dissertations, and printed books written by experts in the field of inclusive education. The parameters of the search included searching texts with key words such as inclusive education, pre-service teachers' attitudes, concerns and teaching efficacy towards inclusive education, roles of leaders of higher education institutions in the pre-service teachers' preparation programs, the impact of completing a course about inclusive education on pre-service teachers and models of pre-service training for teachers about inclusive education. The search yielded several studies of literature pertaining to inclusive education. However, the focus of the literature review was narrowed down to articles within the last two decades, which were frequently cited by recognised experts in the field.

The literature review focused on studies conducted within the last two decades, examining how inclusive education was defined and the international legislation that supported and paved the way for inclusion. The role of teachers as facilitators of inclusive education was also examined. However, because preparing pre-service teachers for inclusive education was the focus of this study, this literature review examined scholarly studies relating to the importance of preparing pre-service teachers for inclusive education. Additionally, the roles that leaders of higher education institutions play in pre-service teachers' preparation for inclusive education was also examined and discussed. This is in relation to the aspects of leadership that leaders of higher education institutions can provide to the development and preparation of pre-service teachers for inclusive education.

This literature review further examined studies on pre-service teachers' attitudes, concerns, teaching efficacy and intentions to include students with disabilities into inclusive classrooms. The importance of professional placements for pre-service teachers and the different approaches of teacher preparation programs for inclusive education were also included in the scope of this literature review. The implication of the studies reviewed in literature will be of great importance to the direction in which pre-service teachers are being prepared for their roles as inclusive teachers in regular classrooms. The diagram below depicts the areas discussed in this literature review.

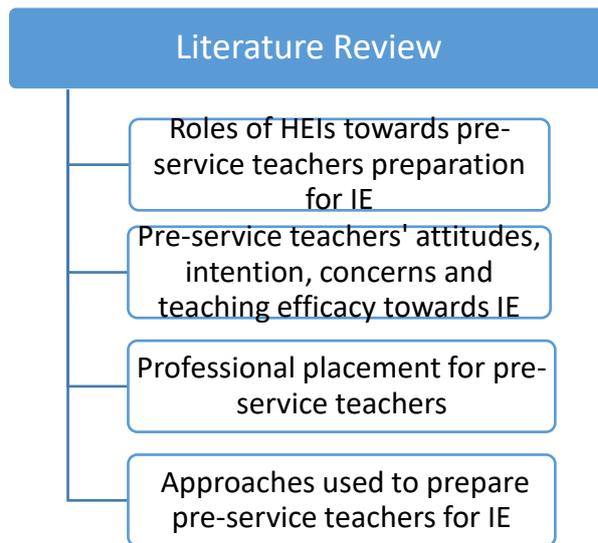


Figure 1: The scope of the literature review

2.1 Theoretical Framework of the Study

This study was conducted to examine pre-service teachers' preparedness for inclusive education in order to teach in inclusive classrooms in the Pacific region, with more specific focus on the Solomon Islands. In order to capture pre-service teachers' preparedness for this undertaking, the current study was based upon four assumptions.

1. Institutional heads of pre-service teacher education institutions and colleges should believe and be knowledgeable about good practices of inclusive education
2. Pre-service teachers should have positive attitudes towards inclusive education.
3. Pre-service teachers should have high levels of confidence and beliefs about their perceived teaching efficacy in inclusive classrooms.
4. Pre-service teachers' intentions to include students with disabilities are likely to influence their teaching practices in inclusive classrooms.

The training of teachers in inclusive education is central (Ahsan & Sharma, 2018; Costello & Boyle, 2013; Mintz, 2007). ITE programs can address this aspect by ensuring that pre-service teachers develop positive beliefs, values and attitudes to inclusion during the course of their training. It has been suggested that when teachers hold positive attitudes towards inclusive education, they will effectively practice inclusion in their classrooms (Loreman et al., 2010; Romi & Leyser, 2006). Over the last couple of years, a number of attitudinal studies in inclusive education have been conducted trying to explain and predict behaviours (Ahmmed, Sharma & Deppeler, 2012; Ahsan, 2014; Campbell, 2009; Hodge & Jansma, 2000; MacFarlane & Woolfson, 2013; Mahat, 2008; Subban & Mahlo, 2017) based on the Theory of Planned Behaviour. These studies confirmed that predicting behaviours using the TPB has yield significant result.

Fundamentally, this study and basis for the thesis was driven by the Theory of Planned Behaviour (TPB), as proposed by Icek Ajzen (1987, 2005). It is important to note that the purpose of this study was not to test or replicate the theory proposed by Ajzen (1987; 2005) but to use this theory in a meaningful way to help best explain the nature of my own study on pre-service teachers' attitudes, concerns and perceived teaching efficacy towards inclusive education. The TPB provides an informative model for understanding how attitudes are formed, based on the impact of different background variables, and how attitudes are interpreted in predicting behaviours (Ajzen, 1991). Different disciplines have used the TPB and have found the theory to be a successful model for predicting intentions to perform a behaviour (Ajzen, 2011).

According to the TPB, a person's intention to carry out and perform a behavioural act depends on three factors. They are: a) the person's disposition; b) the person's perceived beliefs based on the views of other associated people, to perform or not to perform a behavioural act and c) the person's perception towards his or her control in performing or not

performing a behavioural action through analysis of available environmental components (Ajzen, 2005). Several studies (Ahmmed, Sharma and Deppeler, 2012; Ahsan, 2014; Mahat, 2008; Subban & Mahlo, 2017) have used and tested Ajzen's (1991) Theory of Planned Behaviour and have found that the theory supports the concept that all three factors have an impact on predicting a person's intention to perform a behaviour. According to the TPB, (Ajzen, 1991) the above three factors were named: 'attitudes', 'subjective norm' and 'perceived control behaviour respectively. Attitudes towards a behaviour refers to the degree to which a person has a positive or negative appraisal of the behaviour in question. Subjective norm refers to the perceived social pressure to perform or not to perform a behaviour. The perceived control behaviour refers to the perceived ease or difficulty of performing the behaviour. It assumes reflection of past experiences as well as anticipated impediments and obstacles. This means, a person's perceptions of his or her ability to perform a given behaviour is controlled by his or her perception of the intended behaviour (Ajzen, 1987; 2005). In this regard, assumptions derived from the TPB proposed that the more favourable the attitude and subjective norm in respect to a behaviour and greater perceived behavioural control, the stronger should be an individual's intention to perform the behaviour.

The following diagram shows the Theory of Planned Behaviour as proposed by Ajzen (1991).

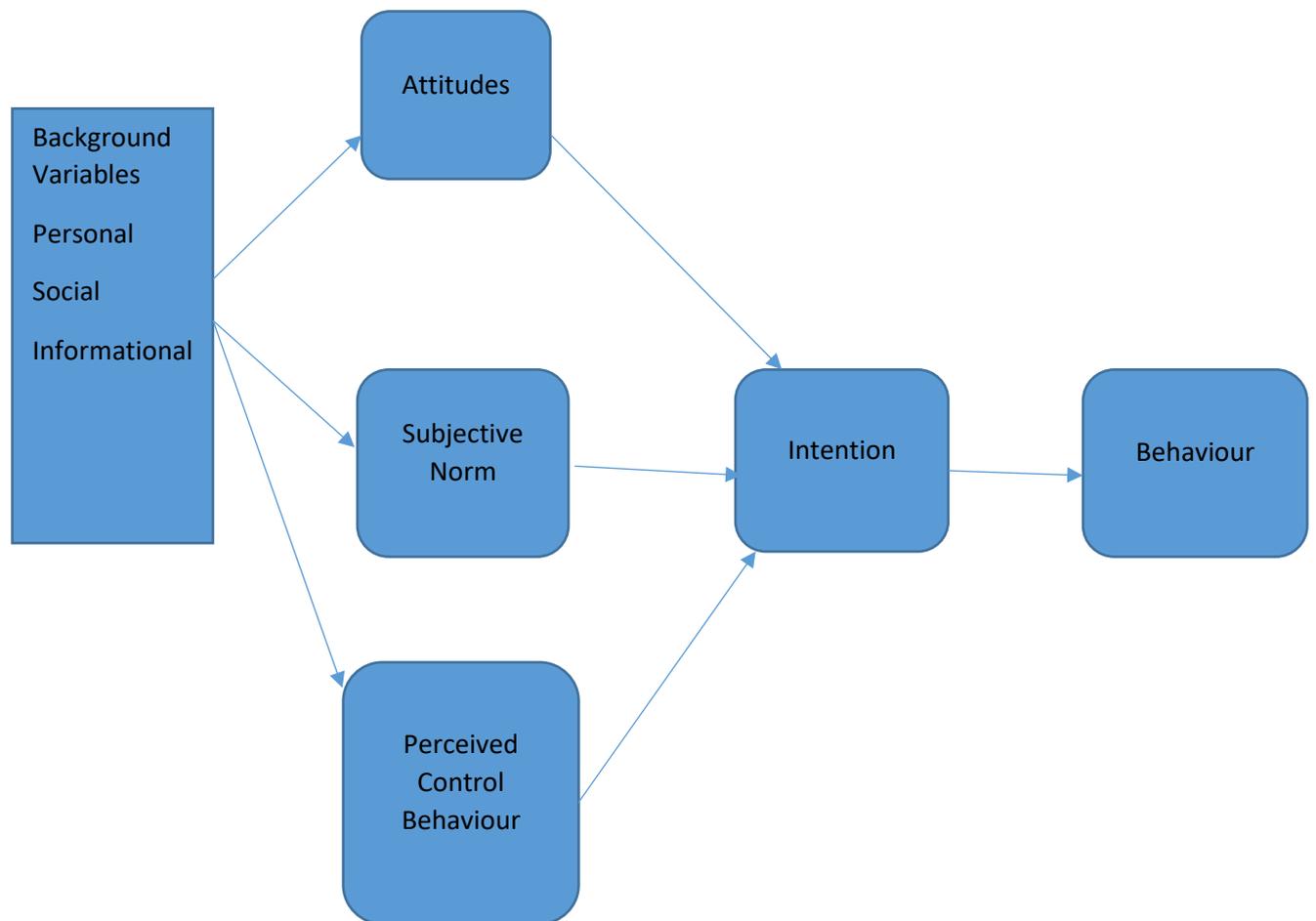


Figure 2: The Theory of Planned Behaviour

According to Ajzen (2005), several background factors can have an impact on the three components (attitudes, subjective norm, perceived behavioural control) of his TPB model, which can then contribute to predicting a person's intention to perform a behavioural action. More recently, Ajzen (2011) argued that his theory could not identify the origin of a person's beliefs. However, the theory could recognise background factors that can influence a person's beliefs. The background factors are categorised into three areas namely: *Personal* (personal traits, emotion, values, intelligence; *Social* (age, gender, religion, education background, race, ethnicity); and *Informational* (previous experience, previous knowledge, media exposure). In this regard, this TPB model proposed that the three categories of

background factors can influence a person's attitudes, subjective norms and perceived behavioural control norms which, ultimately, can contribute to a person's intention to perform a behaviour (Ajzen, 2005).

Since its inception, the TPB model has been widely applied in different studies (Ajzen, 2011). An analysis of the studies (Ajzen, 2005) conducted over a 20 - year period to explore the strength of the three components of the TPB model in predicting intention to perform a behaviour has reported the following findings that attitudes were the most powerful predictor of an intention, followed by perceived control behaviour and subjective norm respectively (Ajzen, 2005). In applying this TPB, the following studies, for example, Ahmmed et al., (2012) found that teachers' attitudes, teacher efficacy and perceived school support are strong predictors of teachers' intentions to include students with disabilities into regular classrooms. A similar study (Ahsan et al., 2013) found that the level and length of training, along with gender, influenced both teachers' attitudes and teaching efficacy towards inclusive education. In another study (Sharma & Jacobs, 2016), in - service teachers' attitudes and teaching efficacy played a significant role in influencing teacher educators' intentions towards inclusion. In this current study, pre-service teachers' preparedness for inclusive education in the Solomon Islands is explored through measuring their attitudes and teaching efficacy for inclusive education. In addition, the concerns of pre-service teachers about inclusive education, as a subjective factor that may influence pre-service teachers' preparedness for inclusive education, were investigated. With this introduction of the TPB, equally important is the notion of understanding the concept of inclusive education.

2.2 Defining Inclusive Education

Inclusive education has been discussed and debated globally with the emphasis on including children with special needs and disabilities into the regular mainstream classroom. International conventions and legislations have been developed and ratified in support of this trend. The fundamentals of Human Rights and Social Justice were perceived as core attributes to the conceptual framework of inclusive education and have influenced the way inclusive education has been defined.

Inclusive education has been defined as *“an ongoing process aimed at offering high quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of all students and communities, eliminating all forms of discriminations”* (UNESCO 2013, p.14). This definition from UNESCO (2013) on inclusive education emphasised the provision of quality education while respecting diversity and learning needs that children bring with them to schools. Inclusive education is based on the belief that all students are unique and different in many ways regardless of their abilities or disabilities (UNESCO, 2013). The diagram below depicts the essence of inclusive education.

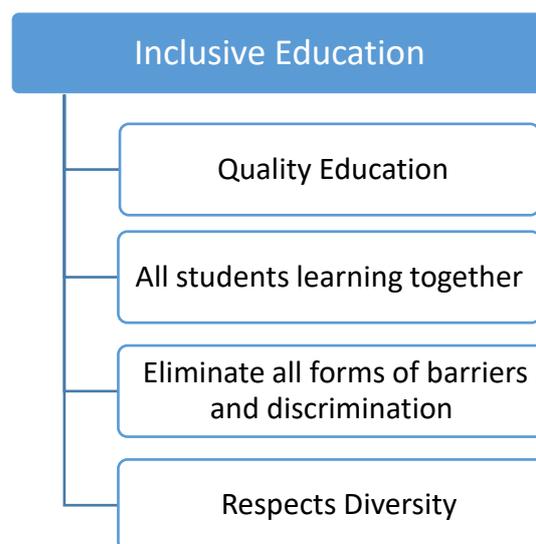


Figure 3: Summary of inclusive education

While the above definition of inclusive education stems from the Salamanca Statement (1999) and UNESCO (2013), it is important to understand how inclusive education is defined in the context of this study. As this study was conducted in the Pacific, a few Pacific scholars have tried to provide definitions that best suit the Pacific context. For example:

“ At the heart of inclusive education is the vision to transform the education system so it can provide improved quality and worthwhile education for all learners. Our schools in Pacific Island countries can only be inclusive when they are working towards full participation and equality” (Miller, 2007, p.32)

“...the means by which the rights of children and youth with disabilities to education are upheld at all levels within the general education system, on an equal basis with others in the communities in which they live. It involves identifying and overcoming barriers to quality education in the general education system; reasonable accommodation of the individual’s requirements; and provision of support measures to facilitate access to and participation in effective quality education”. (Sharma, Loreman and Macanawai. 2016, p.9)

The two definitions of inclusive education have one thing in common that reflects the Pacific community and how inclusive education was defined. In the Pacific context, inclusive education is all about identifying and overcoming barriers that may hinder quality education in the general education system and transforming the education system to accommodate the needs of students including those with disabilities. The definitions of inclusive education as provided, had elements that reflected the overarching definition as provided by the Salamanca Statement (1994) and UNESCO (2013).

2.3 Early Concept of Inclusive Education.

An early concept of inclusive education was on placing students with diverse learning needs in regular classrooms (Winter, 2006). However, more recently, researchers have proposed that inclusive education is more than just placing students with diverse learning needs into a regular classroom (Foreman and Arther - Kelly, 2017; Winter, 2006). It is about *“The quality of school experience and how far students are helped to learn, achieve and participate fully in the life while in schools”* (DfES, 2004, p. 12). Loreman et al., (2010) shared the same perception that inclusion is about valuing students’ diversity, providing help and creating an environment that facilitates meaningful learning experiences for all students. Loreman et al., (2010) thus proposed that valuing of students’ diversity has to happen in schools, reiterating the call for schools to be inclusive. Therefore, to be an inclusive school means schools should be prepared to accommodate the needs of all students, welcome students’ diversity and provide a conducive learning environment that will support and enhance students’ learning (Ainscow, 2016; Ainscow & Sandill, 2010; Ainscow, Booth & Dyson, 2006; Villa & Thousand, 2005). These sentiments thus strengthened the elements of inclusive education as proposed by UNESCO (2013) while reflecting the concept of equity and fairness (Ainscow, 2016).

Moreover, schools should be welcoming and providing equal opportunities to all and students should not be excluded from learning because of their particular disabilities and other forms of learning difficulties (Ainscow & Sandill, 2010; Ainscow et al., 2006; Slee, 2010; UNESCO, 2009). Evidently, suggestion that regular schools are expected to become inclusive, orientated to include diversity of learners (Loreman et al., 2010), providing a conducive learning environment that will enhance learning for all students (Ainscow et al., 2006; Villa & Thousand, 2005) and eliminating exclusive discriminating attitudes (Slee, 2010) reaffirmed the Salamanca framework’s (UNESCO, 1994) goal on inclusive education.

The concept of inclusive education can be best understood by the four key elements of inclusive education that support inclusive practices (UNESCO, 2013). These key elements are perceived in the following manner as summarised in Figure 4.

-
- 1 Inclusion is an ongoing process in search of finding better ways of including everybody,
 - 2 Inclusion is concerned with the identification and removal of barriers to inclusion,
 - 3 Inclusion is about the presence, participation and achievement of all students,
 - 4 Inclusion involves a particular emphasis on the groups of learners who are at risk of marginalisation, exclusion and underachievement.
-

Figure 4. *Key elements of inclusive education.* (UNESCO, 2013, p.5)

In summary, from UNESCO (2013) regarding the key elements of inclusive education, inclusion is a process that is concerned with the identification and removal of all forms of barriers that may hinder the education of all students, including those with special needs. This process has to be seen as never-ending in the search to find better ways of responding positively to diversity. It is about learning how to live with and how to learn from differences that each child brings with them into the classroom. Recognising these differences in a positive way can provide a catalyst and motivation for learning amongst children. Barriers that may hinder the process of inclusion need to be identified and removed. Similarly, collecting, assessing and evaluating information about inclusive education is important as this can contribute to better planning and development of inclusive education policies and practices. Likewise, inclusion is about schools and teachers having a moral responsibility to facilitate the presence, participation and achievement of all students. This is in relation to where students are taught and educated, the quality of their experiences whilst in school, and the outcome of their learning across the curriculum. Finally, the students who are at risk of being marginalised, excluded or of underachieving need to be identified so that they can be provided with support by the responsible authorities. The level of support provided by

responsible authorities can ensure that these students’ achievements are monitored and that avenues are provided for their presence, participation and achievements within the education system. These key elements of inclusive education are supported by scholars through literature (Ainscow, 2016; Loreman et al., 2010; Foreman & Arthur - Kelly, 2017; Slee, 2010; Ainscow et al., 2006).

Refer to Figure 5.

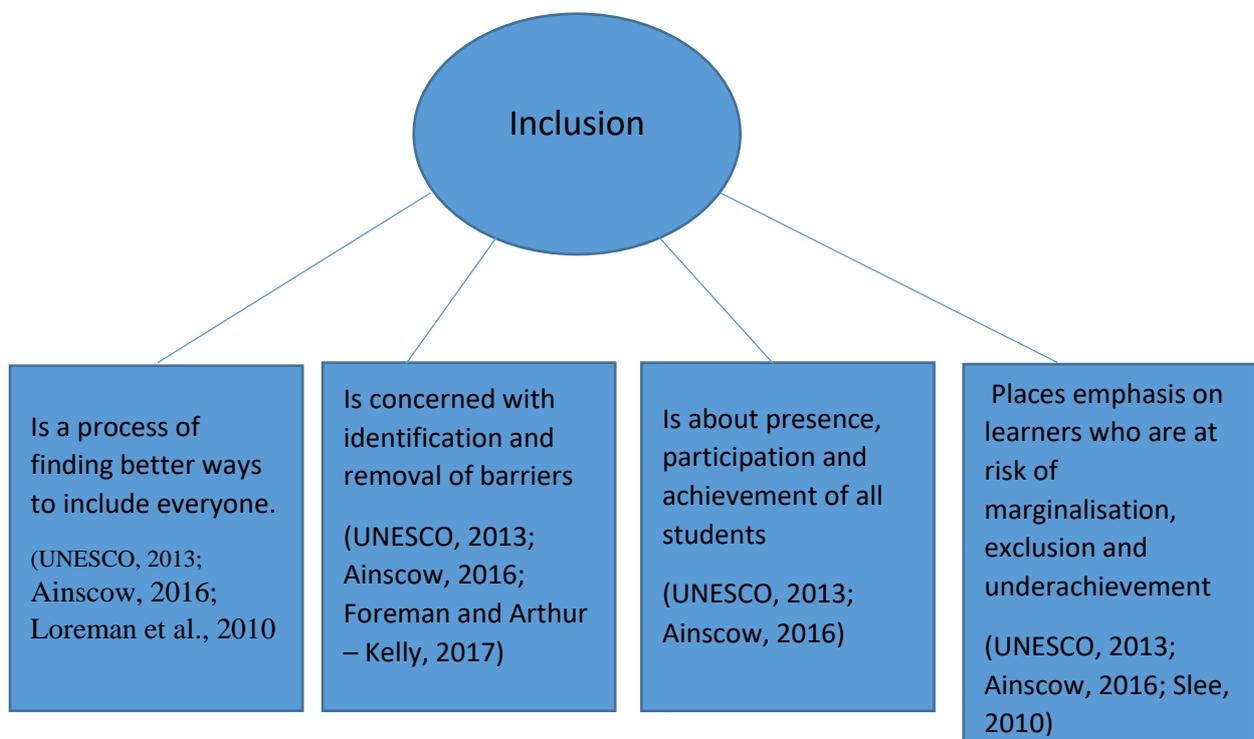


Figure 5: Summary of key elements of Inclusive Education

2.4 Legislation and Conventions supporting Inclusive Education

The development towards inclusive education eventuated after several international conventions and policy statements, namely the Education for All (EFA) (United Nations 1990), the Salamanca Statement (UNESCO, 1994), the Dakar Declaration (2000) and the United Nations Convention of the Rights of Persons with Disabilities (UNCRPD 2006). While these statements outlined that education must be made accessible to all students

regardless of gender, race, ethnicity, ability or disability, it is the Salamanca Statement (UNESCO, 1994) that strengthened and paved the way for inclusive education.

The Salamanca Statement (1994) had a great influence on the successful push for inclusive education. It proclaimed that every child has a fundamental right to education and must be given the opportunity to achieve and maintain an acceptable level of learning. The Salamanca Statement acknowledged the unique characteristics, interests and abilities of every child and proposed that education systems should be designed and educational programs implemented to take into account the wide diversity of every child.

In line with that notion, those with special educational needs should have access to a regular school system. Regular schools are expected to accommodate students with diverse learning abilities using a child – centred pedagogy (UNESCO 1994). As a result of such an expectation, the Salamanca statement proposed that regular schools with an inclusive orientation should combat discriminatory attitudes, build an inclusive society and provide an educational environment where all students, regardless of their abilities or disabilities, are taught together in the same classrooms (UNESCO, 1994). Drawing from the statement, it is evident that the Salamanca Statement (1994) focused on social equity that recognised children’s rights to education and the uniqueness of every child (Lee, 2013; Loreman, Deppeler & Harvey, 2010). In this context, it is perceived that education is a human right that must be made accessible to all. The society has a responsibility to ensure that every child is given the opportunity to gain education.

Prominent researchers have contributed significantly through their work in support of inclusive education. For example, Ainscow and Sandill (2010) contend that inclusive education is a reform that supports diversity and appreciates the uniqueness of every child. This uniqueness can make a difference in the child’s learning when provided with a learning environment and educational programs that supports and meets the child’s learning needs.

Inclusive education was further perceived as an ‘equity concept’ strengthening the concept of inclusion with fairness (Ainscow, 2016) and proposed the view that all students, regardless of their ethnicity, gender, socio-economic status, abilities or disabilities, should be given equal opportunity to access education in an inclusive setting. The concept of equity and fairness can be useful in the process of strengthening the capacity of education systems to reach out to all learners (Ainscow, 2016). Likewise, the concept can be used as an overarching principle to guide educational policies and practices for a better outcome of inclusive education within education systems. Lindsay (2003; 2007) suggests that inclusive education is an education that provides a rationale for regular schools to be inclusively oriented. Regular schools should ensure that effective measures are in place to address teachers’ behaviours and attitudes, creating welcoming communities, building an inclusive society and achieving an education for all (Lindsay, 2007).

This means, schools should have policies in place within the organisation that promote and support inclusive education. Inclusive education should be reflected in the school’s ethos, with support from the school’s leader. Schools need to adapt the physical, social and educational environment and provide an inclusive, friendly atmosphere where all students are safe, valued and have a sense of belonging (Mitchell, 2016). Teachers’ behaviours towards inclusive education should be addressed with immediate effect if there are indications of negative attitudes happening in schools (Loreman et al., 2010; Forlin, 2010). The process of addressing teachers’ perceptions and behaviour, creating welcoming communities, building an inclusive society and achieving an education for all, adds more strength to the objectives of inclusive education as proposed by UNESCO (1994). Additionally, inclusive education requires schools to reach out to communities and provide for the needs of all children regardless of their ability, disability, educational needs or other forms of diversity (Foreman & Arthur – Kelly. 2017). The term ‘diversity’ referred to

students' cultural, social, family, ethnic origin and their ability level. On this premise, teachers need to understand their students' background in the classroom. Gaining such knowledge and understanding about students' background should help teachers to provide appropriate learning for students and creating an environment in the classroom that is conducive to students' learning (Foreman & Arthur – Kelly, 2017).

Inclusive education was viewed from a social equity perspective that education is a fundamental human right. Such a view is being supported by international laws such as the Convention on the Rights of the Child (1989) and the Convention on the Rights of People with Disability (2006). These conventions argued that access to appropriate education is fundamental right of every child regardless of their race, gender, abilities or disabilities. This Rights - based approach proposed that children should not be denied opportunities of meaningful learning on the grounds of disability or other conditions (Marshall & Goodall, 2015). On that notion, when education is a human right, the society has a social responsibility to ensure that education is made available and accessible to all, including those with special needs (Ainscow, 2016; Ainscow & Sandill, 2010). The inclusion of students with disabilities into the regular classrooms and society, helps all human beings, increasing tolerance and the need to accept those who are different. From this perspective, inclusive education needs to address the concept of diversity rather than reducing it to categories of differences (Ainscow, 2016; Fisher, 2007).

Drawing from that, literature within the last decade has generated a great deal of discussion about the importance and relevance of inclusive education (Ainscow, 2016; Ainscow & Sandill, 2010; Avramidis & Kalyva, 2007; Forbes, 2007; Forlin, 2010; Boyle, Topping & Jindal – Snape, 2012). Inclusive education is seen as a process of change and improvement within education systems. This means governments, through the education systems, need to have legislation and policies in place that will guide and support the

provision of education for all children in inclusive classrooms and settings (Forlin, 2010). Legislation and policies must be clear in outlining how the education system intends to conduct its services and actions about inclusive education. Legislation and policies should also provide a set of guiding principles reflecting the values, approaches and commitments of the governments and education systems toward inclusive education (UNESCO, 2009) with schools adapting their practices to provide an inclusive school environment (Ainscow, 2016; Kinsella & Senior, 2008). Additionally, education systems through schools should address inclusive education in ways that will increase the schools' capacity to respond to the needs of all learners (Ainscow, 2016; Foreman & Arthur – Kelly, 2017; Lindsay 2007). Other expectations such as administrative structures, availability of resources and qualified classroom teachers are also highlighted as important requirements that would facilitate inclusive education (Agbenyega & Sharma, 2014; Forlin, 2013; Romi & Leyser 2006).

Equally important is the removal of all barriers that may hinder inclusive education. The education systems through schools need to work towards meeting the needs of all students while removing all barriers that may hinder the inclusion of children with special needs into regular schools and classrooms (Slee, 2010). The literature has identified some barriers that may act as impediments to inclusive education. A few common ones are teachers' negative attitudes, teachers' lack of knowledge about inclusive education, inadequate professional development programs for teachers about inclusive education, low peer status of children with disabilities in the regular classrooms and lack of resources (Loreman, Forlin & Sharma, 2007; Rajovic & Jovanovic, 2013). Other barriers include the schools' culture and academic structures that are in place to support students' learning and inclusive leadership that supports inclusion in schools (Agbenyega & Sharma, 2014; Mitchell, 2016). When students experience difficulties in their learning, the problem is with the schooling practice and not with the student (Slee, 2010). In light of such challenges, it must be acknowledged that

significant change is required in the ways teachers work in classrooms and the strategies they use that support and facilitate learning amongst students in inclusive classrooms (Agbenyega & Sharma, 2014; Forbes, 2007). The importance of having policies that will guide the practice of inclusive education in schools was highlighted as significant towards that direction (Forlin and Sin, 2010; Forlin & Chambers, 2011; Forbe, 2007, Foreman & Arthur – Kelly; 2017). Likewise, these policies need to be embedded within the education structures and systems of the organisations to ensure their effectiveness.

2.5 Historical background of teaching students with disabilities

In the past, education for children with special needs often took place in special schools and classes, with special educators using instructions that are modified or particularised to suit the learning needs of the children (Smith et al., 2004; Villa & Thousand, 2005). These institutions are known as ‘special schools’ for children with disabilities. Some institutions were designed for specific disabilities, for example, the School for the Blind, the Deaf, and others. It has been suggested that the provision of these institutions only reinforces the notion of segregation amongst children with disabilities and the institutions which can provide education for them in relation to their disability (Smith et al., 2004).

In light of this discussion, establishing an understanding about disability is important. Defining disability in an educational context is quite difficult. According to Gartrell, Manderson & Jennaway (2013), cultural context and social attitudes can influence the way society perceives and defines disability. The Convention on the Rights of People with Disabilities (CRPD) defines disability as *‘persons with long term physical, mental, intellectual or sensory impairment which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others’* (Article 1). The Individuals with Disabilities Education Act (IDEA) (1990) perceived disabilities as those

who required special education and related services because they showed one of several specific conditions that resulted in their need, for example those with physical, mental, intellectual or sensory impairments and those with learning difficulties. These notable pieces of conventions and legislation defining disabilities are Australian and American. It is worth applying them in defining disabilities because of the importance that definition of disabilities holds. Smith et al., (2004) suggests that despite these definitions, the fact remains that disability categories are composed of different types of children, thus making it quite impossible to draw simple conclusions about them. However, one significant aspect of these conventions is that children with disabilities are given the opportunity to attain education regardless of their abilities or disabilities (Foreman & Arthur - Kelly, 2017) and disabilities should not be used as a yard - stick to determine whether or not a child is fit to go to school (Slee, 2010). The avenue of sending children with disabilities to special schools took a drastic turn when calls were made to have children with disabilities gaining access to education in regular classrooms which can be supported through inclusive education (UNESCO, 1994).

The drive for inclusive education is a result of civil societies, parents of children with special needs, educators and people with disabilities advocating for equal access and educational opportunities for children and those with special needs in regular school settings. This advocacy for change began around the mid - 1970s (Smith et al., 2004). The support for the integration of students with special needs into regular schools came about because advocates believed that it was time to stop developing criteria for those who do or do not belong in the regular schools. The advocates further believed that more focus should be on developing and increasing the capabilities of the regular education system to meet the unique needs of all students (Smith et al, 2004; Stainback, Stainback & Forest, 1989; Foreman & Arthur - Kelly, 2017). This relates to formulating policies and provision of technical support with resources needed to facilitate the learning of all students including those with special

needs in regular schools. It has been suggested that having sound policies on inclusive education at the Governments' national level can be a way forward in supporting such learning for students with the implementation of inclusive education in schools. This assertion is supported by recent scholars about the importance of having sound policies and legislation that support inclusive education (Forlin, 2008; Forlin & Chambers, 2011). The policies need to be supported with legislation based on principles that will lead and guide the practice of inclusion within the education systems and in schools and regular classrooms. The principles of inclusion refer to personal beliefs that one values and holds about inclusive education. The notion of having personal beliefs can be positive or negative and in the context of inclusive education, it is expected that personal beliefs should be positive which may lead to positive practice in schools and classrooms (Foreman & Arthur - Kelly, 2017). Teachers need to have a good knowledge and understanding about legislation and policies pertaining to inclusive education. This relates to human rights laws and Conventions that support the rights of people with disabilities to have equal access to education and other basic infrastructure and services that will support their functions and livelihoods. Likewise, being knowledgeable about policies within the education system that guides and supports the provision of education for all children including those with special needs and disabilities. Gaining such knowledge could help teachers to better understand their roles and responsibilities when implementing inclusion in practice within schools and classrooms. Moreover, having such knowledge enables teachers to reflect upon themselves and their practices about inclusion and come up with ways to address challenges that may hinder them from fulfilling their roles as expected (Foreman & Arthur - Kelly, 2017). Concisely, teachers need to have positive personal beliefs about inclusive education, which in turn will help them to support and facilitate inclusion in their practices.

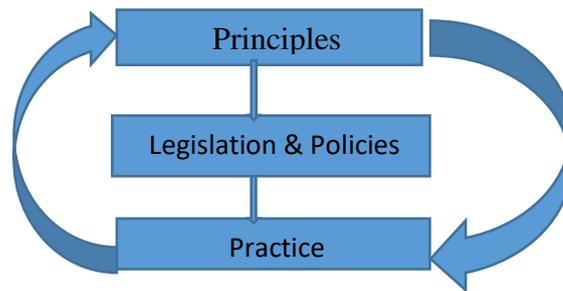


Figure 6: Summary of relationship: Principles, Legislation & Policies, Practice

2.6 The positive impact of inclusive education upon students’ learning

Inclusive education has been suggested as a way forward for all learners (UNESCO, 2013) because of the positive impact in which learning through such a mode had on academic, social and personal achievements and competency level of all students, including those with special needs. Advocates of inclusive education in the early 1970s also echoed this assertion. This is because of the notion that inclusion has been found to have equal and better learning outcomes for all children and not just on children with special needs (Foreman and Arthur – Kelly, 2017; Loreman et al., 2010; Smith et al., 2004).

Several studies have reported positive benefits and learning outcomes about inclusive education. For example, Dessementet and Bless’s (2013) study on the impact of including children with intellectual disability in a general education classroom found that such inclusion did not have a negative impact on the progress of pupils without disabilities. There were positive learning outcomes for all students. In a previous study, Dessementet, Bless & Morin (2012) revealed that children with intellectual disability made important progress in their literacy skills, mathematical skills and adaptive behaviour displayed at school and at home compared to children with similar intellectual disabilities who are taught in special schools. This result resonates to findings of similar past studies that highlighted the

advantages of inclusive education. The studies revealed positive development of academic skills (Turner, Alborz & Gayle, 2008) and improved reading skills (Laws, Byrne & Buckley, 2000) amongst children with disabilities in inclusive classrooms compared to those taught in special schools.

Another study by Banda, Hart and Liu – Gitz (2010) reported that children with disabilities who interact with peers who have higher - level social skills, often imitate these behaviours and skills that results in a positive behaviour outcome for children with disabilities. Similarly, Ekeh and Oladayo's (2013) study on academic achievement of regular and special needs students in inclusive and non-inclusive classroom settings revealed that students with special needs who are taught in regular inclusive classrooms showed higher academic achievement scores, compared to their counterparts taught in non-inclusive classrooms.

The positive impact of inclusive education on the learning of students with disabilities has continued to gain support by many scholars because of its effectiveness on the learning of all children (Loreman et al., 2010). Students with disabilities showed greater academic benefits such as higher levels of academic attainment than students in non-inclusive settings, (Frederickson, Dunsmur, Lang & Monsen, 2004). In addition, students with disabilities demonstrated improved social and communication skills with the development of positive self-esteem as they interacted with their abled peers. Students without disabilities also benefited (Naraian, 2008) by coming to appreciate their peers with disabilities while learning and achieving together with positive academic attainment in an inclusive classroom. A similar study (Ruijs, Van der Veen & Peetsma, 2010) found that inclusive education does not have any negative impact on students without special educational needs but instead contributes to positive academic achievement and socio - emotional functioning of these students. That means students without special educational needs were able to achieve positive

learning outcomes while being able to value and appreciate learning beside their peers with special educational needs. These studies (Frederickson et al., 2004; Naraian, 2008; Ruij et al., 2010) were supported by others (Staub & Peck, 1994; Pijl, Nakken & Mand, 2003; Kalambouka, Dyson & Kaplan, 2007) who concluded that inclusive education is quality education that does not have negative impact on the academic achievement of students without special educational needs. Such notion was support with more recent studies (Lyons, Thompson & Timmons, 2016; Timmons & Thompson, 2017) All students, including those with special needs benefited through learning in an inclusive classroom. The success of inclusive education on the learning outcomes of children with disabilities were attributed to the following factors; teachers' knowledge and skills about inclusion, their ability to modify curriculum to suit students' learning needs, the care and support given to students in class while valuing students' diversity and establishing positive relationship with students and parents in schools (Timmons & Thompson, 2017). Likewise, the level of support from the schools' administration, in terms of resources to make teaching and learning more meaningful for students with disabilities in the regular classrooms (Thompson, Walker, Shogren & Wehmeyer, 2018).

2.6.1 Opposing Arguments about Inclusive Education

Inclusive education has gained momentum. Many developed and developing countries in the world today are now moving towards adopting the concept of inclusive education. There are compelling arguments in support of inclusion with a growing number of scholarly articles reporting its success in classrooms and positive outcomes on learning and development of students with special needs (Loreman et al., 2010; Lyons et al., 2016; Fredrickson et al., 2004; Naraian, 2008, Timmons & Thompson, 2017). Despite growing numbers of scholarly articles in support of inclusion, opposing arguments against inclusive education were also being recorded. There were arguments that inclusion is a 'one size fits all' approach that can

deprive students with disabilities of an appropriate education (Fuch & Fuch, 1995). A few other opposing argument includes negative learning outcome for non-disabled children, children with special needs needed specialised training and education which can only be offered in special schools and teachers being unprepared to teach in inclusive classrooms (Bateman & Bateman, 2002). Upchurch, (2007) argued that inclusive education can have a negative impact on the learning of both students with and without special needs because teachers may not be able to meet the variety of learning needs of all students in inclusive classrooms. Other concerns about inclusive education include teachers' lack of knowledge and preparation to teach in inclusive classrooms and lack of resources and infrastructure to facilitate IE in schools (Kuyini & Desai, 2007), which may have negative impact on students' learning. Additionally, inclusive education may also offer rigid curriculum that offers no accommodation, modification or personalisation of tasks that may be meaningful to the learning of students with disabilities coupled with the socio-cultural attitudes about schools and disability (Schuelka, 2018). In line with ongoing discussion, there is similar concern that the academic achievement of regular students may be affected by the inclusion of students with special needs as demands on teachers' attention may have a negative impact on the learning of regular students (Campbell, 2009).

Other scholars have posit that inclusive education has always been seen and defined as a western concept initiated by Western countries such as the United States, the United Kingdom, Canada and Australia (Shaukat, Sharma & Furlonger, 2013). On that notion, it has been argued that its application within other cultural context and situations can be challenging (Rose, Deveston, Rajanahally & Jament, 2014). Original development leading to the drive for inclusive education were led by western countries with well-developed socio-economic infrastructures, finance and well-established education systems that are capable of sustaining, supporting and facilitating inclusive education (Armstrong, 1998). Likewise, these

above-mentioned western countries had developed legislation that would support inclusive education practices within their education systems.

It was also perceived that movements towards inclusive education systems has been promoted by rights-based agenda that are often led by groups and individuals who themselves have come to terms with some form of exclusion and marginalisation in their educational experiences and social settings (Rose, Deveston, Rajanahally & Jament, 2014). Additionally, the drive for inclusive education came about as groups and individuals developed greater understanding about the benefits of inclusive education and the pedagogical approaches that can be used in the classrooms that support the learning of students who were previously taught in segregated classrooms (Ashman, 2012; Norwich, 2013). Others have posited that the growth and drive for inclusive education have been made possible through the availability of financial and technical resources, legislative framework, skilled teachers and allied professionals, and the traditions of parents' advocacy that has become popular in western and developed countries (Walton, 2018). With these given situations, inclusive education was perceived as a Western concept driven by Western agenda that lacked sensitivity to other cultures and contexts. The Western concept of inclusive education has led some scholars to question the appropriateness of the concept to other cultures and context, branding it as a Western concept imposed on other cultures and context, especially those within developing countries (Armstrong et al., 2010; Rose et al., 2014; Walton, 2018). While that may be the view of scholars about inclusive education perceived as a Western concept, it can be said that the strive for inclusive education was proposed by Western countries in search for better ways to have all children including those with special needs, learning together in regular schools and classrooms rather than in segregation. As an educationist in the area, there was an understanding that the proposal of inclusive education was developed with good intentions. It is all about 'inclusiveness' and the art of considering and including everyone within all

social aspects in life. This art of 'inclusiveness' maybe deemed weak in the Western culture especially when social norms and ways of living have scaled down to focus on nuclear families and limited consideration for wider and extended families to provide family support for one another. The contention of inclusive education as being a Western concept has also drew the attention of a few Pacific scholars.

While the concept of inclusive education is a Western concept with good intentions, a few Pacific scholars (Le Fanu, 2013; McDonald & Tufue-Dolgoy, 2013) have questioned the integrity of the concept. Le Fanu (2013) with McDonald and Tufue-Dolgoy (2013) have argued that 'inclusiveness' has always been a part of the Pacific culture, embedded in the Pacific way of life. The concept is expressed as 'land' which has spiritual, physical, social and social dimensions that links to oral traditions, songs, dances, history and genealogy of the Pacific people (Rabukawaqa, 2009). However, the idea needs to be revisited, revised and reinterpreted within the Pacific cultural context (Rabukawaqa, 2009).

In the Pacific context, Pacific cultures are traditionally communal and are inclusive in nature. The nature of 'inclusiveness' is evident and reflected in most of their practices. The parents, immediate family members and extended families within the community nurture children and take responsibility for children's upbringing, valuing each child regardless of their abilities or disabilities (Tavola & Whippy, 2010). Before the introduction of formal education, non-formal education has traditionally been part of the Pacific culture. Traditional knowledge and skills about how to survive on the land and interact with one another, is passed down to all children by parents and knowledgeable elders and leaders in the community. For example, elderly women would teach young girls how to cook, weave, do gardening and take responsibilities in performing household chores, while leaders and elderly men would teach young boys the skills of building a house, making a canoe, hunting, fishing, gardening and other activities that are important for boys to learn and know about. The

transmission of knowledge through such practices also enabled young boys and girls to learn about the norms and values of the societies and the acceptable practices that are deemed as important. One of those practices is the value of sharing and caring for one another in the community. Although learning through this method is informal, the content and directions of such learning were quite formal, controlled by tradition and culture of the Pacific context (Merumeru, 2006). It is important to note there is wide recognition in the educational community that the fundamental principles of inclusive education (e.g. responding to diversity and community building) are consistent with the local and cultural beliefs and practices about inclusion in the Pacific (Miles et al., 2014).

Nevertheless, such opposing arguments are difficult to sustain especially when a growing number of researchers reported findings of positive learning outcomes for all students learning together in inclusive classrooms (Loreman et al., 2010; Lyons et al., 2016). Such arguments only demand more research into this area and field of study.

2.6.2 Factors that can contribute to success of Inclusive Education

The success of IE in schools depends on a number of factors, ranging from school leadership, teachers, teachers' beliefs and attitudes, to parents and the community collaborating with schools to support inclusion (National Council for Special Education, 2010). Other factors such as changes in policies, administrative structures, availability of resources and qualified classroom teachers were also identified as important elements for successful inclusive education in schools (Lindsay, 2007). While these factors (school leadership, teachers, teachers' beliefs and attitudes, policies and administrative structures, availability of resources and qualified inclusive education teachers) are deemed as essential to foster inclusive education, teachers, teachers' beliefs and attitudes are identified as crucial to the success of inclusive education (Lindsay, 2007; Subban & Sharma, 2005; Srivastava et al.,

2017). Teachers need to believe and have confidence in their competence and ability to educate children of diverse learning needs in inclusive classrooms (National Council for Special Education, 2010; European Agency for Development in Special Needs Education, 2012).

In the light of such requirements and expectations, successful implementation of inclusive education requires teachers who are able to respond with sensitivity to the curricular needs, style of learning and levels of motivation of all students in an inclusive classroom, including those with special needs (Das, Kuyini & Desai, 2013). Additionally, positive attitudes, meaningful adaptations and modifications of curriculum, the use of appropriate interventions to address specific learning needs of students and developing positive relationship with parents and other professionals are also important for teachers to possess, that will foster inclusive education in schools (Cross, Traub, Hutter-Pishgahi & Shelton 2004, Foreman & Arthur – Kelly, 2017; Loreman et al., 2010). In essence, teachers' interaction with students, the teaching strategies and resources used in classrooms coupled with their ability to welcome diversity, are important. Likewise is teachers' capacity to adapt and respond to challenges and diverse learning needs of students. Therefore, teachers need to be prepared for such expectations.

The expectation of inclusive practices has created a demand for expertise within regular schools and classrooms (Forbes, 2007). Arguably, teachers were not being prepared for such demand because most of them may have little or no knowledge on how to approach students with specific learning needs and to teach in inclusive classrooms (Kurniawati, de Boer, Minnaert & Mangunsong, 2017). This lack of knowledge about including students with disabilities into regular classrooms has affected the behaviours of teachers not to accept these students into the classrooms. Such demands require teachers to have specific knowledge and

skills on how to include students with special needs in an inclusive classroom (Kurniawati et al., 2017; McCabe, 2008).

On that premise, scholars (Ahsan et al., 2013; Loreman et al., 2010, Sharma & Michael, 2017) have suggested that (1) teachers' attitudes, (2) knowledge about types of disabilities and (3) knowledge about inclusive teaching methods are important for teachers. Possessing these attributes will help teachers to respond positively to the diverse learning needs of students in the regular classrooms (Avramidis, Bayliss, & Burden, 2000; Bishop & Boag, 2006; Rix, Hall, Nind, Sheehy, & Wearmouth, 2009; Kurniawati et al., 2017; Scrivastava, de Boer and Pijl, 2015). Such expectations require teachers to be both knowledgeable about inclusive teaching practices as well as positively disposed to teach in inclusive classrooms (UNESCO 2013; Loreman et al., 2010; Ainscow et al., 2006; Winter, 2006; Srivastava, de Boer & Piji , 2017; Parasuram, 2006). The foundation to adequately prepare teachers for inclusive education has to begin early during the pre-service training and preparation of teachers. The time of pre-service preparation is thus critical whereby teachers gain knowledge about different disabilities and learn about skills, knowledge, attitudes and best practices of inclusive education.

2.7 The significance of pre-service teacher preparation

Preparing teachers for inclusive education needs to start at the initial pre-service preparation programs for teachers to acquire knowledge and skills about inclusion (Sharma, 2012; Subban & Mahlo, 2017; Winter, 2006). It is important that pre-service teachers are appropriately prepared to become inclusive educators and to display positive attitudes towards inclusive education (Varcoe & Boyle, 2013). The importance of preparing pre-service teachers for inclusive education has been widely researched (Ahsan & Sharma, 2018; Costello & Boyle, 2013; Forlin & Chambers, 2011; Forlin, 2008; Sharma & Nuttall, 2016;

Sharma & Sokal, 2013; Sharma et al., 2008, Sokal & Sharma, 2017; Varcoe & Boyle, 2013). These studies have found that when pre-service teachers are prepared well for inclusive education, pre-service teachers will develop positive attitudes, gain adequate knowledge and develop practical skills to become effective inclusive teachers (Carrington & Macarthur, 2012; Forlin & Chambers, 2011; Loreman et al., 2010).

2.8 Defining Attitudes

Equally important are the attitudes of other stakeholders and professionals such as school administrators and principals that are involved in the preparation of pre-service teachers (Avramidis et al., 2000). Negative attitudes are identified as the greatest hindrance and barrier to inclusive education. According to Vaughan and Hogg (2002), attitudes are basic and pervasive aspects of human life, helping human beings to analyse and react to events, make decisions and make sense of their relations with others. They consist of personal features and judgements that determine a consistent evaluative behaviour towards an idea, object, person or group whenever the object is encountered (Rajovic & Jovanovic, 2013). Loreman et al., (2010) define attitudes as thoughts, feelings and actions that human beings have about others and situations encountered in daily lives. Azjen, (1991) who posits that attitude is a tendency to respond positively or negatively towards an object, idea, or a subject and has the power to influence the person's choice, can best sum up the definition of attitudes. In view of that perspective, if teachers have positive attitudes to IE in relation to how they feel and their prior knowledge about inclusion, it will enable them to respond favourably to inclusive education. They will be able to practice inclusion effectively in their classrooms. On the other hand, teachers with negative attitudes and who are resistant to IE will be unlikely to implement IE successfully in their classroom (Ajzen, 1991). In summary, attitudes are formed by personal experiences with positive or negative reinforcement and can affect and determine a persons' thoughts, feelings and actions. Therefore, within the inclusive education

context, teachers' attitudes to inclusion can be positive or negative depending on teachers' values and beliefs, feelings and their willingness towards accepting inclusive education (Symeonidou & Phtiaka, 2009; Loreman et al., 2010).

Studies have shown that regular teachers have held negative or neutral attitudes towards inclusive education. For example, a review of literature by de Boer et al., (2011) concluded that teachers are negative or undecided in their beliefs about inclusion. Additionally, teachers do not rate themselves as knowledgeable and competent to teach students with special needs in regular classrooms. Mastropieri and Scruggs (1996), who concluded that teachers have reservations and concerns about the inclusion of students with special needs into mainstream classrooms, revealed similar findings. Such reservations contributed more to teachers' negative attitudes towards inclusive education. Other authors (Avramadis et al., 2000; de Boer, Pijl & Minneart 2010) have also attested to similar findings. Drawing from that perspective, the successful implementation of inclusive education depends very much on teachers' perceptions, values and beliefs which can shape and influence their attitudes to inclusion. Such sentiments from teachers only reinforces the importance of preparing teachers to meet the challenges of inclusion in the regular classrooms. The preparation programs should help pre-service teachers understand the challenges that come with inclusive education and how to address such challenges through their practices.

Some studies reveal that being knowledgeable about disabilities is deemed as a basic teaching requirement towards the goal of inclusive education (Allday, Neilsen-Gatti & Hudson, 2013). It is suggested that gaining such knowledge can contribute to teachers' competencies in performing their roles as inclusive teachers. These findings reveal that when teachers hold positive attitudes towards inclusive education and are knowledgeable about the different types of disabilities, they will be able to use appropriate teaching strategies that suit the learning needs of all students including those with special needs (Srivastava et al., 2015).

On that note, it is important that pre-service teachers and teachers who are already teaching in the classrooms, are knowledgeable about disability. However, some of these findings have been criticised by more recent studies (Hopkins, Round & Barley, 2018; Sharma & Nuttall, 2016; Sharma et al., 2007). These studies revealed that while being knowledgeable about disability is important, it can also cause fear and resentment upon pre-service teachers and their attitudes towards including students with disabilities in regular classrooms. Despite the criticism, there has to be balance in being knowledgeable about the different disabilities and how pre-service teachers can be prepared to address such challenges. These challenges of having to teach students with disabilities can be overcome through providing pre-service teachers with knowledge and skills on different approaches and teaching methods, which can be used in inclusive classrooms.

Florian (2006) proposed a few teaching methods which teachers can use in an inclusive classroom. The methods were categorised under the following headings: differentiated instruction which include using different paces of instruction when teaching, cooperative learning and peer tutoring where students are placed in groups or in pairs to learn together and classroom management where seating arrangements of students can be modified to suit the students' needs (Florian, 2006). These methods were described as 'inclusive teaching methods' because of the positive impact that these different teaching strategies can have on the learning outcomes of all students in the regular classroom (Florian, 2006; Srivastava et al., 2015). The inclusive teaching strategies as described by Florian (2006) are a positive way forward for pre-service teachers. Being knowledgeable about these teaching strategies will help pre-service teachers as they strive to become teachers who are expected to teach in inclusive classrooms and become inclusive teachers.

Moreover, being knowledgeable about these teaching strategies will enable pre-service teachers to know when and how to use different teaching strategies in the context of their classrooms. The feedback from teachers about lack of knowledge about how to implement inclusion in the classrooms as revealed through the literature, only highlights the need to equip teachers with knowledge and skills about inclusive education which can only be attained through pre-service teacher preparation programs. Such pre-service preparation programs are essential in preparing pre-service teachers for inclusion. Likewise, the preparation programs will further assist pre-service teachers to develop skills that will enable them to become critical thinkers, reflective practitioners and problem solvers who can actively challenge barriers to access, participation and learning of all students (UNESCO, 2013). Drawing from that perspective, ITE programs need to focus on developing the ability of new teachers to become inclusive in their practice. Teacher preparation programs should produce teachers who are going to be effective in their teaching as well as experts in their subject contents, and are able to diversify their teaching approaches to enhance students' learning (European Agency for Special Education, 2012; UNESCO, 2013).

The expectation on teachers to have positive attitudes, values and beliefs towards inclusive education and being able to become critical thinkers and reflective practitioners can be complicated and demanding on teachers (Sharma & Deppeler, 2005). However, it requires the commitment and dedication of teachers. Teachers must be prepared, willing and dedicated to achieve such expectation as suggested by Carroll et al., (2003) and Sharma, and Desai, (2002). Thus, developing such positive attitudes, values and beliefs towards inclusive education as well as becoming critical thinkers and reflective practitioners (Sharma & Jacobs, 2016; Villa & Thousand, 2016) are essential to instil in pre-service teachers during their preparation.

The call for inclusive education and providing quality school experiences that enhances learning for diverse students, reiterates the important role that HEIs contribute to support inclusive education (Ahsan et al., 2013; Ahsan & Sharma, 2018). HEIs through the initial teacher preparation programs have a duty in ensuring that new graduates are prepared for inclusive education. (Ahsan & Sharma, 2018; Sharma, Loreman & Forlin, 2012; Ferguson, 2006). In order to determine if HEIs and pre-service teachers are prepared for this challenge, this literature review has sought to examine (a) perceptions of the heads of higher education institutions about inclusive education, (b) the attitudes, concerns and teaching efficacy of pre-service teachers to implement inclusive practices and (c) the importance of professional experience during pre-service training of teachers. Examining these aspects will provide a better understanding about how inclusive education is being perceived by leaders of higher education institutions and how attitudes, concerns and teaching efficacy of pre-service teachers on inclusive education can be addressed during pre-service preparation of teachers (Ahsan & Sharma, 2018; Ahsan et al., 2012; Forlin, 2008). Similarly, the professional placement of pre-service teachers is equally important. Pre-service teachers need to gain experience in working and teaching children with special needs in inclusive classrooms. Such preparations can only be attained during the pre-service teacher preparation programs.

2.9 Roles of Higher Education Institutions in Pre-service Teacher Preparation

ITE programs play an important role in preparation of pre-service teachers for the teaching profession. Initial Teacher Preparation programs are designed to prepare pre-service teachers on how to teach and help students learn in a conventional regular classroom (Yeigh & Lynch, 2017). Institutions involved in the preparation of pre-service teachers vary in terms of their structures and teacher education curriculum. Though diverse, most curricula of teacher education programs often placed emphasis on four major areas. These includes

foundation knowledge in the philosophy and history of education, education psychology, social education, and teaching pedagogies. Additionally, skills in assessing students' learning, equipping pre-service teachers with content knowledge and skills relating to specific ways of teaching and assessment in a specific subject, and ensuring that pre-service teachers are introduced to teaching practice in a classroom. In short, the majority of ITE programs have a curriculum that emphasise knowledge, skills and competencies that are vital for pre-service teachers to acquire in preparation for the teaching profession (Yeigh & Lynch, 2017; Moran, 2009). With the passing of time, as the call for inclusive education has gained momentum, initial teacher education programs have been urged to review the curriculum of teacher preparation programs in order to accommodate the call, thus placing the expectation on higher education institutions to take up that role.

HEIs were expected to take an active role in preparing teachers for inclusive education through their ITE programs (Hamre & Oyler, 2004). Significant changes are required in terms of the curriculum on IE and approaches used in the delivery of the IE curriculum. These changes can be reflected in how the IE curriculum is designed and taught with teacher educators working together to support the delivery of the curriculum within the ITE program. The content of the IE curriculum needs to reflect the standards that pre-service teachers need to know about when teaching children with disabilities. Additionally, the curriculum should enable pre-service teachers to understand their role as inclusive teachers (European Agency for Development in Special Needs Education, 2012). In essence, learning and gaining skills and knowledge about inclusion and developing the attributes that are necessary in order to become an effective inclusive teacher. Likewise, the curriculum should blend in the professional standards that should guide teachers in their conduct and practices. Therefore, acquiring knowledge about teachers' professional standards during pre-service preparation programs is essential.

2.9.1 Teachers' Professional Standards

Professional Standards are requirements and expectations that govern teachers' performance and behaviours to achieve quality education. They are a set of guidelines with core attributes that teachers must demonstrate in their professional duties. Professional Standards for teachers entail values and practices that are vital and describe the skills and knowledge that are necessary for effective teaching, which teachers should possess. Most developed and developing countries have professional standards for their teachers. For example, the Australian Institute for Teaching and School Leadership (AITSL) in Australia governs teachers' professional standards. The standards cover teaching skills, content knowledge and the values teachers hold towards teaching. It was further emphasised that when teachers hold positive values towards teaching, they will have the passion for the profession which will enable them to become effective teachers (Carrington et al., 2015). The professional standards also guide teachers in their conducts towards teaching. In applying this concept to inclusive education, the expectations of how teachers must relate to inclusive education practices should be embedded in the Professional Standards Guidelines. It is encouraging to note that professional standards as stated in AITSL recognise diversity of students in the classrooms and have clearly outlined the expectation that is required of teachers in this regard. The professional standards will guide teachers to teach in ways that are respectful of the diversity and background of the learners as highlighted by Loreman et al., (2010). As Ainscow et al., (2006) stated, pre-service teachers need to understand that inclusion is governed by values and in particular, values that promote equity, participation and respect for diversity. The assertion by Ainscow et al., (2006) was supported by the European Agency for Development in Special Needs Education (2012) which proposed that, these values could be instilled in teachers during the pre-service teacher preparation programs,

thus emphasising the importance of pre-service preparation for teachers about inclusive education.

2.10 Deans and Principals as leaders providing support towards inclusive education

Equally important are the roles of the leaders of higher education institutions (deans, directors of Education Faculties and principals of the colleges and schools) in relation to how they perceive inclusive education (Ahsan, Sharma & Deppeler, 2012). Leaders play a critical role in the success of inclusive education. In the context of this study, leaders are people who shape goals, motivations and the action of others (Ryan, 2006). Additionally, leaders initiate change to reach existing, as well as new goals. The quest to provide leadership in order to achieve new goals can be quite complex because it depends on what the leaders think and do, thus emphasising the importance of innovative leadership in schools and education institutions in bringing about such change (Fullan, 2006). Similarly, Swart and Pettipher (2005) further posit that the success of inclusive education depends on leaders with inclusive visions who are determined to bring about change that embraces inclusive practices in schools and organisations. In essence, the process should be organised to advocate inclusion and leaders should be in the forefront to lead the way forward through demonstrating inclusive leadership practices (Ryan, 2006).

Drawing from that perspective, inclusive education needs visionary leaders who believe in inclusion and have a clear perception, knowledge and understanding about inclusive philosophy (Mitchell, 2016). The National Council for Special Education, (2010) further supported that notion by suggesting that inclusive education requires leaders who are able to articulate the reasons of their beliefs and are prepared to defend inclusion against all forms of challenges. Ainscow and Sandill (2010) supports such a notion and posits that providing leadership for such a process is crucial as such leadership requires leaders taking an active

role in directing their institutions towards inclusion and encouraging other leaders within the institution to work collaboratively in enhancing inclusive education and practices. Moreover, good leaders recognise the importance of preparing teaching staff and students so that effective inclusive practices can be maintained (Smith et al., 2004) while acknowledging that collaborative team - work is essential for successful inclusion (Ryan, 2006).

The need for collaborative teamwork has been highlighted as an ingredient for successful inclusion. This collaboration can take place through networking with other institutions and schools and sharing of resources that will support and enhance inclusive education (Agbenyega & Sharma, 2014). Ahsan et al., (2012) further suggested that this collaboration can be extended to manage pre-service and in-service teacher preparation programs. According to Ryan (2006) and Ahsan et al., (2012), leaders in such positions can work as agents of change in order to improve teacher preparation programs. However, in order for that change to happen, it was suggested that leaders themselves must first believe in the concept of inclusion and be willing to implement change (Agbenyega & Sharma, 2014; Ryan, 2006). With that perspective, implementing inclusive education is a process that requires change in the roles and responsibilities of leaders and teacher educators. The process of change includes leaders like the deans and principals of universities and colleges that provide pre-services training and preparation for teachers (Agbenyega & Sharma, 2014; Ahsan et al., 2012). In essence, leaders like the deans and principals should have a positive belief about inclusion and be prepared to lead the change within their institutions, providing support to curriculum reform that features studies about inclusive education in the training of pre-service teachers. The expectation of leaders providing such leadership and support thus signified the important roles that institutional heads and leaders performed in the development and preparation of pre-service teachers for inclusive education (Agyegaben & Sharma, 2014; Ahsan et al., 2012).

The important role of institutional heads to provide strategic direction for implementation of inclusive education within the curriculum of pre-service teachers can be best summed up as providing ‘inclusive leadership’ at the institution and college level. The provision of such leadership is crucial at that level. Being inclusive leaders requires leaders who have vision of inclusion and are willing to share that vision with the staff within the institutions’ communities, believing that inclusion is possible if all can work together to support it. An inclusive leader also acknowledges parental support for the inclusion of children with disabilities in schools and will foster a good working relationship the schools’ community in order to support the learning of all children including those with disabilities. Similarly, an inclusive leader will have the passion of providing support in terms of resources that will help to implement inclusive practices within the school community (Agbenyega & Sharma, 2014). While these attributes of an inclusive leader are appropriate for school leaders and principals, likewise elements of such a concept is appropriate to be reflected in the characteristics and functions of deans and principals of higher education institutions.

2.10.1 Challenges that institution face in preparation of pre-service teachers for Inclusive education.

Much research has been done in both developed and developing countries about the importance of preparing pre-service teachers for inclusive education in ITE programs (Ahsan & Sharma, 2018; Beckham & Rouse, 2012; Costello & Boyle, 2013; Carroll, Forlin & Jobling, 2003; Forlin, Loreman, Sharma & Earle, 2007, 2009; Forlin and Chamber, 2011; Loreman, Forlin & Sharma, 2007; Subban & Mahlo, 2017). Most studies have come to suggest that pre-service teachers need to gain knowledge, skills and understanding about inclusive education and be able to articulate these knowledge and skills in their practice through practicum in inclusive schools. These studies (Ahsan & Sharma, 2018; Loreman et

al., 2007; Forlin et al., 2007) also highlighted issues of concern that teachers have towards inclusion. The issues relate to a lack of resources and support from school administration which can have an impact on teachers as they strive to become inclusive teachers.

However, there is limited research done on examining the challenges that heads of institutions face in terms of their beliefs and perceptions in preparing pre-service teachers for inclusive education. Gaining an understanding of these challenges will greatly help in finding ways that can contribute effectively to the training of pre-service teachers. A study by Ahsan, Sharma and Deppeler (2012) involving 22 institutional heads in Bangladesh on challenges to prepare pre-service teachers for inclusive education found that while a majority of institutional heads had positive attitudes towards inclusive education, there is a mixture of beliefs on including children with disabilities into regular classrooms. Most participants expressed concern about the inclusion of children with severe disabilities into regular classrooms.

In another study on preparing teachers for IE in Cyprus, Angelides, Stylianou & Gibbs (2006) found certain factors that act as barriers in the development of inclusive practices by student teachers. These factors relates to the curriculum of HEIs regarding IE and how teacher educators perceive IE. The study found that teacher educators have interpreted the term 'inclusive education' with different meanings. Teacher educators' interpretation ranges from viewing inclusive education as emerging from the field of 'special' education, to the education of children with special needs. Few teacher educators linked IE to teachers who are able to teach in schools for all. Angelides et al., (2006) suggested that such misinterpretation of IE especially by teacher educators can have an impact on their role in preparing pre-service teachers for inclusion.

A similar study by Bartolo (2010) on major challenges of teacher education for inclusion in Malta found that while the deans and department heads of the faculty of education are positive IE, there are challenges they perceived which can act as barriers. One of the challenges is how to strike a balance between offering specific units on IE with the development of an inclusive pedagogy across subject specialities through the infusion approach. These studies (Ahsan et al., 2012; Angelides et al., 2006; Bartolo, 2010) reiterate the importance of leaders and teacher educators having adequate knowledge and positive attitudes towards inclusive education. Similarly, leaders with inclusive leadership providing support to inclusive education with special attention to the contents of inclusive education curriculum in the teacher preparation programs for pre-service teachers. While it is anticipated that deans and principals of higher education should have knowledge and positive attitudes towards inclusion, likewise, it is important also to examine other factors relating to pre-service teachers' attributes that are vital in the quest for IE. These factors are attitudes, concerns and teaching efficacy of pre-service teachers toward IE.

2.11 Attitudes of Pre-service Teachers towards Inclusive Education

Numerous studies have found that successful implementation of IE depends largely on teachers' attitudes to include students with disabilities in regular classrooms (Mastropieri & Scruggs, 1996; Sharma & Nuttall, 2016; Sharma, Loreman & Forlin, 2012; Shaukat, Sharma & Furlonger, 2013; Subban & Sharma, 2005;). It is important that teachers hold positive attitudes to IE in terms of their beliefs, values and skills (Forlin & Chambers, 2011) in order to make it work in the classrooms. Likewise, gaining an understanding and developing confidence, beliefs, knowledge and skills are also required in order to become an effective inclusive teacher. A better time to prepare teachers for inclusive education with positive attitudes, is through the teachers' pre-service preparation programs (Costello & Boyle, 2013;

Forlin & Chambers, 2011; Sharma & Nuttall, 2016; Subban & Mahlo, 2017; Winter, 2006). Through such training, pre-service teachers will learn about the essence of inclusion and being knowledgeable about the roles and responsibilities of becoming inclusive teachers (Costello & Boyle, 2013; Winter, 2006) which can have a positive impacts towards their attitudes towards inclusive education.

2.11.1 The importance of preparing pre-service teachers for Inclusive education.

The preparation of pre-services teachers for IE has been noted as a way forward. On that note, this literature review focused on studies conducted within the last decade on teacher preparation for IE. The studies includes those done on pre-service teachers' attitudes, concerns, teaching efficacy, and intentions to include students with disabilities in inclusive classrooms. Likewise, the importance of professional placement during pre-service training of teachers and the knowledge, beliefs, values and skills that pre-service teachers hold towards inclusion (Cameron & Cook, 2007, Sharma et al., 2012). Attaining the expectation of having knowledge, beliefs and values about inclusion can only be achieved through pre-service preparation which means doing and completing courses on special education and IE during the pre-service teacher preparation programs (Cook, 2002; Sharma et al., 2012; Sharma & Jacobs, 2016; Sharma & Nuttall, 2016; Subban & Mahlo, 2017; Winter 2006).

A number of studies conducted on the attitudes of pre-service teachers towards IE found that pre-service teachers who had developed positive attitudes (beliefs, values and skills) towards IE in their pre-service teachers preparation programs, tended to become successful inclusive teachers. For example, Varcoe and Boyle's (2013) study with 342 primary pre-service teachers' attitudes to IE found that doing a course on IE had a positive impact on pre-service teachers' attitudes to IE. A similar study undertaken by Sharma, Forlin, Loreman and Earle (2006) with 1060 pre-service teachers' attitudes, concerns and sentiments on IE

reported that completing a course on IE had a significant impact on the attitudes of pre-service teachers to inclusion. Costello and Boyle's (2013) study with 193 pre-service teachers' attitudes to IE also concluded that completing a course on IE during pre-service preparation of teachers had positive impact on pre-service teachers' attitudes to inclusion. In more recent studies regarding pre-service teachers' attitudes towards IE (Ahsan & Sharma, 2018; Goddard & Evans, 2018; Sharma & Nuttall, 2016; Sokal & Sharma, 2017; Subban & Mahlo, 2017) participating in a course on IE had shown significant impact on pre-service teachers' attitudes. While pre-service teachers had positive attitudes and knowledge about inclusion, they were also able to demonstrate inclusive values in their practices. Likewise, when pre-service teachers possessed positive attitudes and knowledge about inclusion, such attributes influenced their behaviour to support students with diverse learning needs in their classrooms (Avramidis, Bayliss, & Burden, 2000). Being knowledgeable and having positive attitudes about IE means that pre-service teachers believe that inclusion can benefit all students regardless of the abilities and disabilities that students have in the class. This can be achieved when pre-service teachers have learned about the different inclusive teaching strategies that can be used to meet the learning needs of all the students in the regular classrooms. Conversely, pre-service teachers who have limited training and hold negative attitudes about IE are not supportive to the inclusion of students with diverse learning in their classrooms (Varcoe & Boyle, 2013). On that premise, attitudes formed during pre-service teacher preparation programs are likely to influence pre-service teachers' attitudes to inclusion during their teaching careers and especially in the first few years of teaching. Many scholars in the field of IE (Costello & Boyle, 2013; Forlin, 2010; Loreman et al., 2010; Sharma & Nuttall, 2016; Subban & Mahlo, 2017) supported these sentiments.

In contrast, several other studies have reported otherwise, whereby pre-service teachers presented negative beliefs and attitudes towards inclusion after completing a course on IE. For example, Lyakurwa and Tungaraza's (2013) study with 641 pre-service teachers from two Teacher Education Institutions in Tanzania found that the majority of the participants (80.2%) had negative attitudes towards IE while 19.2% had positive attitudes after completing a course on IE. In other studies, for example, Thaver and Lim's (2014) study with 1538 mainstream pre-service teachers in Singapore; Adams and Mabusela's (2015) study with 85 pre-service teachers revealed that pre-service teachers displayed negative attitudes towards IE after completing a course on inclusion. A similar finding was also reported by Civitillo, De Moore and Vervloed's (2016) study with 139 primary pre-service teachers from an institution in the Netherlands. Results from that study showed that pre-service teachers held negative beliefs and attitudes towards IE. In a more recent study with 1623 pre-service teachers in Bangladesh, Ahsan and Sharma (2018) found that pre-service teachers had negative attitudes towards the inclusion of children who need high support for their inclusion into the regular classrooms. The results of those studies (Lyakurwa & Tungaraza, 2013; Adams & Mabusela, 2015; Thaver & Lim, 2014; Civitillo et al., 2016; Ahsan & Sharma, 2018) on pre-service teachers' negative attitudes towards inclusion are important because gaining an understanding is vital for successful implementation of IE. Gaining such understanding can provide teacher education programs with vital information on how to provide an IE curriculum that will address apprehensive attitudes of pre-service teachers towards IE. A few of the studies have also taken further steps to investigate certain variables that can influence pre-service teachers' attitudes towards inclusive education (Ahsan et al., 2013; Avramidis, Bayless & Burden, 2000; Avramidis & Booth, 2002; Loreman et al., 2007; Thaver & Lim, 2014).

2.11.2 Variables influencing teachers' attitudes towards inclusive education

It has been suggested that certain demographic and background variables can influence teachers' attitudes to inclusion of children with disabilities and other learning difficulties in the regular classroom (Avramidis, Bayless & Burden, 2000; Avramidis & Norwich, 2002; Forlin et al., 2007; Van Reusen, Shoho & Barker, 2001). Such variables include gender, age, qualification of teachers, the teaching experience and the amount of exposure to working and teaching children with disabilities. According to Avramidis and Norwich (2002) these variables are referred to as teacher - related variables, as they refer to teachers' demographic variables that may influence their attitudes towards IE (Varcoe & Boyle, 2013). Other demographic variables include having knowledge about someone with a disability, being in contact with someone with a disability, having training and knowledge on IE, length of the training and the content of the courses within the preparation programs of pre-service teachers (Ahsan et al., 2012).

Gender

Gender has been significantly identified as related to pre-service teachers' attitudes towards IE (Ahsan et al., 2012). Results gathered from studies on gender in relation to IE have reported that female pre-service and general female teachers showed more positive attitudes towards IE than males (Avramidis et al., 2000; Forlin et al., 2007; Loreman et al., 2005; Parasuram, 2006). Woodcock (2008) also reported similar results in an Australian study with both primary and secondary level pre-service teachers. Female pre-service teachers had more positive attitudes towards inclusion than male teachers. Other studies with pre-service teachers in Israel (Romi & Leyser, 2006) and in Ghana and Botswana (Kuyini & Mangope, 2011) also reported similar findings in that female pre-service teachers had more positive attitudes towards IE than their male counterparts. However, no significant relationship was found between pre-service teachers' gender and attitudes

towards IE in the studies from Carroll et al., (2003) and Varcoe and Boyle, (2013) with pre-service teachers in Australia. Studies done with general teachers have also reported similar findings. There was no relationship between gender and attitudes towards inclusion. For example, Al-Zyoudi's (2006) study with Jordanian teachers and Van Reusen et al., (2001) study with 125 high school teachers of a large suburban high school in the US found no relationship between gender and attitudes.

Age

Research has also reported a relationship between age and attitudes. For example, Forlin et al.,'s (2007) study with 603 pre-service teachers from Australia, Canada, Hong Kong and Singapore, concluded that younger pre-service teachers were more positive towards IE. However, other studies (Avramidis et al., 2000; Carroll et al., 2003; Varcoe & Boyle, 2013) found no significant differences between different age groups. This inconsistency does suggest that more research is needed in this area.

Teachers' qualification

Teachers' qualifications have also been shown to have strong influence on pre-service teachers' attitudes to IE (Forlin et al., 2007). A number of studies that have investigated the influence of having higher degrees and attitudes of pre-service teachers towards inclusion have concluded inconsistent findings. For example, while Forlin et al., (2007) and Varcoe and Boyle, (2013) concluded from their studies that pre-service teachers with higher degrees showed more positive attitudes towards inclusive education than those completing under graduate studies, other researchers (Carroll et al., 2003) found no significant differences between those taking Postgraduate studies and pre-service teachers completing Undergraduate studies.

Years of teaching experiences

Years of teaching experiences have also been shown to have an impact on pre-service teachers' attitudes towards IE. For example, studies showed that when teachers become more experienced, it is more likely that they will have a negative attitude towards IE as time progresses (Boyle, Topping & Jindal – Snape, 2012; Forlin, 2006; Lambe, 2007; Varcoe & Boyle, 2013). Boyle et al., (2012) and Varcoe and Boyle, (2013) found from their studies that pre-service teachers who had teaching experiences and had received training on special needs education showed less positive attitudes towards inclusion. In addition, pre-service teachers felt less competent to teach a diverse range of students, compared to teachers with training but no teaching experience (Varcoe & Boyle, 2013).

Contact with person with disabilities

Previous contact, experience and interaction with children with disabilities can also have an impact on pre-service teachers' attitudes towards IE. Pre-service teachers who have had regular contact with a person with disability have been found to have positive attitude attitudes towards IE (Avramidis & Kalyva, 2007; Boyle et al., 2012; Goddard & Evans, 2018; Loreman et al., 2007). Similar findings were reported by Romi and Leyser (2006) with their study done with 1,155 pre-service teachers in Israel, Carroll, Forlin and Jobling's (2003) study with 220 pre-service teachers in Australia and Lyakurwa and Tungaraza's (2013) study with 641 pre-service teachers in Tanzania. These studies reported that having regular contact with a person with disability reduces pre-service teachers' level of discomfort in their interaction with the person with disability than those who did not have that exposure. While that may be the assertion, other studies (Varcoe & Boyle, 2013; Bradshaw & Mundia, 2005) did not find any significant differences between regular contact with individuals with disabilities and attitudes towards inclusion. These inconsistencies in findings means that more research is needed into these areas.

2.12 Concerns of Pre-service Teachers toward Inclusive Education

Preparing teachers to teach in regular classroom has gone through a major shift in recent years (Loreman et al., 2010). Teacher Education Institutions engaged in teacher preparation programs are expected to ensure that pre-service teachers master necessary skills and knowledge to meet the needs of the diverse learners in the regular classrooms. While the attitudes of teachers play a vital role in the success or failure of inclusion in the regular classrooms, teachers' concerns about inclusion are equally important (Forlin, Earle, Loreman & Sharma, 2011). Teachers do have concerns about IE. Recognising the concerns of classroom teachers about inclusion is vital because gaining such understanding can help in how these concerns can be addressed within schools and regular classrooms. Likewise, the concerns can also be used to inform how pre-service teacher preparation programs can address pre-service teachers' concerns during their preparation program.

Research has indicated that pre-service teachers have various concerns about inclusion. For example, Sharma, Moore and Sonawane's (2009) study with 478 pre-service teachers' attitudes and concerns regarding inclusion of students with disabilities into regular classrooms found that pre-service teachers are more concerned about the lack of resources to teach in inclusive classrooms, acceptance of students with disabilities and increased workload. Similarly, Sharma and Sokal's (2013) study with 88 pre-service teachers also reported similar findings. Pre-service teachers were concerned about the lack of resources and increased workload. In another study, Sharma, Forlin and Loreman, (2008), found that pre-service teachers were more concerned with the inclusion of children with disabilities in inclusive classrooms as it may increase their workload and affect the performance of other students in the classrooms. Other similar studies done in Ghana and Botswana (Kuyini & Mangope, 2011) and in Bangladesh (Ahsan, Sharma & Deppeler, 2012) also reported similar results.

Drawing from the findings, pre-service teachers' concerns were related to a limited knowledge and skills to teach diverse learners, lack of appropriate resources to effectively teach students with disabilities, lack of time teachers may have for other students in the classrooms and inclusion can increase teachers' workload. In addition, more time will be required for planning and getting other necessary support that teachers' need in order to teach effectively in inclusive classrooms. Literature has also mentioned that the level of severity of disabilities within children is also a concern for teachers. Children who present mild disabilities are often accepted with ease into inclusive classrooms, compared to those with more severe forms of disabilities and those who present disabilities that may require a high level of support. This includes those children who use Braille or sign language or those who may need to have an Individualised Academic program (Ahsan & Sharma, 2018; Avramidis et al., 2000; Schmidt & Vrhovnik, 2015). These studies demonstrates the view that the concerns of teachers already teaching in inclusive classrooms and pre-service teachers about inclusion are real. An important time to address some of these concerns is during teachers' pre-service preparation programs. These concerns can have an impact on pre-service teachers' ability to effectively implement inclusion in regular classrooms (Forlin & Chambers, 2011; Horne & Timmons, 2009) and can create fear within pre-service teachers in their confidence to become inclusive in their practice at the completion of their preparation programs.

2.12.1 Variables influencing pre-service teachers' concerns towards inclusion

There have been limited studies done on examining the relationship between pre-service teachers' concerns and their demographic variables (Sharma, Forlin & Loreman, 2007). Despite such limitations, the description of teachers' concerns can be better understood with other attitudinal studies about aspects of inclusion. As suggested, teachers with a higher degree of confidence to teach students with disabilities in inclusive classrooms, seemed to

have a lower degree of concern about inclusion (Sharma et al., 2007). Similar results were reported from other researchers who reported that a higher degree of competence in teaching children with disabilities is associated more with accepting attitudes towards inclusion (Zanandrea and Rizzo, 1998; Loreman et al., 2007, Forlin, 2010). An explanation for such results can be drawn from the theory of self-efficacy (Bandura, 1997). The theory relates to the belief in one's ability to influence events that affect one's life and control over the way these events are experienced (Bandura, 1997). In essence, people with a strong sense of personal competence have the ability to face and master difficult challenges, set challenging goals and maintain strong commitments to achieve those goals (Pajares, 1997). The opposite can happen when people lack that strong sense of personal competence to achieve their goals. In the context of pre-service teacher preparation, it is only desirable that pre-service teachers' programs are designed in ways that will enhance prospective pre-service teachers' sense of efficacy and competence to teach and include student with disabilities in the regular classrooms. Having such confidence in their abilities to include students with disabilities in the regular classrooms can have a positive impact on their overall level of concerns. It may help to reduce some of their fears and concerns about inclusion (Forlin, 2010).

2.13 Teaching Efficacy of Pre-service Teachers towards Inclusive Education

Teaching efficacy is another factor used to understand teachers' practice in the classroom. Teaching efficacy refers to teachers' confidence and belief in their ability to positively promote and impact student learning (Hoy, 2000; Henson, 2001). This means, when teachers believe in themselves and their ability to teach effectively with confidence, they can make a difference in students' learning. Based on the work of Bandura (1997), teachers' self-efficacy beliefs have been associated with positive teaching behaviours and students' learning outcomes (Henson, 2001). Bandura (1997) proposed that teachers'

perceived teaching efficacy can influence the kind of learning environment teachers create for their students as well as their ability to perform different teaching tasks that will enhance students' learning performance.

Linking this proposition to IE , a teacher with high teaching efficacy in implementing inclusive practices would believe that a student with special needs can be effectively taught in a regular classroom (Tschannen - Moran, Woolfolk & Hoy, 1998). In contrast, a teacher with poor teaching efficacy for implementing inclusive practices may not consider including a student with disability as important, in a regular classroom. This proposition upon a teachers' sense of efficacy can affect their behaviour and the outcome of their actions on students' learning (Tschannen - Moran, Woolfolk & Hoy, 1998). When teachers lack confidences to teach effectively and do not consider the learning of all students as important, such teachers' behaviour can have a negative impact on students' learning.

A few studies relating to pre-service teachers' perceived teaching efficacy towards IE reported that teachers' sense of teaching efficacy is one of strongest predictors of their attitudes to inclusion. A study conducted by Ahmmed, Sharma and Deppeler (2013) on predicting pre-service teachers' preparedness, attitudes and perceived teaching efficacy for IE found that pre-service teachers had reasonably positive attitudes and high levels of perceived teaching efficacy for inclusion after completing a course on IE during the initial teacher preparation programs. Forlin, Loreman and Sharma (2014), Romi and Leyser (2006) and Sharma, Moore and Sonawane (2009) similarly examined the relationship between pre-service teachers' attitudes towards inclusion with variables such as knowledge of local legislation and policies, contacts with people with disabilities and their level of confidence in teaching in inclusive classrooms. These studies revealed that confidence to teach in inclusive classrooms was found to be a significant predictor of participants' attitudes towards inclusion. Additionally, completing a course on IE had a significant impact on pre-service teachers'

level of teaching efficacy. The notion of having confidence to teach in inclusive classrooms and the impact of completing a course in IE are attributes that can contribute to teachers' high teaching efficacy. It was also found that having high teaching efficacy can be a key factor in creating an inclusive classroom environment (Romi & Leyser, 2006). Pre-service teachers need to have confidence and the belief that they can implement inclusion in their classroom and reflect that sense of high self – efficacy in their practice that will enhance students' learning. Similar findings were also reported from studies done with general teachers (Weisel & Dror, 2006; Almog & Schechtman, 2007) which found that teachers' sense of self efficacy was a significant predictor of their attitudes toward inclusion. Teachers with a high sense of self efficacy tend to perform more positively in their role as inclusive teachers in the classroom, compared to teachers with a low sense of self efficacy.

Studies have found that teachers with high teaching efficacy tend to use better teaching strategies which allow students to learn effectively because they believe that low-achieving students can learn (Sharma et al., 2012). Such teaching strategies include providing positive feedback on students' work, better questioning and preparing meaningful lessons with practical learning activities (Sharma et al., 2012). In addition, teachers with high teaching efficacy are open to new ideas and are willing to experiment with new methods of teaching to meet the needs of their students. These teachers are also often less critical when students make errors in their learning (Jerald, 2007). Furthermore, teachers with high teaching efficacy tend to use a more hands-on teaching approach in their classrooms. This approach leads to significant improvement in student learning (Chan, 2008). Findings from the studies mentioned (Sharma et al., 2012; Jerald, 2007; Chan, 2008) may mean that teachers need to have confidence in their abilities to teach effectively, while at the same time being able to use inclusive teaching strategies and meaningful learning activities that will enhance learning of all students, including those with special needs. Such teachers are passionate with

their teaching and are willing to go the extra mile in supporting and engaging with students that have difficulties in learning. Alternatively, teachers with low teaching efficacy use less effective teaching strategies that hinder learning and spend more time on non-academic matters (Sharma et al., 2012).

2.13.1 Variables affecting pre-service teachers' teaching efficacy

In a series of studies, the relationship between pre-service teachers' teaching efficacy towards inclusion has been examined in relation to variables such as gender, age, qualification, contact with people with disabilities, confidence level and knowledge of local legislation and policies. For example, Shaukat, Sharma and Furlonger's (2013) study with 317 pre-service teachers in Pakistan and Australia found that three variables: gender, level of training and previous experience with children with disabilities were found to relate significantly to Pakistani pre-service teachers. The study reported that Pakistani female participants held more efficacy beliefs towards inclusion compared to their male counterparts. Additionally, level of training and previous experience of teaching children with disabilities had also increased the pre-service teachers' level of teaching efficacy towards inclusion. Similar findings were reported by Forlin et al., (2009), Sharma et al., (2012) and Sharma and Nuttall (2016) that contact with people with disabilities, knowledge of local legislation, confidence level of pre-service teachers and completing a course on IE can have a positive impact on pre-service teachers' sense of teaching efficacy.

2.14 Professional experience of pre-service teachers in Inclusive Education

Professional experience for pre-service teachers on inclusion is another element that can contribute to successful IE (Voltz, 2003). Professional teaching experience commonly known as 'practicum' refers to when pre-service teachers are placed into schools for real

practical sessions in the classrooms. Practicum is a time when pre-service teachers put into practice the knowledge and skills of teaching learned during the course. Moreover, through practicum, pre-service teachers would learn about the challenges that teachers faced in the classrooms. However, more importantly, is the linking of theories of teaching into classroom practices. Likewise participating in professional experience allows pre-service teachers to observe professional teachers as examples, applying the programs' competencies in classroom settings and reflect on their own values and beliefs about teaching (Salend, 2010). Teacher preparation institutions need to address practicum in teacher preparation programs (Brownlee & Carrington, 2000; Forlin, 2008). With regard to IE, Pearce (2009) further supports that notion by stating that practicum needs to be considered as a significant factor in preparing teachers for better inclusive practices. Pre-service teachers need professional teaching experience in the classrooms and in inclusive settings.

Several researchers have suggested that more exposure of pre-service teachers to working and interacting with children with disabilities can improve pre-service teachers' attitudes and perceptions toward children with disabilities (Kowalski, 1995; Voltz, 2003; Cook, 2002; Salend, 2010). For example, a study done by Kowalski (1995) with four universities that used the infusion model approach to teach inclusive education in teacher preparation revealed that pre-service teachers need to be exposed to teaching and working with students with disabilities. Pre-service teachers need exposure to teach and interact with students with special needs in inclusive classrooms. Such experience will enable teachers to develop confidence in working with such students. Malak (2013) also conducted a similar study with 100 pre-service special education teachers in Bangladesh regarding their attitudes towards inclusive education. Findings from the study revealed that pre-service special education teachers hold positive attitudes towards teaching students with special needs. The study also found that being exposed to teaching students with special needs helped shaped the

attitudes of teachers to teach students with special needs in regular classrooms. The implication of the finding is that, in order to encourage change in attitudes of prospective teachers, practicum needs to be factored as an aspect of training in any initial teacher education programs. In doing so, such exposure will increase pre-service teachers' confidence to teach children with disabilities (Malak, 2013; Forlin, 2010) and help them to overcome fears and negative attitudes they may have towards children with disabilities (Forlin, 2008, 2010). More importantly, being exposed to working and interacting with children with disabilities will enhance teachers' practical skills and knowledge on inclusion. Moreover, it can make them understand the reality of teaching in an inclusive classroom and environment.

2.15 Predicting pre-service teachers' intentions to include students with disabilities into regular classrooms

An aim of this study was to investigate factors that predict pre-service teachers' intentions to include students with disabilities into the regular classrooms. IE has embraced the fundamental belief that all children regardless of race, gender, abilities or disabilities are required to be taught in regular classrooms (UNESCO, 2006). The implication of such an intention required positive attitudes and a high sense of teachers' teaching efficacy amongst teachers. Positive attitudes and a high sense of teaching efficacy can help reduce teachers' concerns and anxiety about inclusion (Forlin, 2010). Additionally, the education system through schools has a responsibility to ensure that students' learning experiences at school are of high quality. This means providing a learning environment supported with adequate learning resources that will assist students' learning. The provision of such a climate will enable all students to learn so that they can achieve their full potential and participate fully in the school community.

Studies on predicting pre-service teachers' intention to include students with disabilities into the regular classroom have reported several variables that can predict teachers' intention to inclusion. In the classroom settings, teachers have an important role in ensuring that principles of inclusive education are incorporated in their teaching practices. Researchers have posited that positive attitudes towards inclusion are important for its successful implementation in the classrooms. If classroom teachers do not have positive attitudes towards inclusion, any attempts to include students with disabilities may not be successful (Avramidis & Kalyva, 2007). A study by Ahmmed, Sharma and Deppeler, (2013), examined the influence of teachers' attitudes, teaching efficacy and perceived school support on teachers' intentions to include students with disabilities in regular classrooms. The study found that perceived school support was the strongest predictor variable, influencing teachers' intentions more than the other two variable. This means, intention to include students with disabilities in the classroom depends very much on the level of support teachers receive from the school administration.

In another study conducted in the Solomon Islands (Sharma, Simi & Forlin, 2015), examining pre-service teachers' intentions to inclusion, three variables were examined – attitudes, concerns and teaching efficacy. At the pre-stage two variables (i.e. attitudes and concerns) were significant predictors. At the post stage only one variable (i.e. attitudes) emerged as a significant predictor. The findings suggest that teachers' intentions to include students with disabilities depends on their attitudes. Similar finding was also reported by Subban and Mahlo (2017) that attitudes emerged as a strong predictor on pre-service teachers' intention to include students with disabilities in the classroom.

In summary, gaining an understanding with the perceptions of deans and principals of HEIs about IE, coupled with attitudes, concerns and teaching efficacy of pre-service teachers is necessary. Better informed leaders could help higher education institutions develop

programs and deliver courses that will help pre-service teachers develop positive attitudes (beliefs and skills) to inclusion.

Inclusive education places an emphasis on providing education and learning for children with disabilities alongside their peers in a regular inclusive classroom (Loreman et al., (2010). Such expectation has shifted the focus to HEI to determine how best teacher preparation curriculum and pedagogy can address this phenomenon (Ahsan & Sharma, 2018; Ahsan et al., 2013; Kowalski, 1995; Taite & Purdie, 2000). HEIs vary in their approaches to teacher preparation programs and how IE is addressed in the ITE programs.

2.16 Approaches used to prepare pre-service teachers for Inclusive Education

There are three main approaches used by HEIs in teacher preparation programs. These approaches are the Content Infusion, the traditional Stand-Alone approach and the development of partnerships between universities and schools. The decision on which model of training to be used depends on the HEI's context and the nature of the ITE programs offered in the institutions.

2.16.1 Content Infusion Model

According to Loreman (2010), the term 'Content infused' is understood to mean that attitudes, skills and knowledge that are normally taught in a single unit on special education or inclusive education unit, are being spread throughout a number of units within a program or the entire program of study. Cameron and Cook (2007) interpret content infusion as presenting curricular content related to inclusion through an existing teacher education program rather than devoting an entire course to a topic. Kowalski (1995) described content infusion as providing content about special education and weaving the information systematically throughout the teacher education program.

Drawing from these descriptions as presented by Loreman, (2010), Cameron and Cook, (2007) and Kowalski, (1995), the content infusion model is based on the premise that the contents of special education and IE are infused or spread systemically throughout a number of units within the curriculum of the initial teacher education programs for pre-service teachers. This means, the skills, knowledge and understanding on special education, inclusion and working with children with disabilities are covered and spread throughout a number of units within a program.

Studies conducted on the effectiveness of the content infusion model reported positive impact on attitudes of pre-service teachers towards teaching and working with children with disabilities. For example, Kowalski's (1995) study in four universities that have used the content infusion model in the initial teacher education programs found that preservice teachers had developed positive attitudes, values and beliefs towards inclusion at the completion of the program. Loreman and Earle (2007) did a study on examining pre-service teachers' attitudes, concerns and sentiments regarding IE through the content infusion model. Focusing on a Content – Infused Canadian teacher preparation program, the study found that this model of delivery was effective in improving pre-service teachers' attitudes IE. A similar finding was supported by Voltz (2003), in a review of 252 initial teacher education institutions in the USA that used a 'Collaborative infusion model' similar to the 'content infusion' model. The study found that the approach was beneficial to both faculty staff and pre-service teachers. The faculty staff were able to work collaboratively with their colleagues in sharing of information and resources for their collaborative teaching. Pre-service teachers were able to develop positive attitudes, knowledge and understanding on IE.

Cameron and Cook (2007) did a similar study with 23 special education and 34 general pre-service teachers that completed training through the content infusion approach. Findings revealed that pre-service special educators rated their beliefs, skills and intended

practices much higher than the general educators. In another study, the work of Florian et al., (2010) in particular to the Inclusive Practice Project, which was implemented at the University of Aberdeen in the United Kingdom, focused on reforming the Postgraduate Diploma of Education and having contents of IE infused within the curriculum of the program. The study revealed that participants held positive attitudes and beliefs towards inclusion after completing the course. Results from these studies (Florian, Young & Rouse, 2010; Cameron & Cook, 2007; Loreman & Earl, 2007; Voltz, 2003) support the position that Content Infusion can be an effective approach to use in the preparation of teachers for IE.

2.16.2 Concerns about the ‘Content Infusion Model’

Although the content infusion approach was deemed as successful, concerns were raised about the effectiveness of implementing such a model in larger institutions, whereby it can be difficult to monitor (Avramidis et al., 2000). Even, advocates of the approach also admit similar concern and calls for greater monitoring of this approach in teacher education programs (Volts, 2003). Loreman and Earl’s (2007) study with pre-service teachers in Canada revealed that while the content-infused model had positive impact on attitudes of pre-service teachers, delivery through such an approach does not reduce anxiety about inclusion or negative sentiments towards disabled people by pre-service teachers. Gao and Mager (2011) did a study with 216 pre-service teachers enrolled in a four - year course in which issues of diversity and inclusive education were infused in all course units of the study, activities and fieldwork. Pre-service teachers’ efficacy and attitudes towards school diversity were measured throughout the course. The research concluded that, overall, the participants’ perceived sense of efficacy showed significant positivity with their attitudes towards inclusion and beliefs about socio cultural diversity, although they did not feel confident about teaching children with behavioural difficulties. The concerns raised about the effectiveness of

the infusion model (Avramidis et al., 2000; Gao & Mager, 2011; Loreman & Earl, 2007; Voltz, 2003) thus suggested that more research is needed about this approach in order to understand its effectiveness and practicalities on pre-service teachers' curriculum within initial teacher preparation programs.

2.16.3 The 'Stand - Alone Model'

The Stand - Alone approach is the other model used by HEIs in preparing pre-service teachers for IE. Through this approach, contents of special education and IE are taught as stand - alone courses and students have to complete the course within the semester. A few studies done on this approach have reported its success. For example, the work of Carroll et al., (2003) revealed that the stand - alone unit approach, based on lectures, workshops, and applied activities can have a significant impact on the attitudes of pre-service teachers towards IE. There were reports of positive changes on the attitudes of pre-service teachers towards teaching children with disabilities as well as having enhanced confidence to interact with people with disabilities.

In another study, Forlin et al., (2009) found that a specific unit of study focusing on how to cater for students with diverse learning abilities can have a significant impact on pre-service teachers in terms of helping to develop positive attitudes to inclusion. Moreover, it was also perceived that pre-service teachers preparation through this stand - alone approach had helped pre-service teachers overcome their fears and concerns about working and interacting with children with disabilities (Sharma, Forlin & Loreman, 2007; Sharma & Sokal, 2013) while gaining more knowledge and developing positive beliefs about inclusion.

2.16.4 Concerns about the Stand - Alone Model

Although studies (Forlin et al., 2009; Sharma et al., 2007; Sharma & Sokal, 2013) have found that stand-alone approach had a positive impact on pre-service teachers' knowledge, attitudes and skills, other studies have reported otherwise. For example, Chong, Forlin and Au's (2007) study investigated the impact of an inclusive education unit of study on the attitudes of pre-service teachers. The study found that there were no substantial changes to pre-service teachers' attitudes to inclusion, although the unit entailed lectures on the theories and historical background of IE, how to implement IE and participating in a practical activity of interacting with disabled students for a day. In another similar study, Forlin and Chambers (2011) found no significant differences in the attitudes of pre-service teachers after completing an IE unit through this stand-alone approach even though the unit of study included lectures, workshop, group discussions and activities coupled with opportunities to meet and interact with a person with a disability. Their findings show that such a unit of study may improve pre-service teachers' awareness, but it does not necessarily help them to develop attitudes towards inclusion, neither does it reduce their level of stress. As a result of that study (Forlin and Chambers, 2011), it was suggested that stand-alone units on IE need to provide more opportunities to improve pre-service teachers' knowledge and skills about IE.

2.16.5 The development of partnerships between universities and schools

Apart from the Content Infusion and Stand-Alone approaches in preparing pre-service teachers for IE, other scholars have suggested approaches that incorporate school placement and experiences whereby pre-service teachers are placed in schools in order to gain the experience of teaching in inclusive classrooms (Forlin, 2010; Hopkins et al., 2018; Voltz, 2003). The approach entailed initial teacher education programs establishing partnership with

schools and ensuring that pre-service teachers spend time in schools to conceptualise and implement IE practices. Scholars of IE have argued that the real-world context of ITE programs needs to consider this approach in the preparation of pre-service teachers because of its positive impact on pre-service teachers' attitudes and teaching practices (Moran, 2009; Waitoller & Kozelski, 2010).

Similarly, research has suggested that attitudes, knowledge and skills of pre-service teachers about IE can improve if the courses or units of study had fieldwork requirements. Such close connections with schools could enhance pre-service teachers' experiences about inclusion. For example, Peebles and Mendaglio (2014) examined the impact of an IE unit of study that comprised of a 10 weeks of course work and three weeks of field experience in schools. During the fieldwork experience, pre-service teachers worked with individuals as well as groups of learners in planning activities and engaging in related learning activities. The outcome of the study revealed that although coursework itself was effective in developing self-efficacy amongst pre-service teachers, the combination of work and field experience had significant impact on pre-service teachers' self-efficacy.

In another study, Warner and Hallman (2017) revealed that field experiences in schools had significant impact on teaching efficacy of pre-service teachers, especially in their teaching practices. Participants in the study were able to share knowledge and understanding about teaching practices and how students' learning can be facilitated in the classroom. The findings (Peebles & Mendaglio, 2014; Warner & Hallman, 2017) reaffirmed the importance of involving pre-service teachers in fieldwork activities.

Although it was perceived that incorporating field experience within initial teacher education programs could have positive impact on pre-service teachers' attitudes, knowledge, skills and teaching efficacy about inclusive education, this may not always be the case. There are contrasts from other studies. For example, Lancaster and Bain (2010) examined a group

of students attending an IE unit of study that emphasised involving pre-service teachers in classroom experience. The study revealed that although participants' attitudes towards inclusion had improved, the greatest improvement was recorded in the group whose unit did not include an applied experience. This was supported by other similar studies (Moran, 2009; Angelides, 2008).

The debate on which model of teacher preparation is suitable for preparing pre-service teachers for IE will remain as more research is still required into the effectiveness of the three approaches namely the Content Infusion Model and the Stand-Alone Model and the development of partnerships between universities and schools (Lancaster & Bains, 2010; Sharma, et al., 2008). However, what is important is the kind of attitudes, knowledge and skills that pre-service teachers need to gain and develop in order to prepare them for IE (Loreman, Deppeler & Harvey, 2010; Chambers & Forlin, 2010). Moreover, through pre-service preparation, pre-service teachers' concerns' and the teaching efficacy on IE can be addressed. Therefore, HEIs need to take note on these aspects to ensure that ITE program address them. Apart from addressing attitudes, concerns and teachers teaching efficacy in the pre-service training of teachers, Sharma et al., (2013) further suggests that ITEs need to focus on pre-service courses that integrates curriculum about disability and IE. This will ensure that pre-service teachers understand aspects of disability and be knowledgeable on how to address the needs of all students including those with disabilities in an inclusive classroom.

2.17 Implications for Teacher Education

Teachers play a crucial role in the success of implementing IE in schools and classrooms. They play the role of promoting learning and participation, particularly with children who might be perceived as having difficulties in learning, and those who are at risk of underachievement, through their classroom teaching practices (Campbell et al., 2003;

Loreman et al., 2010; Rouse, 2008). Preparing teachers for IE places the challenge on HEIs through ITE and preparation programs to tailor an IE curriculum that will equip pre-service teachers with knowledge, skills and understanding on inclusion to prepare them for their role as inclusive teachers in regular classrooms (Chambers & Forlin, 2010). The implication of such expectations requires reviewing the content of the curriculum to include special education and IE with emphasis on pedagogical knowledge with practical skills and experience of working with children with disabilities (Ahsan et al., 2013; Kowalski, 1995; Rouse, 2010; Romi & Leyser, 2006; Shama & Jacobs, 2016).

More importantly, the training of teachers about IE needs to offer a balance between theory and practice based teaching and learning, learning about the theory of inclusive teaching and how to apply the pedagogy in practical classrooms. In addition, Romi and Leyser (2006) suggest that teacher education programs need to feature contents that embrace an inclusion philosophy with focus on helping pre-service students to cultivate positive attitudes and sentiments towards IE and people with disabilities.

Teachers' lack of understanding about the philosophies of IE was also seen as an impediment to inclusion in schools and classrooms and teachers not having a clear idea of their own philosophy about IE (Loreman et al., 2010). The lack of teachers' knowledge and understanding about the philosophies of inclusion and not having a clear idea of their own philosophy about inclusive IE need to be addressed during the teacher preparation programs of pre-service teachers. IE can be successful when teachers know and understand the concept of inclusion and develop their own beliefs, values and attitudes that support inclusion (Cologon, 2013; Forlin & Chambers, 2011). The European Agency for Development in Special Needs Education (2012) identified some values and beliefs that are deemed important for teachers to know. These includes teachers' (a) valuing learners' diversity, (b) supporting all learners to high level of achievement, (c) collaborating and working with others to

facilitate learning for all students and (d) personal professional development whereby teaching is a learning activity and teachers take full responsibility for their lifelong learning. These values and attributes are associated with teacher competencies that are made up of three elements known as attitudes, knowledge and skills. It is with the understanding that certain attitudes or beliefs, demand certain knowledge or level of understanding and then skills in order to implement this knowledge in a practical situation (European Agency for Development in Special Needs Education, 2012). Linking that knowledge to IE, when teachers have positive attitudes and adequate knowledge about inclusion, they will develop skills to practice inclusion effectively and to reflect these core values in inclusive classrooms. This undertaking can be achieved through the preparation of pre-service teachers in the initial teacher preparation programs.

The expectation of teachers developing positive attitudes and values towards inclusion can happen when leaders of HEIs believe in IE and are able to provide inclusive leadership support for such a course through the ITE programs of the institutions (Ahsan & Sharma, 2018; Ahsan et al., 2012; Agbenyega & Sharma, 2014; Ryan, 2006). As suggested by Chambers and Forlin (2010), Loreman et al., (2010), Sharma (2012) and others, (Costello & Boyle 2013; Varcoe & Boyle, 2013), IE is all about good practices in teaching. Inclusive education embraces and respects diversity while ensuring that all students, regardless of their race, gender, ethnicity, ability or disability, have equal opportunity to gain quality education through such an approach as suggested by UNESCO (2013). Thus, teachers need training in order to be effective implementers of the concept in the classrooms.

2.18 Inclusive Education Curriculum

As stated above, ITE programs HEIs play a vital role in preparing pre-service teachers for IE. On that note, there is a pressing need for teacher education and preparation programs to focus on “*reconceptualising the roles, attitudes and competencies of pre-service teachers to prepare them to diversify their teaching methods, to redefine their relationship between teachers and students and to empower them teachers as co-developers of curriculum*” (UNESCO, 2013, p. 6). This expectation by UNESCO (2013) reaffirmed the notion that teachers are key partners in the successful implementation of IE in schools and classrooms. Therefore, it is important that attention be given about ways that can improve pre-service teachers’ preparation for IE (Juma, Lehtomaki, & Naukkarine, 2017). Such undertaking can be achieved in offering courses about IE within the programs. Research has shown that completing a course in IE has a positive impact on pre-service teachers’ attitudes towards inclusion (Sharma & Nuttall, 2016; Sharma & Sokal, 2013; Sharma et al., 2008). Such positive impact on pre-service teachers’ attitudes towards inclusion is a reflection of the contents of the IE curriculum used within the teacher education program in preparation of pre-service teachers.

Globally, as teacher education programs strives to prepare pre-service teachers for IE, the contents of the inclusive curriculum vary depending on the structure of the programs. However, one thing which can be certain is that fundamentals of IE are embedded within the content of the curriculum. For example, Sharma and Sokal’s (2013) comparative study of 28 pre-service teachers from Australia and 60 pre-service teachers from Canada found that completing a course on inclusive education helped reduce pre-service teachers’ concerns and increased their attitudes and level of teaching efficacy towards inclusion. While the content of the IE curriculum varied between countries, the content of curriculum for Australia’s pre-service teachers focuses on three key aspects of inclusion: ‘What is inclusion?’, ‘Why

inclusion?’ and ‘How to include everyone?’. The curriculum provided pre-service teachers with general information about disability, integration, mainstreaming, inclusion, and international policies that support inclusion of children with disabilities into regular mainstream classrooms. Relevant information about why inclusion is important and how to include everyone in an inclusive setting, through using appropriate teaching strategies is also covered in the content of the curriculum for pre-service teachers (Sharma & Sokal, 2013). Likewise, organising guest lectures and pre-service teachers having opportunities to visit inclusive schools. These elements have formed a good component of an IE curriculum. Similar suggestions alluded to by Sharma et al., (2013) who proposed that content of IE curriculum for pre-service teachers needs to include information that integrates aspects of disability and inclusion.

Likewise, Florian (2006) proposed IE curriculum that provides pre-service teachers with information on inclusive teaching strategies that can be used in inclusive classrooms. Florian’s (2006) work was supported with the argument for the need to ensure that pre-service teachers are also prepared to become reflective practitioners who are equipped with strategies that are responsive to the needs of individuals and diverse learners (Florian & Spratt, 2013). Reflective practice implies that teachers continually reflect on their teaching practices. They reflect on what they do, how they do it and the impact of their teaching practices on students’ learning. Such reflection in turn, informs teachers on their teaching progress while improving their practices (Florian & Spratt, 2013).

In becoming reflective practitioners, pre-service teachers need knowledge about how to engage in action research that will inform them in their teaching practices. The knowledge and skill about involving in action research that will inform them about their teaching practices, can be embedded in the content of inclusive curriculum for pre-service teachers. Others have suggested course designs with emphasis on quality teaching and practical

inclusive practices (Forlin, Kawai & Higuchi, 2014; Sharma et al., 2013). This is in relation to ensuring that pre-service teachers are given the opportunity to be exposed in inclusive classrooms, and interacting with children with disabilities.

Likewise, professional standards of teachers in relation to IE are also important to include in the curriculum (Juma et al., 2017). With these suggestions, the expectations on the contents of an IE curriculum for pre-service teachers is enormous. It is desirable, that an IE curriculum should be a one that equips pre-service teachers with knowledge and skills to become effective inclusive teachers. The content of the inclusive education curriculum should provide information to pre-service teachers about the importance of inclusion in regular classrooms as well as addressing concerns and other challenges that teachers are likely to face (Sharma & Sokal, 2013). Likewise, it is desirable that the IE curriculum be designed in such a way that enables pre-service teachers to be knowledgeable about inclusion, be able to apply inclusive knowledge in their practices and have the belief that inclusion is practical.

2.19 The 3H Framework

A better way to understand this concept is through the work of Shulman (2004) who talked about the need to ensure that training and induction in all the professions have three essential elements. These three elements are referred to as the ‘three apprenticeship’. The first is the ‘apprenticeship of the head’, which he referred to as the cognitive knowledge and theoretical basis of the profession. The second is the ‘apprenticeship of the hand’ which includes the technical and practical skills required to carry out essential tasks of the role in the profession, and finally the ‘apprenticeship of the heart’, which refers to the ethical and moral dimension, the attitudes and beliefs that are crucial to the particular profession and its work (Shulman, 2004).

Based on the work of Shulman (2004), the Head, Hand and Heart framework is an approach that HEIs through their teacher education and preparation programs can implant into the IE curriculum for pre-service teachers. According to Shulman (2004) three changes need to happen in the training and induction of any profession. In light of this literature review it can be said, that teacher preparation programs can apply this concept to the preparation of pre-service teachers. There has to be a change in the pre-service teachers' Head, Hand and Heart (3H) and their beliefs about IE. The framework was further developed by Florian and Rouse (2009) proposing that teachers need to have knowledge and theoretical understanding about inclusion (Head), have necessary technical and practical skills to practice inclusion (Hand) and developing ethical, moral attitudes and beliefs that have to be reflected in ones' behaviour about inclusion (Heart). Drawing from that perspective, this means teachers need to develop within themselves the knowledge and skills on inclusion. Teachers must also believe that inclusion is possible with positive attitude and be able to practice inclusion in their classroom using inclusive activities and teaching strategies that will involve all students.

Rouse (2010) and Forlin (2008) therefore suggest that reform is needed in teacher education programs to ensure that teachers are prepared to work and teach in ways that are inclusive. The call for reform in teacher education programs is also based on the notion that future progress in IE requires new ways of thinking about the provision and practices of inclusion. The reform can also be extended to addressing the IE curriculum, the structure of the programs as well as the beliefs of teacher educators who are preparing pre-service teachers for inclusion. The proposal to apply Shulman's framework in the curriculum of pre-service teachers' preparation program in this regard is relevant, important and worthy to consider.

2.20 Conclusion

IE is about providing quality education and promoting good teaching practices. A lot of factor can contribute to its success in schools. However, teachers play a pivotal role in its success as they implement and practice inclusion in schools and classroom (Forlin, 2010). Drawing from that conclusion, pre-service preparation of teachers has been highlighted as crucial for the success of IE. Teachers need preparation about inclusion to develop knowledge, skills and values that will enhance inclusive practices and address inclusive challenges in schools and classroom. This is in light of the notion that pre-service teachers will become future teachers one day and it is important that they have sound personality in terms of knowledge and attitudes, which will reflect upon on their teaching in inclusive classrooms. Likewise, visions of inclusive leadership from leaders of HEIs and colleges are equally important. Institution leaders can provide support and direction in the way the IE curriculum is being addressed within ITE programs of pre-service teachers. Additionally, HEIs through the initial teacher education programs, play an important role in the shaping of the personalities of these future teachers during the pre-service preparation of teachers. Following this literature review, the next chapter discusses the research method that was used to collect data for this study.

CHAPTER THREE

This chapter presents the procedures used to conduct this study. The chapter is divided into the following sections:

3.0 Introduction

3.1 Research Design

3.2 Research Questions

3.3 Study Participants

3.4 Study One – Deans and Principals

3.4.1 Participants

3.4.2 Data collection procedures

3.4.3 Instruments

3.4.4 Data Analysis

3.5 Study Two – Pre-service Teachers

3.5.1 Participants

3.5.2 Data collection procedures

3.5.3 Instruments

3.5.4 Content validation

3.5.5 Data analysis

3.5.6 Focus Group Discussions

3.6 Conclusion

Introduction

This chapter presents an overview of the methodology employed in this study conducted particularly in the Pacific but more specifically in the Solomon Islands. It is important that educators are research literate because of the impact that research can have on today's education and society. By being knowledgeable about research, educators will be able to evaluate published materials and conduct well designed research studies on their own or with others (Macfarlane, 2007). Drawing on this, as with other similar observations (Cohen, Manion & Morrison, 2004; Creswell, 2009), it can be said that the place of research in education and being knowledgeable about how to conduct research are important.

This chapter begins with a presentation of the research design. The recruitment of participants, data collection and data analysis procedures are also presented. Thereafter, the research questions of the study are presented with discussions of ethical considerations applied within the study.

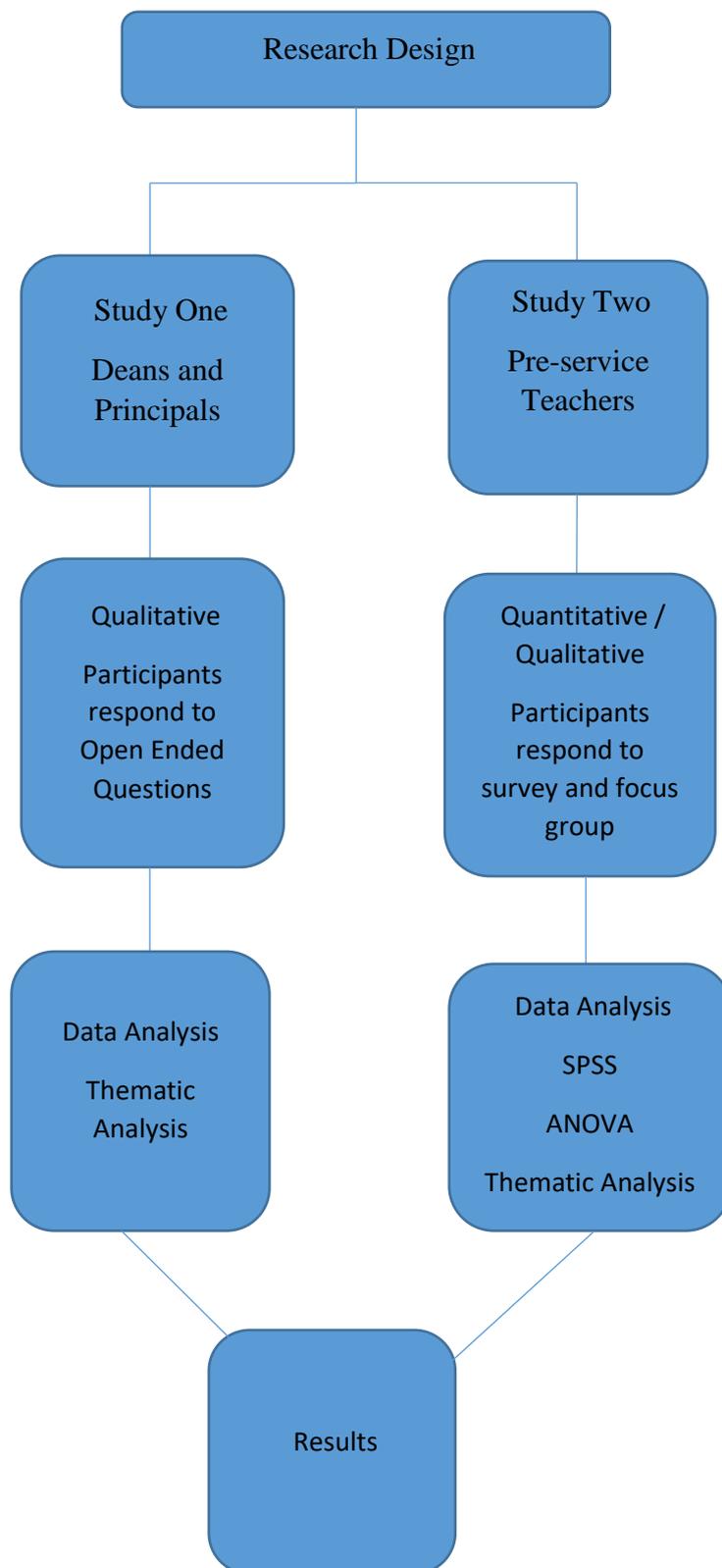
3.1 Research Design

In order to conduct this study, a mixed methods approach was deemed as appropriate. Mixed methods involved both qualitative and quantitative investigations. The use of mixed methods research design is increasing and widely used by a growing number of researchers (Creswell & Plano Clark, 2007; Creswell, 2013; Goldkuhi, 2012; McKim, 2017). A few scholars have pointed out that studies conducted through this method often add value to the study by increasing validity in the findings, informing the collection of the second source of data and assisting with knowledge creation (Hurmerinta – Peltomaki, & Nummela, 2006; Newby, 2014). Additionally, research performed through this method gives readers more confidence in the results and conclusions drawn from the study and helps researchers cultivate ideas for future research (O'Cathain, Murphy & Nicholl, 2010). However, there is a

caution in using this method, as research undertaken using mixed methods requires more time due to the need to collect and analyse two different types of data (Creswell & Plano Clark, 2011). Additionally, researchers may require additional funding for added supplies, extra space to interview participants or to administer a survey and assistants to help with data collection, data entry and to some extent, data analysis. More importantly, mixed methods requires knowledge of both quantitative and qualitative methodologies. As mixed methods was chosen to guide this study, Creswell and Plano Clark (2011) cautioned that researchers must be explicit about the reasons for choosing this method. Mixed methods was chosen to guide this study because data collected through the qualitative method can be used to triangulate with data gathered through the quantitative method, to ensure that the nature of the study can be better understood.

The study was conducted in two phases. A qualitative study involved deans and principals of higher education institutions in the Pacific and a quantitative study that involved pre-service teachers at the School of Education and Humanities, Solomon Islands National University. The quantitative study was facilitated through the use of a survey questionnaire. Within the context of mixed methods, qualitative findings can provide contextual and internal valid understanding of the results (Creswell & Plano Clark, 2011; Bryman, 2006; Patton, 2002), as well as making meanings out of results obtained from quantitative findings. On that premise, it is anticipated that results derived from this mixed method design will help us to understand how pre-service teachers are prepared for inclusive education in the Pacific and how best the findings can contribute to improving the provision of preparing pre-service teachers for such undertaking. The flow chart (Fig. 7) provides a visual representation of the research design for this study

Figure 7: Diagram of the Mixed Methods Research Design



3.2 Research Questions

The importance of the study evolved from recognising the need to prepare teachers for Inclusive Education (IE). This study was based on the assumption that when pre-service teachers are prepared for inclusive education during the initial teacher education programs, pre-service teachers will develop characteristics and positive attitudes to teaching and including students with diverse abilities into the regular classrooms. Furthermore, pre-service teachers will acquire necessary knowledge and skills to become effective inclusive teachers. The main aim of the study was to understand:

To what extent do current teacher education programs prepare pre-service teachers for inclusive education in the Pacific and more specifically in the Solomon Islands?

The following research questions were used to answer this key overarching question:

- 1) What are the perceptions of the deans and principals of higher education institutions in the Pacific about the preparedness of pre-service teachers to teach in inclusive classrooms effectively?
- 2) What attitudes do pre-service teachers in the Solomon Islands have towards inclusion and do their background variables influence their attitudes?
- 3) What level of concern do pre-service teachers in the Solomon Islands experience towards inclusion?
- 4) What level of teaching efficacy do pre-service teachers in Solomon Islands have towards inclusion and do their background variables influence their level of teaching efficacy?
- 5) Does participation in a course in Special and Inclusive Education influence pre-service teachers' attitudes, concerns, teaching efficacy and intentions towards inclusive education?

- 6) Does professional experience prepare pre-service teachers for their roles as inclusive educators in the Solomon Islands?
- 7) Can pre-service teachers' intention to include student with disabilities be predicted by their attitudes to inclusion, their level of teaching efficacy and their level of concern to include students with disabilities in a regular classroom?

3.3 Study Participants

There were two target populations for this study. These target groups were (1) the Deans of Higher Education Institutions in the Pacific and (2) Year One Primary Pre-service Teachers enrolled at the School of Education and Humanities, Solomon Islands National University (SINU). A purposive sampling method was employed to select samples for the qualitative study. Purposive sampling is now widely used in qualitative research which involves the selection of a sample with a particular purpose based on the researcher's judgement (Cohen, et al., 2004; O'Leary, 2010; Patton, 2002). Patton (2015) further described purposeful sampling as:

'The logic and power of purposeful sampling lie in selecting information-rich cases for in-depth study. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry....studying information-rich cases yields insights and in-depth understanding' (p.264)

In essence, purposive sampling is relevant with samples that provide depth of information or unique perspectives related to the phenomena of interest in the study (Tashakkori & Teddlie, 2010; Vogt, 2007; Wadsworth, 2011). This study used purposeful sampling because participants involved were useful and suitable for the nature of this particular study. These participants were deans and principals of higher education institutions that were involved in the preparation of pre-service teachers, and year one primary pre-

service teachers that were undertaking pre-service studies to become teachers. The participants' involvement in this study serves its purpose in relation to gaining an understanding about how pre-service teachers were prepared for inclusive education in the pre-service training and preparation program. The following procedures details how research participants were selected and how the study was conducted.

3.4 Study One – Deans and Principals

3.4.1 Participants

The participants of Study One involved deans and principals from Higher Education Institutions in the Pacific. In the Pacific region there are 14 Pacific Island countries. Nine of these countries have higher education institutions that provide teacher education and preparation programs for pre-service teachers. Teacher educators from all teacher education programs ($n=12$) were invited to participate in the study. Out of the invitations sent out to institutions and colleges, nine ($n=9$) institutions responded to participate in the study.

3.4.2 Data collection procedures

In order to undertake this study, approval was sought from the Monash University Standing Committee on Ethics in Research Involving Humans (SCEHR). Upon getting approval from the SCEHR (see Appendix A), letters of invitation were sent out to the deans and principals of the Higher Education Institutions and colleges in the Pacific to inform them about the nature of this study (see Appendix B). They were also sent a copy of the explanatory statement along with the survey questionnaire and a consent form (see Appendix C). Deans and principals who agreed to participate, were asked to complete the survey questionnaire (see Appendix D) and a consent form (see Appendix E) and return them to the researcher. The deans and principals were requested to complete the survey within two weeks

of receiving the survey. Follow up emails were sent to those who had not responded within two weeks of posting the survey.

3.4.3 Instruments

A survey questionnaire was developed to collect data. The questions were designed to collect data about perceptions of deans about the preparedness of pre-service teachers to teach in inclusive classrooms across the Pacific countries. The questions in the survey were developed based on the research in teacher and inclusive education (Costello & Boyle, 2013; Varcoe & Boyle, 2013; Winter, 2006; European Agency for Development on Special Education, 2012). These studies have highlighted the importance of training for teachers in inclusive education. In the survey questionnaire, the participants were asked to respond to 12 open ended questions. These questions related to their perceptions and understanding about inclusive education and how respective institutions address IE in their Initial Teacher Education programs (ITE).

3.4.4 Data Analysis

Data collected through the survey questionnaire was used to answer Research Question One – *What is the perception of deans and principals of higher education institutions in the Pacific about the preparedness of pre-service teachers to teach in inclusive classrooms effectively?* The information gathered from each participants was transcribed and made available for analysis. Data were analysed using a thematic analysis approach. Thematic analysis is a form of data analysis commonly used in qualitative research. It includes identifying, analysing and reporting patterns of themes within data and describes data in rich details (Braun & Clark, 2006). Fereday and Muir-Cochrane (2006) further described thematic analysis as a *'form of pattern recognition within the data, where emerging themes becomes the categories for analysis'* (p.4). In essence, it involves tactfully identifying and reviewing of data, moving backward and forward, with the intention to find themes that

respond to the main research question. The thematic analysis approach has six phases. It begins with familiarisation of the data, generation of codes, searching of themes, reviewing of themes and defining and naming themes, which often leads to the conclusion and production of a report (Braun and Clark, 2006; Patton, 2015). A number of researchers have cautioned about the way the approach should be used, as thematic analysis is not a simple reproduction of a verbatim report. The procedure requires careful analysis and identification of a good code that captures the qualitative richness of the phenomenon under investigation (Braun & Clark, 2006; Gentles, Charles, Ploeg & McKibbin, 2015; Patton, 2015). Braun and Clark (2006) cautioned that:

Thematic analysis is not just a collection of extracts strung together with little or no analytic narrative. Nor is it a selection of extracts with analytic comment that simply or primarily paraphrases their content. The extract in thematic analysis are illustrative of the analytic points the researcher makes about the data, and should be used to illustrate/support an analysis that goes beyond their specific content, to make sense of the data, and tell the reader what it does mean (p.97)

This study was initially interested in understanding how deans and principals of higher education institutions and colleges in the Pacific perceive inclusive education. Furthermore, the study also investigated the understanding of pre-service teachers and how they are being prepared for inclusive education in ITE programs of HEIs and colleges across the Pacific. Gaining such understanding is important as the results will inform this study about the current practices and can provide helpful insights as we strive to prepare pre-service teachers for inclusive education in the Pacific region. The research was conducted in four countries concurrently. In this study, responses from deans and principals were analysed through the themes that emerged from the data to determine their perceptions on preparation of pre-service teachers to teach in inclusive classrooms.

3.5 Study Two – Pre-service Teachers

3.5.1 Participants

Participants for Study Two were Year One primary pre-service teachers of the School of Education and Humanities at the Solomon Islands National University (SINU). These pre-service teachers were enrolled in the Diploma of Teaching Primary Year One program. Participants were asked to complete a survey questionnaire and participate in two focus group discussions. A total of $n=78$ participants completed the survey, and $n=16$ participants participated in two focus group interviews.

3.5.2 Data collection procedures

A letter was sent to the Dean of the School of Education and Humanities to request permission to carry out the study at the school (see Appendix F). The data from pre-service teachers was collected at two different stages (prior to them completing a course on disabilities and inclusive education) and at post stage (after they had completed the course). A clear explanation was given to all participants regarding their involvement in the study and the importance of ensuring that confidentiality of information gathered from them would be maintained (see Appendix G). Participants were assured that all measures would be taken to protect their identity and to maintain the confidentiality of the data collected. It was also explained to participants that in the final analysis, no findings which could identify any individual participant would be included in the survey questionnaire. At the end of the explanatory session, participants were given an opportunity to ask questions regarding the study. They were also provided with a copy of the explanatory statements for them to keep for their records. Participants for the Focus Group Discussion (FGD) were recruited through issuing an open invitation to primary pre-service teachers who wanted to participate in the FGD interviews.

3.5.3 Instruments

A five - part survey questionnaire was used to collect data from pre-service teachers. The survey was constructed by renowned researchers in the field, and has been used widely in international circles. (See Appendix H). The choice and wording of questions aligned appropriately with inclusive education in the Solomon Islands. Furthermore, the survey was developed in line with inclusive trends across the globe, and has been used in both developed and developing countries. The use of a published survey was considered appropriate as it was academically rigorous, and had been validated through previous studies. The data collected from the use of this five – part survey questionnaire will be presented in the next chapter. Furthermore, the survey was selected primarily because it aligned with the aims of the study. Such studies such as Sharma and Jacobs (2016), Sharma and Desai (2002), Sharma and Sokal (2013) and Sharma et al., (2012), validated the use of this scale. The survey was validated for the use in the Solomon Islands context as used below.

Description of the Survey Questionnaire

The first part of the survey questionnaire consisted of the *Attitudes to Inclusion Scale* (AIS). Based on an extensive review of literature on inclusive education, the scale was developed by Sharma and Jacobs (2016) and was used to measure participants' attitudes towards inclusive education. The Attitudes to Inclusion Scale (AIS) consists of eight statements and was used to measure pre-service teachers' attitudes to inclusion of students with disabilities in regular classrooms. Examples of such statements include “I believe that all students regardless of their ability should be taught in regular classroom” and “I believe that inclusion is beneficial to all students socially”. A Likert type format response with seven possible responses was used. Participants were asked to complete this part of the questionnaire by rating each statement on a seven point rating scale of *Strongly Disagree*, *Moderately Disagree*, *Slightly Disagree*, *Undecided*, *Slightly Agree*, *Moderately Agree* and

Strongly Agree. Researchers (Sharma & Jacobs, 2016) have found that AIS has a high degree of reliability. Two countries have used the scale. The alpha coefficients for the Australian was 0.80 and the Indian sample it was 0.86. The scale yields a total score value which can range from 8 to 56. A higher score on the scale is indicative of more positive attitudes towards inclusion.

Part Two of the questionnaire consisted of seven statements on the *Intention to Teach in Inclusive Classroom Scale (ITICS)*. Also developed by Sharma and Jacobs (2016), this scale was used to capture participants' intention to teach in inclusive classrooms. An example of a statement includes "Change the curriculum to meet the learning needs of a student with a learning difficulty enrolled in your class". Participants were asked to complete this part by responding to each statement on a seven point Likert scale rating of *Extremely Unlikely, Very Unlikely, Somewhat Unlikely, Not Sure, Somewhat Likely, Very likely and Extremely likely*. The reliability coefficient for ITICS is found to be 0.73 for Australia and 0.83 for Indian in-service teachers. ITICS also yields a total score the value of which can range from seven to 49 (Sharma & Jacobs, 2016). A higher score on ITICS is an indicator of high level of intention to teach in inclusive classrooms.

Part Three of the questionnaire consisted of the *Concerns about Inclusive Education Scale (CIES)*. The scale was designed by Sharma and Desai (2002). Consisting of 21 items, the scale was developed to measure participants' levels of concerns about practical aspects of the implementation of inclusive education (Sharma & Desai, 2002). In this study, this scale was used to measure participants' level of concern about the practicalities of implementing inclusive education in regular classrooms in the Solomon Islands. Participants were asked to complete this part of the questionnaire by rating each item on a four point Likert scale of (4) *Extremely Concerned*, (3) *Very Concerned*, (2) *A Little Concerned* and (1) *Not at All Concerned*. Research has found that the scale has a high degree of reliability. For example, a

study done in Australia and Canada (Forlin, Earle, Loreman & Sharma, 2011) on the impact of a teacher education course on pre-service teachers' beliefs about inclusion reported coefficient alpha of 0.88 for Australian and 0.89 for Canadian pre-service teachers. The scale yields a total score, the value of which can range from 21 to 84. A high CIES score indicates a high level of concern to implement inclusion in the classroom. Another study by Woodcock, Hemmings and Kay (2012) also reported similar findings. The study was on whether completing an inclusive education subject does influence pre-service teachers' concerns and self-efficacy about inclusion. The outcome of the study reported a coefficient alpha of .80. The scale yields a total score, the value of which can range from 0 to 63. A higher CIES score indicates that a respondent is more concerned about his/her ability to implement inclusion (Woodcock, Hemmings & Kay, 2012). Other studies (O'Toole & Burke, 2013; Oswald & Swart, 2011) that had used the CIES have also found the scale to be reliable.

The fourth part of the questionnaire was the *Teaching Efficacy for Inclusive Practices Scale* (TEIP) which consists of eighteen items. Developed by Sharma, Loreman and Forlin (2012), the scale was used to gain an understanding about participants' teaching efficacy to teach in inclusive classrooms. In this study, participants were asked to complete this part of the questionnaire by rating each item on a six point Likert scale of (1) *Strongly Disagree*, (2) *Disagree*, (3) *Disagree Somewhat*, (4) *Agree Somewhat*, (5) *Agree* and (6) *Strongly Agree*. The scale yields a total score, the value of which can range from 18 to 108. A higher score on the scale is an indication of participants having a high sense of teaching efficacy to teach in inclusive classrooms. This scale has been widely used internationally and found to be reliable across different contexts (Sharma & Sokal, 2013). For example, a study on the impact of a teacher education course on pre-service teachers' beliefs about inclusion (Sharma & Sokal, 2013) in Australia and Canada has found the coefficient for Australian teachers to be 0.91 and 0.88 for Canadian teachers, an indication that the scale is reliable. A few studies that had

used the TEIP scale (Malinen, Savolainen & Xu, 2012; Park, Dimitrov, & Gichuru, 2016; Yada & Savolainen, 2017) have also used the scale and have found the scale to be reliable.

The fifth part of the questionnaire is the background information of the participants in relation to their demographic information. Participants were asked to report on their gender, age, level of highest qualification attained and exposure to education of students with a disability.

3.5.4 Content validation

Prior to using the survey questions and the focus group interview questions, a panel of experts from the Solomon Islands were asked to check the contents of the instruments. The panel consisted of academics working in the School of Education ($n=3$), officials from the Ministry of Education ($n=2$) and school teachers and principals with teaching experience in inclusive classrooms in the Solomon Islands. The panel was asked to (1) check the content of the scales, (2) check that directions to complete the questionnaire were clear and (3) decide whether the items in the scales were relevant for the Solomon Islands context. Based on the feedback received from the experts, two items were deleted and a few minor changes were made to some items. The panel further recommended that the scales be explained to participants before the undertaking. In regards to the Focus Group Interview questions, three academics working in the School of Education were asked to check the contents of the interview questions to see if questions are relevant for the Solomon Islands context. The panel gave a clear rating for the interview questions but with two questions that needed amendments.

3.5.5 Data Analysis

The following procedure was used to analyse data for the Study Two participants.

Research Question Two – What attitudes do pre-service teachers in the Solomon Islands have towards inclusion and do their background variables influence their attitudes?

This research question was answered by first calculating mean scores for teachers' attitudes to inclusion and then conducting one way ANOVAs to determine how background variables influence the mean attitudes scores.

Research Question Three – What level of concerns do pre-service teachers in the Solomon Islands have towards inclusion and do their background variables influence their concerns?

In answering this research question, the mean score of the total scale on concerns to inclusion was calculated and then one way ANOVAs were conducted to determine how background variables influence the mean concern scores.

Research Question Four – What level of teaching efficacy do pre-service teachers in the Solomon Islands have towards inclusion and do their background variables influence their level of teaching efficacy?

This research question was answered by computing mean Teaching Efficacy scores of teachers towards inclusion and conducting one way ANOVAs to determine how background variables influence the mean teaching efficacy scores.

Research Question Five – Does participation in a course in special education influence pre-service teachers' attitudes, concerns, teaching efficacy and intentions to teach in Solomon Islands classrooms?

This research question was answered by first calculating the pre and post mean attitudes, concern, teaching efficacy and intention scores. Paired sample t-tests were then used to determine if there were significant changes in the scores before and after completing the course.

Research Question Six – Does professional experience prepare pre-service teachers for their role as inclusive educators in the Solomon Islands?

This research question was answered by analysing the responses through Thematic Analysis approach to determine if professional experience does prepare pre-service teachers for their role to become inclusive teachers.

Research Question Seven – Can pre-service teachers' intention to include students with disabilities be predicted by their attitudes to inclusion, their teaching efficacy and their level of concern to include students with disabilities in regular classrooms?

This research question was answered by using simple regression with intentions scores as dependent variables and attitudes, efficacy and concerns as predictor variables.

3.5.6 Focus Group Discussion

A sample of pre-service teachers also participated in two focus group discussions. The two focus group interviews were conducted after the pre-service teachers had completed the survey questionnaires. Each group comprised of eight participants. Seven focus group interview questions were developed (See Appendix I) to collect data. The questions related to how participants perceived their training about inclusive education and their perception about the support for inclusive education during professional placement in schools. The participants were required to give their consent to participate in the FGD. (See Appendix J). The Thematic Analysis Approach was used to analyse the responses from the participants.

Analysis of transcribed data was given back to the two groups to ensure that the transcriptions captured the meanings of the discussions.

3.6 Conclusion

This chapter provides descriptions of the procedures used to conduct and collect data for this study. A mixed methods approach was used to collect data. The chapter further provides descriptions of how participants were selected and the approaches used to collect and analyse data. The results collected from the data will be presented in the next chapter.

CHAPTER FOUR

This chapter presents the results of this study. The chapter is divided into the following sections:

4.0 Introduction

4.1 Study One – Deans and Principals

4.1.1 Characteristics of study two participants

4.1.2 Perceptions of deans and principals of higher education institutions about pre-service teachers' preparedness for inclusive education in the Pacific

4.1.3 Deans and principal's understanding about inclusive education

4.1.4 Deans and principals' perceptions about pre-service teachers' preparation programs

4.1.5 Challenges faced by HEIs and Colleges about teacher preparation programs

4.2 Study Two – Pre-service Teachers

4.2.1 Characteristics of Study Two participants

4.2.2 Pre-service teachers' attitudes towards inclusive education

4.2.3 Pre-service teachers' concerns about inclusive education

4.2.4 Pre-service teachers' teaching efficacy on implementing inclusive education practices,

4.3 The impact of completing a course on special education on pre-service teachers' attitudes, concerns, teaching efficacy and intentions to teach in the Solomon Islands classrooms

4.4. Interview Results

4.4.1 IE is the inclusion of students with special needs into the regular classrooms

4.4.2 Removing barriers to inclusion

4.4.3 Improving the course on Special Education and Inclusive Practices

4.5. The impact of professional experience on pre-service teachers in preparation for inclusive education

4.5.1 Limited support to demonstrate inclusion

4.5.2 Inadequate support about planning and designing inclusive lessons

4.5.3 Inadequate support about how to address disruptive behaviours

4.5.4 Limited support through provision of teaching resources in class

4.6. Predicting pre-service teachers' intentions to include students with disabilities into regular classrooms.

4.6.1 Predicting pre-service teachers' intentions to inclusion

4.7. Conclusion

Introduction

This study was undertaken to examine the extent to which current teacher education programs are preparing pre-service teachers for inclusive education in the Pacific region and, more specifically, in the Solomon Islands. This section has been divided into two sections. The initial section provided the analysis of the qualitative data, relating to the Heads of HEIs and the open-ended questionnaire. The second section presents with the results of the quantitative study, involving surveys administered to pre-service teachers and the results of the qualitative study through the focus group discussion held with pre-service teachers after the survey.

Study Group One Participants comprised of Deans and Principals of HEIs and Colleges who are engaged in teacher education programs for pre-service teachers in the Pacific region. The data gathered from the deans and principals of HEIs were based on a questionnaire consisting of background information and understanding about inclusive education. The data collected were analysed using the Thematic Analysis Approach.

The Study Group Two Participants comprised of First Year pre-service teachers enrolled in a Diploma in Teaching program at a Higher Teacher Education Institution in the Solomon Islands. The data gathered from the pre-service teachers were based on a five - part questionnaire that consisted of Attitudes towards Inclusion Scale (AIS), Intention to Teach in Inclusive Classroom Scale, (ITICS) Concerns about Inclusive Education Scale (CIES), Teaching - Efficacy in Implementing Inclusive Practices Scale (TEIPS) and background information. The Statistical Package for Social Science (SPSS) was used to analyse the data. Additional data were gathered through a focus group discussion with pre-service teachers.

The following diagram presents an overview of the main headings of this chapter.

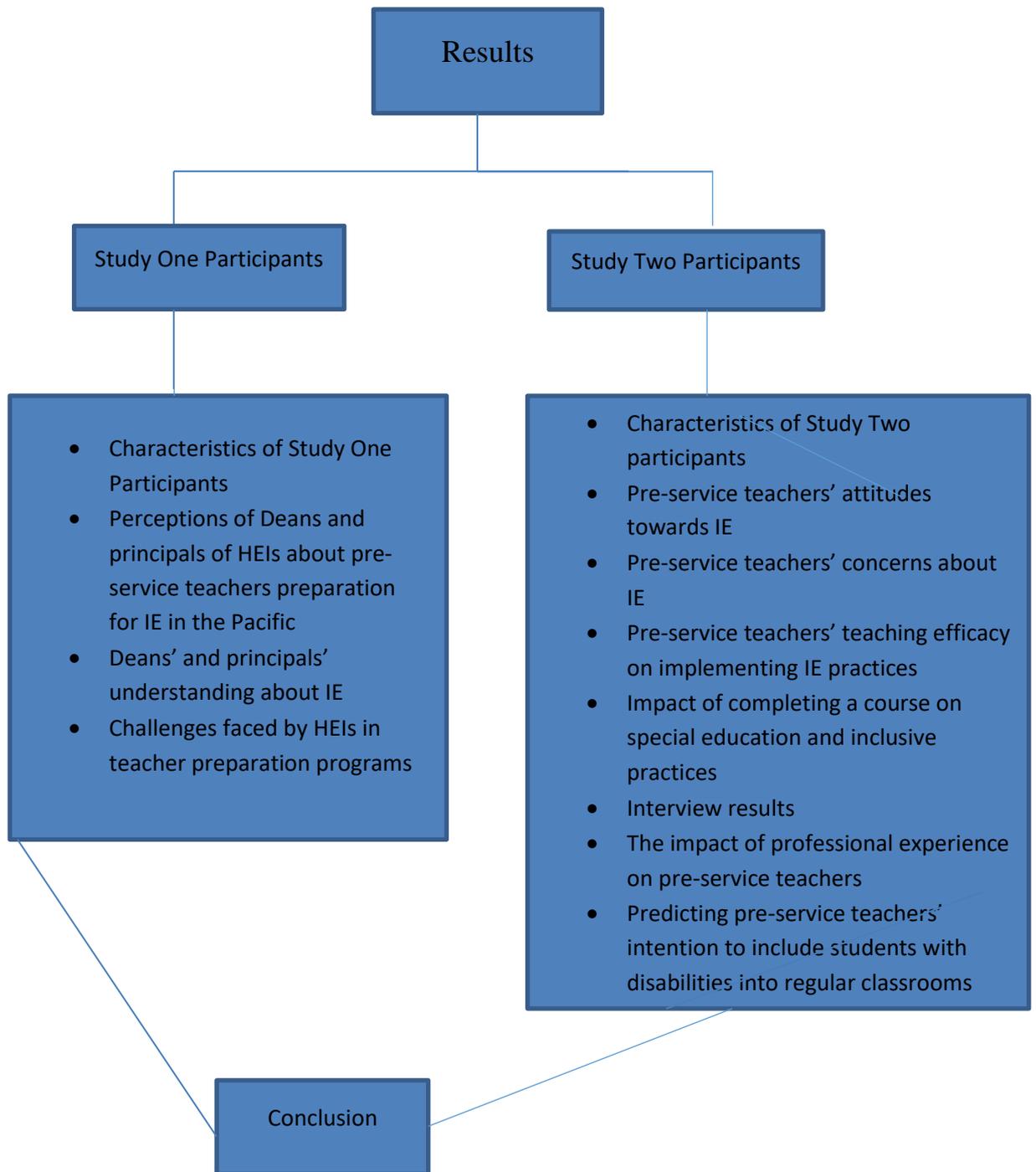


Figure 8: Overview of Chapter Four main headings.

4.1 Study One – Deans and Principals

4.1.1 Characteristics of Group One - Study Participants.

A total of 12 institutions from within the Pacific region were invited to participate in this study through a survey. Nine institutions responded and completed the survey. This section presents the demographic information of the study participants, based on the nature of the research question.

Amongst the total number of respondents, four were males and five were females. A total of seven deans and principals were aged between 41 and 50. Only two were over the age of 50 years. Six respondents had postgraduate qualifications while two had undergraduate qualifications. Seven of them had been deans and principals for less than five years. The remaining two had been in their positions for more than five years. Lastly, the respondents were asked if they had done or completed any training in special education. Six had not received any training. Only three of the respondents indicated having received some training in special education.

4.1.2 Perceptions of deans and principals of higher education institutions about pre-service teachers' preparedness for inclusive education in the Pacific.

This section presents deans' and principals' perceptions about the preparedness of pre-service teachers for inclusive education in the Pacific.

Research Question 1. *What are the perceptions of the Deans and Principals of higher education institutions and colleges in the Pacific about the preparedness of pre-service teachers to teach in inclusive classrooms effectively?*

In order to answer this research question, deans and principals HEIs and colleges in the Pacific were asked to respond to a survey, comprising of 12 open-ended questions. The questions related to deans' and principals' knowledge and understanding about inclusive education and how these leaders perceived the preparedness of pre-service teachers for inclusive education at the completion of the pre-service teacher preparation program. The results of the findings are presented in two subsections:

- Deans' and principals' understanding about inclusive education,
- Deans and principals perceptions about how well prepared pre-service teachers were for implementing inclusive education at the completion of their teacher preparedness program.

4.1.3 Deans' and principals' understanding about inclusive education.

The responses from the deans and principals regarding their understanding about inclusive education indicated that they had reasonable knowledge and understanding about inclusive education. The responses were analysed using the Thematic Analysis Approach, where responses are analysed and categorised under themes that emerged from the responses (Creswell, 2008). Through the analysis, some vocabulary and grammatical adjustments were made to ensure that the content can be comprehended for the analysis. Additionally, to maintain confidentiality and anonymity of the participants, codes were used when presenting the findings. During the analysis, responses were categorised under three key themes. These themes relate to deans' and principals' understanding about inclusive education. The three themes were:

1. Acceptance and inclusion of students with disabilities
2. Inclusive Education is perceived as high quality education

3. Education is a human right

4.1.3.1 Acceptance and inclusion of students with disabilities.

Most responses from deans and principals regarding their understanding about inclusive education seemed to revolve around the notion that inclusive education is about the acceptance and inclusion of students with disabilities and special needs into the regular classrooms. As evident from the responses, one participant (CT/4) described inclusive education in the following way:

“inclusive education is the enrolment of students with special needs into regular classroom”.

Another participant described inclusive education as *“an education that encompasses students with disabilities participating in all aspects of learning and social activities at schools alongside their peers”* (CT/2).

Inclusive education was also viewed as *“the acceptance and inclusion of children with disabilities and special needs into regular schools and classrooms”* (CT/1). Another participant talked about inclusive education as *“an education that provides equal opportunity for all students to learn together regardless of their gender, ethnicity, socio-economic status, ability or disability”* (CT/5).

However, two participants described inclusive education in a varied manner. For example, one participant linked inclusive education with policy development and proposed that it is important to have an inclusive education in place

“that will give direction to education providers to make / take necessary steps to remove all forms of barriers that prevents minority groups from accessing education services” (CT/9).

Another participant discussed inclusive education as: “ *having more inclusive classrooms because students have their own abilities in mainstream classrooms*” (CT/ 3). These responses demonstrate that these participants are likely not fully aware of the full scope of inclusive education, indicating that there is some room for additional knowledge.

4.1.3.2 Inclusive Education is perceived as high quality education.

Most respondents viewed and described IE as a ‘high quality education’. The deans and principals in this study viewed IE as ‘high quality education’ because of the equal opportunity that IE provided for all students to learn together in regular classrooms. A participant described it in the following way:

“inclusive education is a form of high quality education that promote learning for all students in regular classrooms and schools” (CT/8).

Another participant discussed inclusive education as “*high quality education because barriers to inclusion are identified and addressed in order to make learning meaningful for all students in the regular classrooms*” (CT/4).

Another participant (CT/6) described inclusive education as high quality education because “*all students regardless of their differences are given the opportunity to learn together under trained teachers, who valued all students and are able to use materials and teaching strategies that would enhance learning amongst all students.*”

4.1.3.3 Education is a Human Right

Inclusive education was also perceived from the social equity perspectives whereby Education is deemed as a fundamental human right. Participants expressed the view that all humans have a right to education including those with disabilities and special needs. The following responses are examples of comments made by the participants:

“inclusive education relates to the Right to Education of all children including those with special needs” (CT/6).

Another participant described inclusive education in the following way:

“all individuals have the right to basic education, regardless to ones’ ability or disability. Therefore, education needs to be made accessible to all”. (CT/5).

Additionally, participant (CT/4) expressed the thought that: *“accessing education is everyone’s right, and it must be made available to everybody.”*

Evidently, the responses from most of the deans and principals regarding their knowledge and understanding about inclusive education are reasonable. The responses reflected their level of knowledge and understanding about the inclusion concept.

4.1.4 Deans’ and principals’ perceptions’ about pre-service teacher preparedness programs

In order to gain an understanding about the perceptions of deans and principals regarding the preparedness of pre-service teachers for inclusive education after completing the course, this study examined the IE curriculum used by the HEIs and Colleges across the Pacific. The results were as follows:

Participants from all nine institutions indicated that institutions have covered some aspects of inclusive education in the initial teacher preparation programs for pre-service teachers. Three participants responded that IE was taught as a stand - alone unit while six other participants responded that contents of IE were taught and infused in more than one unit. The participants were asked to describe the content of the curriculum about IE and provide a copy of their institutions’ curriculum on IE to the researcher. An analysis of the topics within

the content of the curriculum was made and categorised into three sub-headings that best suit the topics. The sub-headings are:

1. Special Education
2. Teaching and Learning Strategies
3. Inclusive Education

Table 1 shows some of the topics about IE covered by ITE programs.

Table 1: Topics about Inclusive Education

Special Education	Teaching and Learning Strategies	Inclusive Education
History of Special Education	Assessment and Technology	Theories about IE
Disability Discourses	Sign Language	Inclusive Pedagogy
Policies in Special Education	Inclusive Teaching and Learning Strategies	IE and Multi – Class Teaching
Defining Disabilities	Creating Friendly Schools and Classrooms	IE and Classroom Management
Types of Disabilities		Developing an Inclusive Community
Teaching Child with SN		
Teaching Exceptional Child		

An analysis of the contents of the IE courses at each institutions, suggests that the IE curriculum varied across institutions. Examining the contents of the IE curriculum showed that most topics were related to special education, especially the history and discourses about disability and special education. Additionally, contents of IE courses seemed to place more emphasis on knowledge about the philosophy of IE. Further examination showed that

information about acquiring relevant and practical skills to teach in inclusive classrooms were given limited attention in the curriculum. There was also little evidence within the IE curriculum that incorporate elements of the Pacific culture which embraced the view that every individual matters.

Results further showed that the duration of courses on IE varied across institutions. Eight institutions offered the course within a 10-week semester. Only one institution offered the course within a seven-week semester. This may be due to the structure of the programs that varied across institutions in the region.

The participants were further asked to reflect on the impact of the course on the learning of pre-services teachers. This relates to how much knowledge, information and skills about IE were introduced to pre-services teachers and the level of attitudes and confidence of pre-service teachers towards inclusion after completing the course. Participants were asked to use three ratings: a) Nothing at all; b) To some extent; and c) To a larger extent. Table 2 presents the results of the responses.

Table 2: Deans and Principals’ beliefs about aspects of inclusive education received by Pre-service teachers. (n=9)

Contents	To some extent	To a large extent
Knowledge about inclusion	3	5
Information on skills acquired during practicum	6	2
Pre-service teachers’ level of attitudes towards inclusion	6	2
Pre-service teachers’ confidence to teach in inclusive classrooms	7	1

Note: One participant did not respond to this question.

Evident in the results, five participants indicated that pre-service teachers acquired adequate information about IE during their training. On the notion of information about skills and practicum, six participants indicated that these aspects were covered but only “to some extent”. With regard to pre-service teachers’ attitudes to inclusion, six participants indicated that pre-service teachers are willing to include students with special needs in inclusive classrooms but only “to some extent”, while seven participants agreed that pre-service teachers have confidence to teach in inclusive classrooms but only “to some extent”.

Additionally, the participants were asked to identify teaching skills that are important for pre-service teachers to acquire during pre-service teacher education programs. The participants identified the following skills:

- Skills about how to make academic plans
- Skills about planning inclusive lessons
- Skills about using inclusive teaching strategies
- Skills about how to modify curriculum to suit learning needs of students with special needs
- Assessment skills
- Communication skills
- Skills about how to identify students with special needs
- Skills about how to assess and monitor students’ academic progress

4.1.5 Challenges faced by HEIs in teacher preparation programs

While an aim of the study was to gain an understanding about how well pre-service teachers were being prepared for IE, a few challenges about teacher education programs were also mentioned by the participants. Amongst the challenges mentioned, analysis from the

responses indicates that limited teaching materials resources and teacher educators' limited knowledge about IE, were two major challenges faced by institutions in preparing pre-service teachers for IE in this study. For example, as one respondent said:

“preparing pre-service teachers for teaching and to become inclusive teachers is good, but it is a challenge for us as an institution. We need appropriate resources in terms of equipment and teaching materials....our teacher educators’ knowledge about IE is also limited....these areas need to be strengthened in order to support us in our delivery” (TC/8).

A similar concern was expressed by another participant who said: *“our teacher preparation program encountered a lot of challenges and one of them is the lack of teaching resources”* (TC/3).

Another respondent talked about teacher educators' level of knowledge about IE. This is what was said:

“our lecturers lack training and knowledge about special and inclusive education. This affects their delivery of the content to the students” (CT/5).

These are the challenges mentioned by the participants.

In summary, results from Study One participants suggests that deans and principals of higher education institutions across the Pacific have some knowledge and understanding about inclusive education. The IE curriculum and the duration of the courses varied across institutions. Higher Education Institutions also faced challenges relating to pre-service teachers' preparation for IE, an issue that required attention within this study. There was no question about collaboration between institutions, however this aspect has been distinguished as an item for further investigation in the “recommendation” section.

4.1.6 Solomon Islands Study

While these are the responses from deans and principals of HEIs across the Pacific, the study also provided an overview about the perception of the dean in the Solomon Islands in regard to pre-service teachers' preparation for inclusive education.

Characteristics of the study participant in the Solomon Islands

The study participant is a female with postgraduate qualification in the field of Education.

The participant was asked if she had done or completed any training in special education. The respondent replied that she had not received any such training.

Perceptions of the dean of SOEH about pre-service teachers' preparedness for IE in the Solomon Islands.

This section presents the deans perception about the preparedness of pre-service teachers for inclusive education in the Solomon Islands.

Research Question 1. What are the perceptions of deans and principals of higher education and colleges in the Pacific about the preparedness of pre-service teachers to teach in inclusive classrooms effectively?

Linking this research question to the Solomon Islands, the following result was presented to answer the research question:

Dean's understanding about inclusive education

The response from the dean in the Solomon Islands indicated that she had some knowledge and understanding about inclusive education. For example,

“inclusive education is where learning opportunities are made available to the community, based on the variations and differences there may be within it. Everyone's

educational needs is met taking into account everyone in the community gets to have access to education” (Dean SOEH).

The response indicated that she was aware about the importance of ensuring that everyone in the community has access to education regardless of the differences there may be amongst the learners.

Dean’s perceptions about pre-service teachers’ preparation program within the SOEH

The dean was asked to reflect about the program within SOEH in relation to the preparation of pre-service teachers. The study examined the IE education curriculum of the SOEH. The result of this study showed that the SOEH in the Solomon Islands offered the course as a stand - alone unit within its program. The course covered topics such as History and discourses in disabilities, policy and systems in special education, developing an inclusive community, Solomon Islands culture and customs and teaching strategies to help learners with special needs. An analysis of the content of the IE curriculum indicated that most of the topics covered within the program reflect topics related to special education. There was little emphasis on inclusive education except teaching strategies to help learners with special needs in the classrooms. Results further showed that the duration for the course was only seven weeks. This was due to the structure of the program within the school.

The dean was further asked to reflect on the impact of the course on the learning of the pre-service teachers. This relates to how much knowledge, information and skills about IE were introduced to pre-service teachers and the level of attitudes and confidence of pre-service teachers towards inclusion after completing the course. The dean was asked to use three ratings: a) Nothing at all; b) To some extent: and c) To a large extent

Table 3. Solomon Islands – Dean’s belief about aspects of inclusive education received by pre-service teachers

Contents	To some extent	To a large extent
Knowledge about inclusion	x	
Information on skills acquired during practicum	x	
Pre-service teachers level of attitudes towards inclusion	x	
Pre-service teachers’ confidences to teach in inclusive classrooms	x	

Response from the dean indicated that pre-service teachers acquired information about IE during their training but only “to some extent”. In regard to information about skills and practicum, results indicated these aspects were covered but only “to some extent”. With regard to pre-service teachers’ attitudes to inclusion, the dean had a belief that pre-service teachers are willing to include students with special needs in inclusive classrooms but only “to some extent”. Lastly, the dean agreed that pre-service teachers have confidence to teach in inclusive classrooms but only “to some extent”.

The dean was further asked to identify teaching skills that are important for pre-service teachers to acquire during pre-service teacher education program. The following teaching skills were identified:

- Skills to correctly identify a disability,
- Skills on how to communicate with learners with disability,
- Skills on how to plan academic programs for learners with disabilities,
- Skills on how to manage learners with disabilities
- Skills on how to assess and monitor academic performance of learners with disabilities,
- Skills on how to liaise and communicate with parents and guardians,
- Skills on developing mainstream programs for classes.

The dean also reported that as an higher education institution, SOEH had many challenges in the preparation of pre-service teachers for inclusive education. The two common ones for the school are limited teaching resources and teacher educators' limited knowledge about inclusive education. In summary, the result from the Solomon Islands suggests that the dean of SOEH had some knowledge and understanding about inclusive education. The curriculum focused more on special education and the duration of the course is too short. SOEH also faced challenges relating to pre-service teachers' preparation got inclusive education.

4.2 Study Two – Pre-service Teachers

4.2.1 Characteristics of Group Two Study Participants.

A total of 78 pre-service teachers participated in this study. Table 4 provides specific information relating to participants' backgrounds. Some items on the questionnaire did not receive any response. The patterns of the missing responses appeared to be random. All data from 78 participants were considered for analysis. The percentages for the subcategories of the variables were calculated using valid responses only. Thus, the total for each variable may vary slightly.

Table 4: Descriptions of Pre-service Teachers' Demographics.

Demographics	N	%
1. Gender		
Male	41	52.6
Female	37	47.4
2. Age		
< 25	36	46.2
25 – 30	31	39.7
Above 30	11	14.1
3. Highest Education Qualification		
Below Bachelor	75	96.2
Bachelor	3	1.3
4. Which grade do you plan to teach		
Pre-school	3	3.8
Grade 1 – 6 (Primary)	72	92.3
Grade 7 – Grade 12 (Secondary)	2	3.8
5. Do you know any person with disability		
Yes	52	66.7
No	26	33.3
6. Please state the relative exposure you had to the education of students with disability		
None	21	59.0
Some	48	43.6
High	5	6.4
7. Rate the degree of success to date in teaching students with diverse learning needs in regular classrooms		
Low		
Average	46	59.0
High	27	34.6
	5	6.4
8. Rate your level of confidence in teaching students with disabilities in a regular classroom		
Low	19	24.4
Average	46	59.0
High	13	16.7

Gender

Table 4 indicated that of the total number of respondents, 41 (52.6%) were males and 37 (47.4%) were females.

Age

The majority of the pre-service teachers 36 (46.2%) were aged below 25 years, 31 (39.7%) were aged between 25 years to 30 years, and 11 (14.1%) were aged were aged beyond 31 years.

Highest level of Education

A majority of the respondents 75 (96.2%) had qualifications below Bachelor level. Only 3 (1.3%) had Bachelor degree qualifications.

Which grade do you plan to teach?

Respondents indicated that 3 planned to teach in preschool, 72 planned to teach in Grade 1 – Grade 6 (primary). Only 2 planned to teach in Grade 7 – Grade 12 (secondary).

Contact with a person with a disability

A large majority of respondents 52 (66.7%) had some contact and knowledge of a person with disability. Only 26 (33.3%) indicated having no knowledge of any person with a disability.

Estimate the relative amount of exposure you had about the education of students with disability.

Table 4 indicated that 21 (59.0%) of the pre-service teachers had no exposure to the education of students with disability, 48 (43.6%) had some exposure to education of students

with a disability and 5 (6.4%) had a high level of exposure to education of students with disability.

Degree of success in teaching students with diverse learning needs in a regular classroom.

The majority of the respondents, 46 (59.0%) indicated low success in teaching students with diverse learning needs in regular classroom, 27 (34.6%) indicated an average degree of success and 5 (6.4%) indicated a high degree of success.

Confidence in teaching students with disability in a regular classroom.

The respondents were asked to rate their level of confidence in teaching students with a disability in a regular classroom. Nineteen (24.4%) had low confidence, 46 (59.0%) had average confidence and 13 (16.7%) had high confidence in teaching students with a disability in a regular classroom.

4.2.2 Pre-service teachers' attitudes towards inclusive education.

This section reports on the attitudes of pre-service teachers towards inclusive education. It is divided into two subsections.

4.2.2.1 Pre-service teachers' attitudes towards inclusive education,

4.2.2.2 The relationship between pre-service teachers' attitudes towards inclusive education and their background variables.

4.2.2.1 Pre-service teachers' attitudes towards inclusive education.

Research Question 1: *What attitudes do pre-service teachers have towards inclusive education?*

In order to answer this question, data from pre and post stages of training for pre-service teachers were used. Pre-service teachers' responses on AIS were examined.

Pre stage data on AIS

Pre - stage data on pre-service teachers' attitudes towards inclusive education.

At the pre-stage of the training, the overall mean score of all respondents on the AIS was 5.15 (SD = .76) (see Table 4). Responses on the AIS range from "Strongly Disagree" (1), "Undecided" (4) to "Strongly Agree" (7). A score close to value 5 on the AIS suggests participants 'Slightly Agreed' with the statements. At the pre stage of the training, pre-service teachers in this study had reasonably positive attitudes towards IE. Table 5 indicates pre-service teachers' responses on the AIS.

Table 5. Pre stage and Post stage data, Mean and Standard Deviation and valid numbers of Pre-service Teachers' Responses on each item of the AIS. ($N=78$).

Items	Pre stage <i>Mean (SD)</i>	Post stage <i>Mean (SD)</i>
1. Happy to include students who need daily assistance	5.41 (1.15)	6.35(1.04)
2. All students can learn if teachers can adapt the curriculum	5.33 (1.42)	6.42 (.99)
3. Include students with range of abilities makes a good teacher	5.23 (1.40)	6.36 (.99)
4. Have the opportunity to teach lower academic students	5.18 (1.46)	6.19 (.97)
5. Inclusion benefits all students academically	5.17 (1.54)	5.95(1.32)
6. Feeling excited to teach students with range of abilities	5.15 (1.41)	6.14(1.08)
7. Inclusion benefits all students socially	5.12 (1.50)	5.86(1.13)
8. Belief that all students be taught in regular classrooms	4.65 (1.88)	4.65 (1.88)
Total	5.15 (.76)	6.19 (.72)

(Response on a 7 – point scale = Strongly Disagree (1), Undecided (4), Strongly Agree (7))

An examination of the mean responses on individual items showed that pre-service teachers were mostly positive to the inclusion of students who need assistance in daily activities (Mean = 5.41). Item 1 also had the smallest standard deviation (SD = 1.15), an indication that the pre-service teachers generally agreed on this point. In contrast, they were least favourable to the belief that all students can be taught in the regular classrooms (Item 8, Mean = 4.65, SD=1.88).

Post stage data on AIS.

At the post stage of the training, the overall mean score of all respondents on AIS improved to 6.19 (SD = .73) (See Table 5). A score close to the value 6 on the AIS refers to participants as ‘Moderately Agreed’ with the statements on AIS.

The pre-service teachers held most positive attitudes towards the belief that students can learn if teachers adapt the curriculum (Item 2, Mean = 6.42, SD=.99). Their attitudes towards other items had also improved respectively. However, there was no improvement on their attitudes towards the belief that all students can be taught in the regular classroom (Item 8, Mean = 4.65, SD=1.88).

4.2.2.2 The Relationship between pre - service teachers’ attitudes towards inclusive education and their background variables.

Research question 2.1: *Is there a significant relationship between pre-service teachers’ attitudes towards inclusive education and the following demographic characteristics,*

1. Gender
2. Age
3. Highest level of qualification
4. Contact with a person with a disability.

Data from pre and post stage were used to answer this question using a One – way ANOVA. Table 6 and Table 7 present the pre stage and post stage responses of pre-service teachers’ demographic characteristics to determine if demographic variables influence their attitudes towards inclusive education

Pre Stage data.

In order to answer the research question, One-way ANOVA analysis was applied to determine if significant differences in the attitudes scores existed on the demographic characteristics (Gender, Age, Level of Qualification and Contact with a person with a disability). Results showed that none of the demographic characteristics were found to have any significant relationship with teachers' attitudes towards inclusive education.

Table 6. Pre stage pre-service teachers' attitudes towards inclusive education in relation to their demographic characteristics.

Source	Mean (SD)	<i>F</i>	<i>P</i>
Gender			
Male	5.27 (.70)	2.106	.151
Female	5.02 (.83)		
Age			
<25	5.26 (.65)	.755	.474
25 - 30	5.03 (.93)		
Above 30	5.14 (.58)		
Highest level of qualification			
Below Bachelor	5.12 (.77)	2.807	.098
Bachelor	5.87 (.45)		
Contact with a person with disability			
Yes	5.17 (.77)	.350	.556
No	5.11 (.70)		

Post stage data

A similar method was employed to analyse post stage data. The relationship between all demographic characteristics within the “attitudes towards inclusion” was found to be statistically non – significant except for the highest level of qualification. Results showed that participants with “Below Bachelor” qualifications demonstrated high attitude scores (M=6.22, SD=.83), compared to participants who had “Bachelor” (M=5.37, SD=1.40) qualifications.

Table 7. Post stage pre-service teachers’ attitudes towards inclusive education in relation to their demographic characteristics.

Source	Mean (SD)	<i>F</i>	<i>P</i>
Gender			
Male	6.18 (.82)	.010	.922
Female	6.20 (.62)		
Age			
<25	6.16 (.86)	.869	.423
25 - 30	6.30 (.60)		
Above 30	5.98 (.57)		
Highest level of qualification			
Below Bachelor	6.22 (.83)	4.084	.047*
Bachelor	5.37 (1.40)		
Contact with a person with disability			
Yes	6.09 (.83)	1.394	.242
No	6.38 (.41)		

*p<0.05

4.2.3. Pre-service teachers' concerns about inclusive education.

This section presents the concerns rated highly by pre-service teachers. The section is divided into two subsections:

4.2.3.1 Pre-service teachers' concerns about inclusive education,

4.2.3.2 The relationship between pre-service teachers' concerns about inclusive education and their background variables.

4.2.3.1 Pre-service teachers concerns about inclusive education

Research Question 3: *What concerns do pre-service teachers have about inclusive education?*

In order to answer this question, data from pre and post stages of the training were used. Pre-service teachers' responses on the Concern to Inclusive Education Scale (CIES) were examined. The overall mean score of all respondents on all the statements of the CIES was 3.00 (SD = .35). Responses on the CIES can range from 'Extremely Concerned' (4), 'Very Concerned' (3), 'A Little Concerned' (2) to 'Not at All Concerned' (1). A score close to the value 3 on the CIES suggests to participants being "very concerned" about implementing inclusive education.

Pre stage data in CIES

At the pre-stage of data, pre-service teachers had high levels of concern towards inclusive education. Table 8 presents the results of the mean and standard deviation of pre-service teachers' concerns about inclusive education. Analysis of items in the CIES indicates that pre-service teachers were "very concerned" about 5 items. These were concerns about inadequate para-professional staff available to support students with disabilities (M=3.28, SD = .77), lack of adequate resources (M = 3.18, SD = .73), lack of trained IE teachers (M = 3.18, SD = .73), difficulty in giving equal attention to all students (M = 3.12, SD = .73), and

additional paper work ($M=3.10$, $SD = .80$). They were least concerned about Item 20, (the overall academic standard of the school will suffer, $M=2.88$, $SD=.88$), and Item 21, (lack of knowledge and skills required to teach disabled students $M=2.82$, $SD=.88$).

Post stage data

The overall total mean concern scores of all respondents on the statements in the CIES was 2.39 ($SD = .42$). A score close to the value 2 on the CIES refers to participants being “a little concerned” about implementing inclusive education. At the post stage of training, pre-service teachers’ overall concerns towards inclusive education had reduced, which indicates that there was a little concern on statements relating to inclusive education. Refer to Table 8 which presents the results of the mean and standard deviation of pre-service teachers’ responses on each item of the CIES.

Analysis of items showed that participants’ concerns declined but still remained quite high. Participants still had high concerns about Item 6, (inadequate administration support to implement inclusion $M=2.68$, $SD=.75$), Item 3, (inadequate special educational instructional materials and aids $M=2.63$, $SD=.90$) and Item 5, (I will have additional paper work to do $M=2.59$, $SD=.90$). However, the most significant decline in concern score was noted on Item 7 academic achievement of non-disabled students will be affected ($M = 2.08$, $SD = .94$).

Table 8. Pre stage and Post stage data, Mean Standard Deviation and valid numbers of Pre-service Teachers' Responses on each items of the CIES. ($N=78$).

Items	Pre stage Mean (SD)	Post stage Mean (SD)
1. Lack of para-professional staff to support learning of students	3.28 (.77)	2.56 (.85)
2. Lack of resources and special teachers to support inclusion	3.18 (.73)	2.46 (.73)
3. Inadequate special educational instructional materials and aids	3.18 (.73)	2.63 (.90)
4. Difficult in giving equal attention to all students in inclusive class	3.12 (.73)	2.46 (.96)
5. I will have additional paper work to do	3.10 (.80)	2.59 (.90)
6. Inadequate administration support to implement inclusion	3.06 (.74)	2.68 (.75)
7. Academic achievement of non – disabled students will be affected	3.04 (.76)	2.08 (.94)
8. Unable to cope with disabled students who lacked self-care skills	3.03 (.75)	2.55 (.94)
9. My performance as a teacher will decline	3.01 (.73)	2.19 (1.01)
10. Lack of appropriate infrastructure to accommodate disabled students	2.99 (.86)	2.36 (.84)
11. Difficult to maintain discipline in class	2.96 (.86)	2.35 (.90)
12. Inadequate incentives (e.g., remuneration to teach disabled students	2.95 (.84)	2.14 (.88)
13. No time to plan educational programs for students with disabilities	2.94 (.94)	2.40 (.83)
14. Inclusion of disabled students will lead to higher stress on me	2.94 (.84)	2.29 (.76)
15. Workload will increase	2.92 (.94)	2.24 (.84)
16. Other school staff will be stressed	2.92 (.83)	2.17 (.80)
17. Lack of funds to implement inclusion successfully	2.91 (.93)	2.50 (.95)
18. Non acceptance of students with disabilities by others	2.90 (.90)	2.38 (.90)
19. Negative attitudes of parents of children without disabilities	2.90 (.86)	2.50 (.92)
20. The overall academic standard of school will suffer	2.88 (.88)	2.23 (.88)
21. Lack of knowledge and skills required to teach disabled students	2.82 (.88)	2.36 (.90)
Total	3.00 (.35)	2.39 (.42)

Response on a 4 – point scale = Extremely concerned (4), Very concerned (3), A little concerned (2), Not at all concerned (1)

4.2.3.2 The relationship between pre - service teachers' concerns towards inclusive education and their background variables.

Research question 3.1: *Is there a significant relationship between pre-service teachers' concerns towards inclusive education and the following demographic characteristics?*

1. Gender
2. Age
3. Highest level of qualification
4. Contact with a person with disability

Pre - stage data.

In order to answer this research question, one-way ANOVA was computed, to investigate whether demographic characteristics had any significant relationship with teachers' concerns about inclusion. Overall pre-stage data showed that none of the demographic variables was statistically significant except having contact with a person with disability. Table 9 presents pre-service teachers' demographic characteristics at the pre-stage of the study. This is to determine if demographic variables has any relationship with pre-service teachers' concerns about inclusive education.

Table 9. Pre stage pre-service teachers' concerns about inclusive education in relation to their demographic characteristics.

Source	Mean (SD)	F	P
Gender			
Male	3.02 (.37)	.298	.587
Female	2.97 (.34)		
Age			
<25	2.97 (.38)	.697	.501
25 - 30	3.05 (.34)		
Above 30	2.93 (.29)		
Highest level of qualification			
Below Bachelor	3.00 (.35)	.636	.428
Bachelor	2.84 (.43)		
Contact with a person with disability			
Yes	3.08 (.36)	6.097	.016*
No	2.84 (.27)		

*p<0.05

Participants who responded with “Yes”, demonstrated higher scores (M=3.08, SD=.36) compared to participants who indicated having “No” contact (M=2.84, SD=.27). This is an indication that participants who had contact with a person with disability are quite concerned about the inclusion of persons with disability in inclusive classrooms.

Post stage data

A similar method was employed to determine if demographic characteristics had significant relationships with pre-service teachers' concerns and inclusion. Overall post-stage data showed statistically non-significant results for all demographic variables. See Table 10.

Table 10. Post stage pre-service teachers' concerns about inclusive education in relation to their demographic characteristics.

Source	Mean (SD)	<i>F</i>	<i>P</i>
Gender			
Male	6.18 (.82)	.010	.922
Female	6.20 (.62)		
Age			
<25	2.32 (.44)	1.248	.293
25 - 30	2.47 (.40)		
Above 30	2.33 (.35)		
Highest level of qualification			
Below Bachelor	2.37 (.41)	2.108	.151
Bachelor	2.73 (.51)		
Contact with a person with disability			
Yes	2.38 (.43)	.332	.567
No	2.32 (.42)		

4.2.4. Pre-service Teachers' Teaching Efficacy on implementing Inclusive Education practices.

This section aims to explore pre-service teachers' levels of teaching efficacy towards implementing inclusive education practices in the classroom. Pre-service teachers were asked to respond to a survey that captured their teaching efficacy towards inclusive practices and the relationship between their teaching efficacy about inclusion and their demographic characteristics. The section is divided into two subsections:

4.2.4.1 Pre-service teachers' teaching efficacy about implementing inclusive education practices,

4.2.4.2 The relationship between pre-service teachers' teaching efficacy about implementing inclusive education practices and their background variables

4.2.4.1 Pre-service teachers' teaching efficacy about implementing inclusive education practices.

Research Question 4: *What level of self-teaching efficacy do pre-service teachers have about inclusive education?*

In order to answer this question, data from pre and post stage of the training were used. Pre-service teachers' responses on the TEIPS were examined.

Pre stage data

The overall mean score of teaching efficacy of all respondents on the statements of the TEIPS was 4.60 (SD = .49). A score close to the value of 4 on the TEIPS scale refers to participants being 'Somewhat Agree' with the statement that indicated their perceived teaching efficacy towards the implementation of inclusive education practices in the

classrooms. Results from this study showed that pre-service teachers' level of perceived teaching efficacy towards implementing inclusive practices was slightly above the mid-point.

Analysis of scores of pre-service teachers' responses on statements on the TEIPS identified 3 items that were highly rated by participants. They were Item 1 (efficacy in making expectations clear about students' behaviour, $M=4.85$, $SD=.85$), followed by Item 2 (efficacy in calming a student with disruptive behaviour, $M=4.79$, $SD=1.05$), and Item 3 (efficacy in preventing disruptive behaviours in the classroom, $M=4.79$, $SD=1.11$). Participants had low ratings on Item 17, (I can use variety of assessment strategies, $M=4.31$, $SD=1.11$) and Item 18, (I can inform others about laws and policies towards inclusive education, $M=4.23$, $SD=1.03$). Table 11 presents pre-service teachers' responses to TEIPS at the pre-stage of the study.

Table 11. Pre stage and Post stage data, Mean and Standard Deviation and valid numbers of Pre-service Teachers' Responses on each items of the TEIPS. ($N=78$).

Items	Pre stage Mean (SD)	Post stage Mean (SD)
1. I can make students' expected behaviour clear	4.85 (.85)	5.28 (.64)
2. I can calm a student who is disruptive or noisy	4.79 (1.05)	5.36 (.77)
3. I can prevent disruptive behaviours in the class	4.79 (1.11)	5.33 (.70)
4. I am confident to get students work in group	4.77 (1.07)	5.46 (.70)
5. I can improve the learning of a failing student	4.72 (.92)	5.36 (.62)
6. I can work with other professionals to teach students	4.69 (1.04)	5.35 (.80)
7. I can assist families in helping their children learn	4.63 (.97)	5.46 (.57)
8. I can get parents involved in school activities	4.63 (1.13)	5.49 (.60)
9. I can control disruptive behaviour in the classroom	4.60 (1.07)	5.18 (.75)
10. I can get students to follow classroom rules	4.60 (.96)	5.47 (.56)
11. I can work with other professionals on students' IEP	4.59 (1.00)	5.19 (.70)
12. I can deal with physically aggressive students	4.54 (1.11)	5.17 (.80)
13. I can design tasks that meets students' learning needs	4.47 (1.12)	5.06 (.89)
14. I can provide appropriate challenges for students	4.47 (1.38)	5.04 (.81)
15. I can use alternative explanations in my lessons	4.46 (1.18)	5.29 (.84)
16. I can gauge students' comprehension in my teaching	4.40 (1.12)	4.96 (.86)
17. I can use variety of assessment strategies	4.31 (1.11)	5.22 (.53)
18. I can inform others about laws and policies towards IE	4.23 (1.03)	5.36 (.64)
Total	4.60 (.49)	5.27 (.41)

Post stage data

At the post stage of the training, the overall mean teaching efficacy of all respondents on the statements of TEIP was 5.27 (SD=.41). A score close to the value of 5 on the TEIP scale refers to participants being “Agreed” with the statements that indicated their perceived self-teaching efficacy to implement inclusive practices in the classrooms. Post stage results showed that pre-service teachers had a relatively high level of perceived self-teaching efficacy towards inclusive education. An examination of post stage results showed that participants had a high level of teaching efficacy on Item 8, (I can get parents involved in school activities, M=5.49, SD=.60), and Item10, (I can get students to follow classroom rules, M=5.47, SD=.56). In contrast, participants had a low level of teaching efficacy on least Item14, (I can provide appropriate challenges for students, M=5.04, SD=.81). Table 11 presents pre-service teachers’ responses at the post stage of the study.

4.2.4.2 The Relationship between Pre – service Teachers’ Self - Teaching Efficacy towards Implementing inclusive education practices and their background variables.

Research question 4.1: Is there a significant relationship between pre-service teachers’ self – teaching efficacy towards inclusive education practices and their demographic characteristics?

1. Gender
2. Age
3. Highest qualification
4. Contact with a person with disability

Pre stage data

In answering this question, a one-way ANOVA was computed to investigate whether demographic characteristics had any significant relationship with teachers' self-teaching efficacy towards inclusive education practices. Overall pre-stage data yielded non-significant results. Table 12 presents pre-service teachers demographic characteristics at the pre-stage of the study. This is to determine if the demographic characteristics of the pre-service teachers has any impact on their self-teaching efficacy to inclusive education.

Table 12. Pre stage pre-service teachers' self-teaching efficacy about inclusive education in relation to their demographic characteristics.

Source	Mean (SD)	<i>F</i>	<i>P</i>
Gender			
Male	4.57 (.54)	.247	.621
Female	4.63 (.42)		
Age			
<25	4.51 (.54)	1.145	.324
25 - 30	4.68 (.41)		
Above 30	4.66 (.48)		
Highest level of qualification			
Below Bachelor	4.61 (.47)	1.905	.172
Bachelor	4.22 (.67)		
Contact with a person with disability			
Yes	4.57 (.51)	.379	.540
No	4.66 (.43)		

Post stage data

A similar method was employed to analyse the post stage data. Analysis of post stage data undertaken through one way ANOVA found non-significant results. Table 13 presents pre-service teachers' demographic characteristics at the post stage of the study.

Table 13. Post stage pre-service teachers' self-teaching efficacy about inclusive education in relation to their demographic characteristics.

Source	Mean (SD)	<i>F</i>	<i>P</i>
Gender			
Male	5.28 (.44)	.005	.942
Female	5.27 (.38)		
Age			
<25	5.21 (.38)	1.321	.273
25 - 30	5.30 (.42)		
Above 30	5.43 (.44)		
Highest level of qualification			
Below Bachelor	5.29 (.41)	3.130	.081
Bachelor	4.87 (.28)		
Contact with a person with disability			
Yes	5.32 (.38)	2.934	.091
No	5.19 (.46)		

4.3 Impact of completing a course on Special Education and Inclusive Practices.

This section presents the results about the impact of completing a course on special education and inclusive practices.

Research question 5. Does participation in a course on special education and inclusive practices influence pre-service teachers' attitudes, concerns, teaching efficacy and intentions to teach in Solomon Islands classrooms?

In order to answer this question, pre and post stage data gathered prior to doing the course and after completing the course were used. Paired sample t-tests were used to compute pre and post mean attitudes, intentions, concerns, and teaching efficacy of pre-service teachers. Apart from results derived from paired sample t-tests, a focused group interview was also employed with a small sample of two groups of pre-service students. This was done to ensure that pre-service teachers' perceptions about the impact of completing a course on special education and inclusive practices were adequately captured.

4.3.1 Results of paired sample t-tests

When comparing the mean scores of the 78 pre-service teachers who had completed the surveys at both points (before and after the intervention), observing the results indicated that there was an increase in the mean scores on attitudes, intentions and self-efficacy, however, there was a decrease in the mean score on concerns. (See Table 14). The overall data showed a significant outcome of the results on pre-service teachers' attitudes ($M= 6.19$, $SD=.72$), intentions ($M=6.20$, $SD=.65$), concerns ($M=2.39$, $SD=.42$) and self-teaching efficacy ($M=5.27$, $SD= .41$) towards inclusive education after the training. This was an indication that completing a course on special and inclusive education had a positive impact on pre-service teachers' attitudes, intentions, concerns and teaching efficacy towards inclusive education.

Table 14. Comparison of Pre-stage and Post stage Mean and Standard Deviation of pre-service teachers' attitudes, intentions, concerns and teaching efficacy towards inclusive education.

Source	Pre stage	Post stage	<i>t</i>	<i>p</i>
	Mean (SD)	Mean (SD)		
Attitudes	5.15 (.76)	6.19 (.72)	-8.297	.000***
Intentions	5.04 (.79)	6.20 (.65)	-10.532	.000***
Teaching Efficacy	4.60 (.49)	5.27 (.41)	-11.282	.000***
Concerns	3.00 (.35)	2.39 (.42)	11.690	.000***

*** $p < 0.000$

4.4 Interview Results

The results of this research question were corroborated by the data from a focus group discussion. A small sample of pre-service teachers ($n=16$) were interviewed in two focus group discussions in regard to their perceptions about completing a course on special education and inclusive practices. The interviews were done in Solomon Islands pidgin language. When translating into English, this study tried to keep the text as close to the original as possible. Some grammatical and vocabulary adjustments had to be made to ensure that the content was comprehensible after the translation. Code names were used to maintain anonymity and confidentiality when presenting the findings.

It was found that completing a course on special and inclusive education can have a positive or negative impact on pre-service teachers' confidences to include students with special needs in regular classrooms. That impact can be reflected through the knowledge, skills and understanding about inclusive education that pre-service teachers had gained during the preparation program. An analysis of responses from the participants revealed two strong outcomes that reflected pre-service teachers' understanding about inclusive education.

1. IE is the inclusion of students with special needs into regular classrooms.
2. IE is about removing barriers to inclusion.

4.4.1 IE is the inclusion of students with special needs into regular classrooms.

Most participants in this study had just completed a course on special education and inclusive practices. According to the responses, pre-service teachers' understanding about inclusive education centred on the notion that inclusion involved all students including those with special needs, learning together in the regular classrooms. One participant responded in the following way:

“inclusive education is about involving and including those with special needs into regular classroom. Learning about inclusive education has enabled me to understand the inclusion concept that as teachers to be, we need to change our attitude to accept inclusive education in our classrooms. Therefore, completing a course has helped me a lot” (G1/P3), while another participant described inclusive education as

“including students with special needs into the regular classroom and making them learn with other able students because every child needs to be educated” (G2/P1).

Another participant (G2/4) saw inclusive education as *“all students regardless of their gender, abilities or differences, learning together in a classroom. In our culture, students*

with special needs do not go to schools and teachers will not accept them in the classrooms. Doing this course helped me to see things differently, that all students regardless of their differences, need education and this can be done through inclusive education.”

Another participant (G2/8) said that *“all students learning together in a classroom regardless of their abilities or disabilities is inclusion. That is why we teachers need to learn about this concept and how to apply it in our classrooms when we go out to teach.”*(G2/8)

4.4.2 Removing barriers to inclusion

The participants viewed inclusive education as an avenue where all students learn together. The participants felt that this avenue of education should be free from barriers that may act as impediments to the process of learning for all students in inclusive classrooms. Therefore, any barriers to inclusive education need to be identified and addressed. Such a response was reflected from participant G2/P4 who said:

“inclusive education can be a challenge because barriers are likely to happen that will stop students from learning together”. Another participant said: *“inclusive education is good for all students. If there are barriers, it is good to address these barriers so that students’ learning is not affected”* (G2/P5).

The barriers to inclusive education was best summed up by participant G2/P6 who said: *“we all need to work together to remove barriers to inclusion in schools and classrooms.”* The mention of barriers had raised another question for participants, asking them to list some of the barriers that they were referring to in the conversation. An analysis of the responses identified the following aspects that can act as barriers to inclusion in Solomon Islands’ classrooms: teachers’ negative attitudes, teachers’ lack of knowledge and

understanding about inclusive education, lack of resources to help teachers in their teachings, negative attitudes from parents and communities “*the barrier I am referring to is teachers’ negative attitudes and lack of knowledge and understanding about inclusive education*” (G2/P6). Another participant said that “*in our Solomon Islands’ classrooms, we lack resources to help us with our teachings in the classrooms. Also, we need to address negative attitudes from parents of students with disabilities because these parents are hesitant to send their children to school*”(G2/P5). Another participant discussed the view that “*the physical environment of most of our schools can act as barriers to inclusive education. The playgrounds are rigid and rough, with classrooms lacking better pavements for students with disabilities*”G2/P4).

Gaining knowledge and understanding about inclusive education is important. The pre-service teachers expressed their thoughts that completing a course about inclusive education had prepared them for inclusive education. The course had given them adequate insights into what inclusive education is about. For example, participant G1/P5 said: “*the course had helped me to learn about the importance of inclusive education and some of the teaching strategies that I can use to include a child with special needs in my class.*” Another participant expressed his thought in the following way: “*through the course I was able to learn about various types of disabilities and the possible teaching strategies that I can use to include them in my classroom*” (G1/P6). One participant said that completing the course “*had given me some ideas now on what inclusion is about and my role as a teacher in the classroom*” (G1/7). While the course had helped pre-service teachers in gaining knowledge and skills about inclusion, others expressed a view that learning about inclusive education had challenged their views. For example, participant (G1/4) described such challenge in the following way: “*the course helped me. It challenged my perspectives about inclusive education. The course has made me develop a positive attitude towards the inclusion of*

children with special needs into the regular classrooms. Prior to doing the course, I always had the thought that students with special needs are not supposed to go to school. If they do, I will not teach them.” (G1/4).

Another participant (G2/5) discussed the challenge in the following way: *prior to doing the course, I was so hesitant about inclusion, because I was scared and lacked knowledge about the concept. But now that I have completed the course, some of my fears are gone and my attitude towards inclusion has improved as well. I am confident that I think I can facilitate inclusion in my classroom”.*

The results from the interviews seem to suggest that completing a course on inclusive education had a positive impact on pre-service teachers’ perceptions and knowledge about inclusive education. Pre-service teachers were able to develop a positive attitude towards the inclusion of students with special needs into the regular classrooms. Additionally, they felt more confident about inclusion than prior to doing the course.

4.4.3 Improving the course on Special Education and Inclusive Practices

Pre-service teachers who participated in this study have all completed a course on special education and inclusive practices. An aim of the study was to find out how the course on special education and inclusive practices can be improved. Such information will contribute positively to the reviewing of the course, in terms of the course content and structure. A participant responded as follows: *“doing the course within a seven weeks semester is too short. There is more to learn about disability and inclusion that cannot be fully covered in seven weeks.”* (G1/P6). Another participant expressed his thought as follows: *“the course is quite limited. There was not enough time given to learn about the issues relating to disability and inclusion.”* (G2/P3).

Another participant (G1/P5) felt that there was lack of exposure in the inclusive classrooms and how to interact with students with special needs. The following discussions summed up his thoughts: *“we need to gain an experience on working and teaching students with special needs in our classrooms.....that is not happening in our training program here at the School of Education and Humanities. Being exposed to such situations will help us understand the challenges of inclusion....and dealing with our thoughts about inclusive education’*. (G1/P5).

These responses indicate that improving the course on special and inclusive education is needed. Attention needs to be given to the duration of the course within the teacher education program. Likewise, ensuring that exposing pre-service teachers to working with students with disabilities is also desirable in the course.

4.5 The impact of professional experience on the pre-service teachers.

This section presents the results about the impact of professional experience upon pre-service teachers in preparation for inclusive education.

Research question 6: *Does professional experience prepare pre-service teachers for their role as inclusive teachers?*

In answering this research question, a small sample of pre-service teachers (n=16) were interviewed in two focus groups. Code names were used to maintain anonymity and confidentiality when presenting the findings.

As part of the academic requirements, pre-service teachers are expected to undertake professional experience. During professional experience, pre-service teachers are expected to be placed in schools for four weeks and to participate in all requirements that are prescribed

in the professional experience handbook. The participants in this study were asked to discuss their perceptions about professional experience in relation to inclusive education.

Results from the study showed that the professional experience component of the course had a mixed impact on the experiences of the pre-service teachers. The participants were mostly pre-service teachers with no experience or exposure in an inclusive classroom setting. Results showed that ($n=6$) 37.5% of participants thought that professional experience was interesting because of the different learning environments that different classrooms presented. Some classrooms had a reasonable number of students with a few resources, proper desks and tables for students and teachers while other classrooms did not have such basic facilities. Additionally, the participants felt that professional experience had given them the opportunity to be in a real classroom and to apply the theories of teaching learned during the course, into the classrooms, for example, the experience of lesson planning and teaching lessons and being able to interact with students in the classroom.

Professional experience also provided pre-service teachers with a first-hand account of the many challenges that teachers faced in the classrooms. Pre-service teachers ($n=10$, 62.5%) have expressed the view that professional experience is challenging. The challenges were identified as having students with disruptive behaviours in the classrooms, lack of teaching resources, over crowdedness in the classrooms and poor classroom environment in schools. These challenges were mentioned especially when pre-service teachers had to teach students displaying disruptive behaviours and to teach in classrooms with limited resources. Pre-service teachers reported over crowdedness in the classrooms where the class sizes were just too large for the teacher. Others reported poor classroom environment, especially in rural schools where some classrooms have poor lighting, poor ventilation and lack basic furniture that is supposed to be in the classrooms. A participant described it as follows:

“one of my biggest challenges is to deal with a few students with disruptive behaviours in the classroom. Also I had experienced over crowdedness in the classroom, especially in schools within urban areas.” (G1/3).

Another participant expressed his thought in the following way: *“it’s my first time to be in a classroom. My classroom is in a rural area, which only has a teacher’s table without desks for the students. There was also a lack of resources, for example, the teachers’ guidebook or even teaching aids to use while explaining concepts to students. Even the classroom needs a bit of repair on the roof to stop rain from coming in during rainy days” (G2/5).*

The results further showed that most pre-service teachers were not able to experience inclusion in the classrooms during their practicum. All the schools to which pre-service teachers were sent on placement during professional experiences have yet to adopt the concept of inclusive education. There were no students with disabilities in most of the classrooms. Despite the experience, results from the focus group discussion indicated that a few students with hearing impairment and visual impairment have gained access into regular classrooms.

For example, one participant said, *“in my class, I had a child with visual impairment” (G1/P3)*, while another participant said, *“a child with hearing impairment was in my class. Having such a child in my class gave me the opportunity to demonstrate some of the inclusive teaching skills that I learned during the course. I gathered through my interaction with the student that learning is happening but not to a larger extent”. (G2/P5).*

Getting support from mentor teachers at schools during practicum is also important. During professional experience sessions, pre-service teachers need support from the mentor teachers. This support can enable pre-service teachers to build their confidences in teaching. The finding of this study showed that pre-service teachers received little support from the

associate teachers, especially in the area of including students with special needs in the classroom. Four concerns emerged from the findings, based on thematic analysis.

1. Limited support to demonstrate inclusion.
2. Inadequate support to demonstrate the planning and designing of inclusive lessons
3. Inadequate support about how to deal with disruptive behaviours
4. Limited support through provision of teaching resources

4.5.1 Limited support to demonstrate inclusion

Participants expressed their concerns that there was little support from mentor teachers in terms of how to facilitate inclusion in the classroom. For example, the following participant described it in the following way: *“my mentor teacher did not help me much. I did not get much support on how to include a child with special needs in the classroom”* (G2/P1) while another participant (G1/P3) reported that: *“my mentor teacher did not demonstrate to me how to include a child with a special need in the classroom, although there is a child with visual impairment in the class”*. In addition, another participant (G2/P4) expressed it in the following way: *“there was no demonstration and discussion about how to include students with special needs in the classroom”*.

4.5.2 Inadequate support to demonstrate the planning and designing of inclusive lessons.

Results also revealed that there was little support from mentor teachers about how to plan and design inclusive lessons. This revelation was reflected through the following responses from the participants. A participant expressed it in the following way: *“there was no support from my mentor teacher about how to plan an inclusive lesson, instead I was being introduced to the traditional aspect of lesson planning, which is more general”*

(G1/P8). Another participant said: *“there is a student with visual impairment in my class. My mentor teacher did not provide me with any assistance about how to plan and design an inclusive lesson, through any example”* (G1/P3), while participant (G2/P5) said: *“there was little support to me about how to plan an inclusive lesson. I have a child with hearing impairment in my class.”* (G2/P5). Results further showed that there are classes where there are no students with special needs. However, pre-service teachers asked their mentor teachers for some advice about how to include a child with special needs into the classrooms. The following is a discussion from one of the participant who said that: *“I do not have a child with special needs in my class. But I asked my mentor teacher about how to plan and design an inclusive lesson, just in case I may have one child of such nature in my class in future. The response was negative. The mentor teacher does not have a clue about what “inclusive education” is all about.”* (G1/8).

4.5.3 Inadequate support about how to address disruptive behaviours.

The participants also indicated that one of their major challenges was having to address disruptive behaviours in the classrooms. The participants revealed that there was lack of support from mentor teachers about how to teach students with disruptive behaviours in classrooms. The following examples were responses from a few participants. A participant expressed it in the following way: *“students with disruptive behaviours in class were one of my major challenges. My mentor teacher was not helpful to me about how to address and teach students with such behaviours in the classroom, except only to ignore the students after repeatedly calling their names.”* (G2/P7). Another participant said: *“quite a few students in my class often disturb the whole class with their disruptive behaviours. I asked my associate teacher about how to address students with such disruptive behaviours in class. The response*

was to use the common practice of calling out their names and sending them to the timeout corner.” (G1/P6), while participant (G1/P3) said: “my associate teacher was not very helpful to me about how to manage students with disruptive behaviours in class.

4.5.4 Limited support through provision of teaching resources in class.

The availability of teaching resources in the classroom is important. Teachers need teaching resources to help in teaching of lessons. Such teaching resources can be in the form of teaching aids and books, stationery and other relevant materials that would support teachers in the classroom. Participants indicated limited support through provision of teaching resources as one of the challenges faced in the classroom. For example, one participant said: *“lack of teaching materials. My classroom has limited teaching resources to help me with my teaching. My mentor teacher told me to use whatever resources that are available at hand in the classroom.” (G2/P6), while participant (G1/P4) responded that: “as a new pre-service teacher going out to a school for professional experience, having teaching resources in place for me in schools is important. My current professional experience enabled me to realise that when there are limited teaching resources in the class, my lesson will not be that effective. I expect my mentor teacher to discuss and help me develop some teaching resources that would help me with my teaching’ (G1/P4).*

In summary, analysis from the responses indicated inadequate support from mentor teachers in terms of demonstrating to pre-service students how to include children with special needs in the classrooms, how to plan and design practical inclusive lessons, how to address students with difficult behaviours and the provision of teaching resources to use in the classrooms. Results from this study also revealed that pre-service teachers also need other

support. This includes getting advices about how to manage schools in terms of administration, and how to communicate and reach out to the communities.

4.6 Predicting pre-service teachers' intentions to include students with disabilities into regular classrooms

This section sought to investigate pre-service teachers' intentions to include students with disabilities into regular classrooms.

4.6.1 Predicting pre-service teachers' intentions to inclusion.

Research question 7: *Can pre-service teachers' intention to include students with disabilities into regular classrooms be predicted by their attitudes, concerns and self – teaching efficacy?*

Data from pre and post stages of the training were used to answer this question. Simple regression was used to compute the results, with intention scores as dependent variables and attitudes, concerns and teaching efficacy as predictor variables. The results are as follows:

Pre stage data

Pre stage data analysis of the study indicated that the combined list of predictor variance in participants' mean intention scores accounted for 19 percent (Adjusted $R^2 = .157$, $F = 5.782$, $p < 0.001$). Only two variables emerged as significant predictors of participants intentions to include children with disabilities into their classrooms. These were attitudes to inclusion (Beta = .213, $p < .05$) and mean efficacy scores (Beta = .355, $p < 0.001$).

Post stage data

Post stage data analysis of the data found more significant results in terms of overall variance explained. The same predictor variables (i.e. attitudes, concerns and teaching efficacy) mean scores accounted for approximately 35 percent of the variance (adjusted $R^2 = .323$, $F = 13.247$, $p < 0.000$) in participants' mean intention score. At this stage, two variables emerged as significant predictors of participants' intentions to include children with disabilities into their classrooms. These were attitudes to inclusion (Beta = .336, $p < 0.001$) and mean efficacy score (Beta = .368, $p < 0.001$).

Table 15: Summary of results of simple regression for variables predicting pre-service teachers' intentions to inclusion.

Variables	Pre stage		Post stage	
	Standardised Coefficient	Sig	Standardised Coefficient	Sig
	<i>B</i>		<i>B</i>	
Attitudes to inclusion	-.213	.05	.336	.001**
Concerns to inclusion	.159	.138	-.034	.730
Teaching Efficacy	.355	.001	.368	.001**

** $p < 0.001$

4.7 Conclusion

In summary, this chapter presents the results of this study conducted with deans and principals of higher education institutions and colleges in the Pacific region and pre-service teachers of an institution in the Solomon Islands. This study focused on the perceptions of deans' and principals' understanding about inclusive education and the impact of completing

a course on inclusive education on pre-services teachers. The results from the deans' and principals' understanding about inclusive education indicated that participants have adequate knowledge and understanding about inclusion. Additionally, the deans and principals believed that pre-service teachers have positive attitudes towards inclusive education but not to a 'large extent'. This is an indication that while pre-service teachers have developed positive attitudes towards inclusive education, pre-service teachers still need to develop adequate confidence to include students with disabilities into the regular classrooms.

The second focus of this study was on pre-service teachers' attitudes, concerns and teaching efficacy towards inclusive education and implementing inclusive practices in the classrooms. The study further examined the impact of completing a course about inclusive education by pre-service teachers, professional experience of pre-service teachers during practicums and the intentions of including students with special needs into regular classrooms. As evident from the results of the findings, pre-service teachers' attitudes and teaching efficacy had improved after completing the course while concerns about inclusive education had reduced after completing the course.

Participating in professional experience also gave pre-service teachers an opportunity to experience teaching in the classroom. However, results from this study showed that there was not much experience gained in an inclusive setting as most classrooms in the Solomon Islands are yet to accept inclusive practices. It is clear from the responses that inclusive education is still a challenge in the Pacific region and within the Solomon Islands. On that note, the provision of adequate training for pre-service teachers about inclusive education appears desirable. Discussion on how these issues can be addressed, shall be the focus of the next chapter.

CHAPTER FIVE

This chapter discusses the results of the study. The chapter is divided into the following sections:

5.0 Introduction

5.1 Deans and principals

5.1.1 What are the perceptions of the deans and principals of HEIs and colleges in the Pacific about the preparedness of pre-service teachers to teach in inclusive classrooms?

5.1.2 Understanding about inclusive education

5.1.3 Inclusive education and Social Justice

5.1.4 Deans and Principals' perceptions on how well prepared pre-service teachers are For IE in the Pacific region

5.1.5 Challenges to Inclusive Education in the Pacific

5.2 Pre-service teachers' readiness to teach in the Solomon Islands

5.2.1 Teacher Education

5.2.1.1 Teacher Education in the Solomon Islands

5.2.2 Attitudes

5.2.3 Concerns

5.2.4 Teaching efficacy

5.3 Predicting pre-service teachers intentions to inclusion

5.4 Conclusions

Introduction

This chapter provides a detailed overview of the findings of this two-stage study. The study involved two different groups of participants, driven by seven research questions examining Inclusive Education in the Pacific region, with more specific focus on pre-service teacher preparation in the Solomon Islands. The initial stage of the project involved a qualitative investigation of the perceptions of the deans and principals of higher education institution and colleges in the Pacific region. The study examined deans' and principals' perceptions, knowledge of and understanding about inclusive education and the impact of completing a course on inclusive education taken by pre-service teachers. The deans and principals were surveyed across the Pacific to obtain an accurate cross-section of their views. The differences in their attitudes and perceptions are recorded in the Results sections. The results of the study are significant in that they offer crucial information regarding the skills and knowledge that pre-service teachers acquired in the teacher preparation programs offered by institutions and colleges. A further qualitative investigation is required regarding the perceptions of the deans and principals of schools would provide insight about how the university sector could appropriately respond to inclusive education initiatives in the region. This could be a topic for future research.

The second stage of the project focused directly on pre-service teachers studying at a higher education institution in the Solomon Islands. Utilising survey data and two focus group interviews, the study intended to measure the perceptions of pre-service teachers regarding inclusive education. The study focused on pre-service teachers' attitudes, intentions, concerns and teaching efficacy towards inclusive education and implementing inclusive practices in the classroom. Additionally, the study further examined pre-service teachers' perceptions about the impact of completing a course of special education and inclusive practices and participating in professional experience. Pre-service teachers' intentions to

include students with special needs into regular classrooms were also examined. Findings of this study contributed towards better understanding how higher education institutions in the Pacific region are preparing pre-service teachers for inclusive education. Gaining such understanding will help to ensure that strategies are developed and put into place within teacher education institutions. This regards tailoring inclusive education courses and the extent to which inclusive courses can provide pre-service students with knowledge, skills and confidence to become inclusive teachers. The following research questions were used to gather data that answered the core question.

- (1) What are perceptions of the deans and principals of higher education institutions and colleges in the Pacific about the preparedness of pre-service teachers to teach in inclusive classrooms? This question specifically relates to the deans' and principals'
 - a) understanding about inclusive education and,
 - b) perceptions' about how well prepared pre-service teachers are to teach in inclusive classrooms at the completion of their teacher preparedness program.
- (2) that attitudes do pre-service teachers in the Solomon Islands have towards inclusive education? Additionally, do gender, age, qualification and contact with a person with disabilities influence their attitudes?
- (3) What level of concern do pre-service teachers in the Solomon Islands have towards inclusive education? Likewise, do gender, age, level of qualification and contact with a person with disabilities influence their concerns?
- (4) What level of teaching efficacy do pre-service teachers in the Solomon Islands have towards inclusive education? Do gender, age, level of qualification and contact with a person with disabilities influence their level of teaching efficacy?

- (5) Does participation in a course on special education and inclusive practices influence pre-service teachers' attitudes, concerns, teaching efficacy and intentions to teach in Solomon Islands classrooms?
- (6) Does professional experience prepare pre-service teachers for their role as inclusive educators in the Solomon Islands?
- (7) Can pre-service teachers' intention to include students with disabilities be predicted by their attitudes to inclusion, their teaching efficacy and their level of concerns to include students with disabilities in regular classroom?

5.1 Study One – Deans and Principals

5.1.1 What are the perceptions of the Deans and Principals of higher education institution and colleges in the Pacific about the preparedness of pre-service teachers to teach in inclusive classrooms effectively?

This question specifically related to the deans' and principals'

- a) understanding about inclusive education and,
- b) perceptions' on how well prepared pre-service teachers are for inclusive education at the completion of their teacher preparation.

5.1.2 Understanding about inclusive education

This study was undertaken to examine the extent to which current teacher education programs are preparing pre-service teachers for IE in the Pacific region. Gaining such understanding would support teacher educators and leaders of HEIs and ITE programs in designing and developing inclusive education courses that would prepare pre-service teachers for inclusive education at the completion of their study program. Within the context of this study, leaders HEIs were referred to as deans and principals. Second, being knowledgeable

about inclusive education can have a positive impact on the attitudes of leaders of HEIs and ITE programs towards inclusive education. Swart and Pettipher (2005) proposed that leaders' understanding about inclusion can influence how the inclusive education concept is perceived and addressed in the initial teacher education programs of institutions. Additionally, being knowledgeable about inclusive education would enable leaders to provide leadership that supports inclusion and inclusive practices within organisations such as higher education institution and schools (Agbenyega and Sharma, 2014; Ahsan et al., 2013; Villa & Thousand, 2016). Therefore, in the context of this study, it was assumed that leaders holding positive attitudes and being knowledgeable about inclusive education are a positive indication that IE can be supported in the ITE programs of HEIs.

This initial first step provided a vital audit of current educational practice in the Pacific, as it sought to discover what each institution offered, and whether each educational leader saw their context as appropriately equipping pre-service teachers to be inclusive educators. It was encouraging to note that the deans and the principals in this study were aware of what was required in classrooms, and that they were familiar with pre-service teachers' concerns and requirements. Findings from this study revealed that deans and principals had some knowledge and understanding about inclusive education. A thematic analysis from the responses revealed that deans' and principals' understanding about inclusive education seemed to emphasise three concepts; (1) the acceptance and inclusion of students with disabilities into regular classrooms, (2) the perception that IE is high quality education and (3) education as a human right. Analysis of the responses also revealed that most leaders believed and perceived inclusive education to be mainly referring to the inclusion of students with disabilities and placements of students with special needs into regular classrooms. Additionally, participants perceived inclusive education as quality education with a human rights orientation. Of interest from this study, was that the leaders

were familiar with the needs of their student cohorts, and were aware that inclusive education responded to student variance in the Pacific.

While that may be the perception of deans and principals, many studies (Loreman et al., 2010; Ainscow, 2005; Forlin, 2010; Sharma, 2012; Sharma & Jacobs, 2016), pointed out that although inclusive education is quality education and a persons' right, IE goes beyond the placement of students with special needs in inclusive classrooms. Inclusion is about providing the opportunity where all children regardless of the differences and difficulties, learn together and appreciate each other's uniqueness in inclusive classrooms. Inclusion is about restructuring regular schools to accommodate all students (Avramidis & Norwich, 2002). Other researchers have linked inclusive education to the concept of social inclusion whereby the status of all people in society including those with disabilities is valued, irrespective of differences or disabilities (Forbes, 2007; Forlin, 2006; Thomazet, 2009). While inclusive education may have many interpretations, the underlying importance of it is that education should embrace the key elements of inclusion. As emphasised by UNESCO (2013), inclusion should be seen as a process of finding better ways to include everyone, identifying and removing all barriers to inclusion in schools, valuing all students' participation and helping those students who are at risk of being marginalised and excluded from schools.

5.1.3 Inclusive Education and Social Justice

Inclusive education was suggested as a preferred option for the learning of all students, due to its positive impact on students' learning (Smith et al., 2004). Learning in inclusive classrooms benefited all students regardless of one's ability or disability and is deemed as quality education because of its positive impact on students' learning outcomes (Foreman & Arthur-Kelly, 2017). Of interested to this study, it is desirable that deans and principals are

familiar with such an assertion. A finding from the results indicated that participants had some knowledge and understanding about the benefits of inclusion on students' learning. The deans and principals' knowledge and understanding about inclusive education came as no surprise. Results indicated that 67.7% of these deans and principals have little training in special education and inclusive practices. While having some knowledge about inclusive education, the deans and principals attest to the belief that education is a fundamental human right and perceived inclusive education as quality education. This was evident from the responses. For example, as one participant responded said; *'all individuals have the right to basic education, regardless of ones' ability or disability. Therefore, education needs to be made accessible to all'* (CT/5). Another participant said that: *inclusive education is a form of high quality education that promotes learning for all students in regular classrooms* CT/8). The belief that inclusive education is quality education is consistent with global initiatives such as UNESCO's proposals (2013), the UNESCO's Salamanca Declaration (1994), and current research in the field, such as that conducted by Loreman et al., (2010), Foreman & Arthur – Kelly (2017) all emphasising the positive impact that inclusive education can have on the lives and learning of all students. Numerous studies have supported the notion that inclusive education is high quality education as it benefits both students with and without special needs in terms of students' academic achievement and social interaction with peers (Dessementet & Bless, 2013; Dessementet, Bless & Morin, 2012; Ekeh, & Oladayo, 2013; Foreman & Arthur - Kelly, 2017).

This contention is yet to be proven in the Pacific context, due to limited research on inclusive education and practices in Pacific islands' classrooms. Several studies on inclusive education in the Pacific region have reported that students with disabilities are not attending primary or secondary schools (Pacific Regional Strategy on Disability, 2009) due to lack of resources, inadequate trained classroom teachers, and challenges with socio-cultural beliefs

of disability (McDonald & Tufue-Dolgogy, 2013; Sharma, Forlin, Marella & Jitoko, 2017). While it has been argued that ‘inclusiveness’ has always been part of the Pacific culture (McDonald & Tufue-Dolgogy, 2013), elements of negative socio-cultural beliefs about disability still exists within the culture of most societies. For example, there is a general belief that people and children with disability do not have the potential for learning, therefore it is only proper for them to stay at home (Smith, 2008). Other traditional perceptions of disability are often embedded in a conceptual mindset that perceive disability to be the result of ‘a curse or punishment for wrong doing’ within the family that have angered the Gods (Tavola & Whippy, 2010). Recent research in the Pacific have also echoed the same sentiment that such negative perceptions and beliefs about disability are still held by many communities in the Pacific region (Dickson, 2015; Gartrell et al., 2016). As a result, the families have kept children with disabilities at home. Such perceptions about disability as being a curse from the Gods and the belief that those with disability do not have the potential to learn, are also common in the cultures of other developing countries (Manderson, Gartrell, Jennaway, Fangalasu’s & Dolaiano, 2016). For example, the Theory of Karma, held by Hindus who believe that disability within an individual is a result of past deeds performed by the individual in a previous life. The disability is a form of punishment upon the individual and the society is not expected to provide help and support to the individual, as the Law of Karma would see that as an interference to the punishment upon the individual (Sharma & Deppeler, 2005). Many cultures in the Pacific and especially in the Solomon Islands do have similar beliefs about disability as being a curse from the gods (Manderson et al., 2016; Simi, 2008).

A few researchers have argued that the concept of inclusive education is a Western concept driven largely by international donor agencies (Kalyanpur, 2014) that overlooked cultural issues and ownership in the Pacific (Le Fanu 2013; McDonald & Tufue-Dolgogy, 2013). On that premise, there is a need to search for practical support on the development of a culturally oriented approach to inclusive education that is appropriate and applicable in the Pacific region. Such an undertaking is important as results from this study revealed while higher education institutions and colleges in the Pacific have inclusive education curriculum taught within their ITE programs, there was little evidence of Pacific Islands cultural values embedded within the curriculum.

In the Pacific context, a culturally oriented approach to inclusive education refers to an approach that takes into consideration the cultural values and practices of the Pacific Islands (Page, Boyle, McKay, & Mavropoulou, 2018). A study in the Pacific (Miles et al., 2014) has suggested establishing networks amongst educational institutions involved in teacher preparation programs with other stakeholders that promote the recognition of those with disabilities in the Pacific. Such networking can be strengthened through collaborative research in search of inclusive approaches that can work best within the Pacific context. In another Pacific study (Sharma, Loreman & Macanawai, 2016), the prospect of reforming school practices was identified as a way forward for effective inclusive education in the Pacific. Schools need to establish positive relationships with local communities, and engage in more collaborative partnership with families and schoolteachers, adjusting the curriculum that will effectively address the needs of all students. Even the teaching pedagogy should reflect a community approach in the Pacific context, as children learn best in collaborative, experiential and activity based settings (Le Fanu, 2013). While these findings (Le Fanu, 2013; Miles et al., 2014; Sharma et al., 2016) provided useful insights into some undertakings by which inclusive education can be addressed in the Pacific region, it can be said that more

research is needed in order to fully understand which approach will work best within the cultural context of the region. However, it is clear that leaders at the higher education institutions and colleges can play an important part by bridging Pacific values with ideas guided from the West.

Results from this study also revealed that higher education institutions and colleges across the Pacific region showed little evidence of networking among themselves in the sharing of information about preparing pre-service teachers for inclusive education. Establishing networks amongst education institutions in the preparation of pre-service teachers for inclusive education and promoting positive relationship with communities is important and was suggested as a way forward in this undertaking as supported by these Pacific scholars (Le Fanu, 2013; Miles et al., 2014; Sharma et al., 2016).

In light of such direction, other international scholars have also suggested the idea of having education institutions working together through collaborative action research (CAR). Through engaging in CAR, ideas and information about preparation of pre-service teachers and responding to inclusive education within the curriculum of ITE programs can be shared (Juma et al., 2017; Waitoller and Artiles, 2016). Apart from CAR, another suggestion is through developing a community of practice (CoP) amongst teacher education institutions. The concept of CoP describes a group of individuals who are connected with a common interest. A concept developed by Wenger (1998) who believed that likeminded individuals, sharing common interests can work together to achieve their goals. Linking this concept to inclusive education, this is where teacher educators, scholars and other stakeholders who are passionate about pre-service teacher preparation and inclusive education can engage in professional discussion, collaborative research and sharing of information. Likewise, such collaboration will improve inclusive practices in schools as well as the sharing of ideas about how best higher education institutions can prepare pre-service teachers for inclusive

education (Jimenez-Silva & Olson, 2012). Likewise, developing a community of practice amongst teacher educators and pre-service teachers is also vital as these pre-service teachers complete their pre-service preparation programs and go out into schools to teach and demonstrate inclusive education in their teaching practices. Engaging through such practice after an initial teacher education program will help pre-service teachers to share information and challenges faced in implementing inclusive education in their classrooms and how these challenges were addressed. Additionally, such continuation of collaborative practice between teacher educators and pre-service teachers can also help in providing information on how best the course on inclusive education can be improved in future.

5.1.4 Deans' and Principals' perceptions' on how well prepared pre-service teachers are for inclusive education in the Pacific region.

In order to gain an understanding about the deans and principals' perceptions regarding pre-services teachers' preparedness for inclusion, the participants were asked to reflect upon the impact of the course on the learning of the pre-service teachers. The findings revealed that while the course had covered some aspects of knowledge about inclusion, information on skills and assisting pre-service teachers in developing positive attitudes towards inclusion, the deans and principals still believed that pre-service teachers' confidence to teach in inclusive classrooms needs to be strengthened. In other words, pre-service teachers' levels of confidence to teach in inclusive classrooms continued to remain as an area of concern to the deans and principals. This finding resonates with revelations from other studies that although pre-service teachers had completed a course on inclusive education, it may require some time in order for them to develop their own level of confidence to teach in inclusive classrooms. The perception that pre-service teachers' low level of confidence can be a result of not having appropriate exposure to teach and practice in real-life classroom situations was supported by other studies (Ahsan et al., 2012; Bartolo, 2010; Forlin, 2010).

On this premise, this study sought to examine the inclusive education curriculum from each of the nine institutions. Findings from this study revealed that while HEIs in the Pacific region have preparatory programs that incorporate courses on special and inclusive education, the courses varied across institutions in terms of their content. Moreover, evidence from the results seemed to suggest that more focus is placed on knowledge about special education compared to inclusive education. There is a danger here especially when more emphasis is placed on contents relating to special education. It must be cautioned that content should not be focused heavily on the social medical theory of disabilities that places the disability problem on the children with disabilities when they are faced with difficulties in learning or adapting into the general classroom (Simi, 2008; Slee, 2010). When more emphasis is placed on the social medical theory of disabilities, it may inhibit the participation of the child with disability, in the classroom (Foreman & Arthur – Kelly, 2017; Slee, 2010). There has to be a balance between contents about special education and inclusive education. Through having such balance will enable pre-service teachers to be fully aware about the nature and importance of inclusion. Other weaknesses identified were the duration of the courses across institutions. For example, all HEIs had courses of ten weeks while one course had a seven week semester. Despite that outcome of variations in the content of inclusive education curriculum and the duration of the courses, the majority of the deans and principals believed that more could be done to support students in their roles as inclusive educators. It was evident that they were desirous to fill the existing gaps with regard to equipping their pre-service teachers as they sought to accommodate all students, including those with disabilities. These leaders believed that information on skills, development of positive attitudes towards IE, using inclusive teaching strategies and engaging pre-service teachers on professional experience in inclusive classrooms should be covered in greater detail within

teacher preparation programs. Here too, it was reassuring to note that these leaders were keen to identify areas to improve the teacher education programs.

Another important aspect of preparing pre-service teachers for inclusive education is through professional experience engagement. Professional experience is a segment within teacher preparation programs where pre-service teachers are placed in schools for practicum. Professional experience through practicum gives pre-service teachers the exposure to teach in inclusive classrooms (Chambers & Lavery, 2012; Forlin & Chambers, 2011). In the context of inclusive education, pre-service teachers needed the exposure to teach in inclusive classrooms. The deans and principals who participated in this study believed that pre-service teachers should be given greater opportunities to teach and interact with students of diverse learning abilities in inclusive classrooms. They indicated that increased exposure and contact with diverse student profiles can improve the learning outcome for pre-service teachers, especially with regard to effective professional experience opportunities.

The same sentiment was echoed through the Focused Group Discussion (FGD) held with pre-service teachers. Results from the FGD showed that pre-service teachers were unable to gain adequate experience and exposure to teach in inclusive classrooms, as most classrooms are yet to become inclusive in their settings. Most participants in the FGD have indicated the desire to be exposed to teach in inclusive classrooms and to gain the opportunity and experience to interact with student with special needs. Despite classrooms not being inclusive in nature, this study revealed that a few students with special needs are already entering the regular classrooms, which required a lot of support from mentor teachers to help pre-service teachers in responding to the needs of students with disabilities. The findings justified the importance of professional experience within ITE programs for pre-service teachers.

The findings suggest that more can be done on the content and curriculum of the teacher education programs. The curriculum needs to reflect a balance between theoretical and practical aspects of inclusive education. While pre-service teachers learned about the importance of inclusive education, equally important is gaining that experiential knowledge about the practical skills of planning and teaching inclusive lessons. Exposure to interacting with students with disabilities in inclusive classrooms will also be beneficial. The notion of being exposed to teach and interact with students with disabilities in regular classrooms during professional experience, has been widely researched (Chambers & Lavery, 2012; Forlin & Chambers, 2011; Forlin, 2008; Salend, 2010; Pearce, 2009; Kowalski, 1995) and has come to support the importance of involving pre-service teachers in professional experience. These studies suggest that being exposed to teaching and interacting with students with disabilities, can enhance pre-service teachers' confidence towards inclusion as well as addressing some of their fears and concerns about inclusive education.

More recent studies have supported the contention that having pre-service teachers placed in schools for professional experiences can have positive impact on their attitudes towards inclusion and teaching practices (Bentley-Williams, Grima-Farrell, Long & Law, 2016; Hopkins et al., 2018; Moran, 2009; Peebles & Mendaglio, 2014; Waitoller & Kozeski, 2010). Likewise, having a course on inclusive education that incorporates school attachments and fieldwork experience is vital as such exposures can contribute to enhancing pre-service teachers' experiences about inclusion. On this premise, adequate information on skills about inclusion and participating through teaching and interacting with students with disabilities in an inclusive classroom is desirable and can be considered for pre-service teachers in the Pacific region. Pre-service teachers enrolled in teacher education programs across the Pacific region should be given adequate opportunities to expose and interact with diverse learners in inclusive classrooms in order to be better prepared for IE at the completion of their teacher

preparedness programs. Based on the results of the findings, (i.e. inadequate emphasis on IE and lack of contact with students with disabilities) reform is needed in teacher preparation programs for inclusive education in the Pacific. Initial Teacher Education programs need to consider revising and strengthening the inclusive education curriculum to provide pre-service teachers with adequate professional experience to teach in inclusive classrooms. While this may be desirable, it still remains a challenge. Most Pacific Island Countries have responded positively to the development of the Pacific Regional Strategy on Disability (2009) and the Pacific Development Education Framework (2009) to ensure that inclusive education is reflected within their education systems. This expectation is still far from reality. Most schools across the region are yet to achieve that goal (Sharma et al., 2017), which in turn will affect pre-service teachers in gaining the practical experience of teaching in inclusive classrooms.

5.1.5 Challenges to Inclusive Education in the Pacific.

In the Pacific region, while working towards inclusive education is desirable there are challenges that have thwarted its progress. Some of the challenges recently identified by a few Pacific scholars are:

- Awareness and knowledge about inclusive education within schools where teachers are challenged by inclusive education and ideas for supporting learners with special needs (Sharma, Forlin, Marella, & Jitoko, 2017),
- The provision of cohesive and consistent approach to collecting and keeping of data on reports of children with disabilities within schools and the education system within countries of the Pacific region (Sharma, Forlin, Marella, & Jitoko, 2017),

- The provision of resources for implementing an inclusive policy. This relates to funding for equipment and infrastructures that will support inclusive education within the education systems of the countries. For example, improvement to buildings and classrooms to cater for increasing numbers of students and material resources that can be used to assist teaching and learning of students in the classrooms (Sharma, Forlin, Marella, & Jitoko, 2017),
- Awareness to communities about inclusive education that will address parents' apprehension on sending their child with disability to schools (Sharma, Armstrong, Mewrumeru, Simi, & Yared, 2018),
- The provision of perceived teacher and leadership support in schools, awareness to communities and involvement of external donors with influences, that does not consider Pacific cultural context (McDonald & Tufue-Dolgoy, 2013).
- The provision of adequate preparations for teachers, inadequate resources and attitudinal barriers (Page, Boyle, Mckay & Mavropoulou, 2018; Sharma and Michael, 2017; Sharma, Loreman & Macanawai, 2016; McDonald & Tufue-Dolgoy, 2013).

Reflecting upon these challenges in the Pacific region, the implementation of inclusive education practices needs a paradigm shift. The shift of mindset from a social medical perspective of viewing those with disabilities as having medical conditions and deemed as unfit to access education, to an inclusive paradigm based on the perspective that primary problems facing those with disabilities are external rather than internal (Chambers & Forlin, 2010; Moore et al., 1999). The implication of this new paradigm is that educators and stakeholders working within this paradigm have to alter their beliefs, adapt to and improve the education environment to meet the needs of all children (Simi, 2008) which are pre-

conditions for successful inclusion of all students into regular classrooms. Thus, in the Pacific context, successful implementation of inclusive education can happen if Pacific Island countries adapt an inclusive paradigm within their education systems (Le Fanu, 2013). In order to have an education system that is inclusive in the Pacific, all Pacific Island countries through their governments need to work together in identifying, defining and solving problems they face as Pacific Island nations in implementing inclusive education and developing culturally appropriate strategies that will have wider impact across the region. This assertion was supported by Sharma et al., (2018)'s study which calls for the development of an inclusive strategy that will respond positively to the cultures of the Pacific Islands when working towards implementing inclusive education in the region. Likewise, all Pacific Island countries should be working in collaboration with the Pacific Island Forum Secretariat as they strive to achieve the goal of inclusive education across the Pacific (Pacific Regional Education Framework, 2018 – 2020). The support for inclusive education can be further facilitated through continuous awareness about the importance of including children with disabilities in the regular classrooms. The current practice is that those children with disabilities are still expected to go to special schools.

The findings of this study have significant implications. There is a need for curriculum reform. This suggests that HEIs involved in the training of pre-service teachers for inclusive education need to collaborate and jointly review and refine their Inclusive Education curriculum. The curriculum reform must address contents about inclusive education and practices that will enable pre-service teachers to develop positive attitudes towards inclusion and being able to demonstrate inclusive practice in their classroom teachings. Likewise, the curriculum reform needs to take into consideration the Pacific cultural context of defining disabilities and tailor an inclusive curriculum that is contextually appropriate and sensitive for the Pacific region. That means, developing an inclusive

education curriculum that reflects Pacific values, cultures, traditional knowledge and skills that bind the Pacific people together, rather than emphasising too much on Western values and foreign concepts of inclusive education. This undertaking would be appropriate for the Pacific region and would be welcomed by a majority of Pacific stakeholders.

5.2 Pre-service Teachers Readiness to teach in the Solomon Islands

The purpose of the second stage of the study was to examine pre-service teachers' attitudes, concerns and teaching efficacy towards inclusive education. The following questions were posed in an attempt to gain an understanding about pre-serviced teachers' attitudes, concerns and teaching efficacy.

What are pre-service teachers' attitudes, concerns and teaching efficacy towards inclusive education in the Solomon Islands?

This question specifically related to:

- pre-service teachers' attitudes, concerns and teaching efficacy towards inclusive education, and
- whether demographic characteristics such as gender, age, level of qualification and contact with a person with disability have an impact on pre-service teachers' attitudes, concerns and teaching efficacy towards inclusive education.

Findings from this study have some important practical implications. This section discussed the findings in relation to attitudes, level of concerns and teaching efficacy of pre-service teachers of the Solomon Islands towards inclusive education and the effect of demographic variables on those dependent variables.

5.2.1 Teacher Education

Inclusive education has been discussed globally as a way forward for education of all children regardless of their abilities or disabilities. It demands that such education should take place in the regular classroom. However, lack of teacher preparedness to implement an inclusive approach in schools and classrooms has been one of the biggest challenges faced by developing countries in achieving that endeavour (Sharma et al., 2013). Many regular classroom teachers often felt that they were not adequately prepared for inclusive education. Therefore, if the education system wants teachers to become effective inclusive practitioners and be able to meet the learning needs of all learners, teachers need to be educated in preparation for this undertaking (Ahmmed et al., 2013; Armstrong et al., 2010; Foreman & Arthur - Kelly, 2017; Forlin et al., 2011). Such undertaking reiterates the importance of having reforms in teacher education. Reforming teacher education in preparation of pre-service teachers to learn about inclusive teaching practices and becoming successful in implementing inclusive teaching practices in schools and classrooms has been recognised for many years (Forlin, Loreman & Sharma, 2014; Savolainen et al., 2012, Sharma, Simi & Forlin, 2015). While some education systems are involved in reviewing pre-service teacher education models and researching into developing new approaches whereby pre-service teachers can be prepared for inclusive education, others have tried to ensure that inclusive education is mandatory for all teachers and be recognised as a minimum requirement for all initial teacher education programs (Forlin, 2013). Teacher education programs have a role in preparing pre-service teachers for inclusion through the mandatory inclusive education course. The preparation programs not only equip pre-service teachers with knowledge about effective inclusive practices, but the preparation should encourage and empower pre-service teachers to learn to do things differently and get them to reflect upon their attitudes and beliefs about

inclusion. In short, the preparation should focus on ‘knowing’, ‘doing’, and ‘believing’ that inclusion is possible (Rouse, 2008; Sharma & Loreman, 2012).

5.2.1 Teacher Education in the Solomon Islands

The Solomon Islands has one teacher training institution. Since its inception in 2013, the Solomon Islands National University was mandated to provide teacher education training for both pre-service and in-service teachers, who would then go out to teach in schools within the country. The institution offers a pre-service teacher education program with a duration of two years, of which six weeks are spent in school practicum. The teacher education program focuses on pre-service teachers acquiring skills and knowledge about teaching pedagogies, which can be used in the classrooms; teaching methodologies; developing teaching resources; implementing the curriculum and developing leadership attributes.

Inclusive education is a new course and concept introduced by the School of Education and Humanities in the new Diploma in Teaching (Primary) program in 2009. Due to the compact structure of the teacher education program, the course on inclusive education was assigned to be offered in Semester 1 of Year 1 program for primary pre-service teachers. The course on inclusive education is an introductory course, developed with the intention of preparing pre-service teacher inclusion in the regular classrooms. The course is offered through a seven week semester with four hours per week duration. The course is compulsory for all pre-service teachers within the teacher education program. Pre-service teachers receive a two hour lecture and a two hour tutorial each week. The course focuses on discussing inclusive education within the Solomon Islands’ cultural context, policies, planning, developing positive attitudes, adapting the curriculum and learning about inclusive teaching strategies that can be used in the classrooms. Cooperative learning and peer tutoring were the two inclusive teaching strategies that were introduced to pre-service teachers.

With the brief introduction given, this study set out to measure the effectiveness of a seven-week university introductory course that aims to address the attitudes, concerns and teaching efficacy of pre-service teachers. Furthermore, the study aimed to examine how demographic variables influence the attitudes, concerns and teaching efficacy of pre-service teachers. The notion of preparing pre-service teachers for inclusive education by educating them about the essence of inclusion, is important, as it could help them to be comfortable and confident in using inclusive practices when they enter the workforce. The following studies (Forlin, Loreman & Sharma, 2014; Sharma & Jacobs, 2016; Sharma & Nuttall, 2016) revealed that for pre-service teachers to feel comfortable about inclusion they need to have positive attitudes, high level of teaching efficacy, and low level of concern towards inclusive education. Additionally, formal education about inclusive practices can alter pre-service teachers' attitudes, concerns and teaching efficacy towards inclusive education (Forlin, 2013; Sharma & Loreman, 2012).

5.2.2 Attitudes

An aim of this study was to examine the attitudes of pre-service teachers towards inclusive education. The research question required pre-service teachers to respond to statements that examined how they felt towards inclusive education using the Attitudes towards Inclusion Scale (AIS). This scale was used to measure pre-service teachers' attitudes towards inclusive education. Numerous studies revealed that teachers' attitudes are amongst the many factors that can contribute to successful implementation of inclusive education in the regular classrooms (Loreman et al., 2010; Costello & Boyle, 2013; Varcoe & Boyle, 2013, Subban & Mahlo, 2017). This means, teachers' attitudes can affect how they respond to inclusive education. 'Attitudes' has been described as a basic and pervasive aspect of human life, helping humans to be able to analyse and react to events, make decisions and make sense of their relationship with others (Vaughan & Hogg, 2002). It is about thoughts, feelings,

actions and other experiences that humans encounter in daily life. These thoughts, feelings and experiences can influence one's perception and decisions on whether or not they like or dislike someone or something (Loreman et al., 2010). The opposite can happen when individuals perceive that specific actions will be unlikely to bring about the desired behaviour because they feel that they do not possess the required skills (Bandura, 1982). The notion of having positive attitudes in order to perform a behaviour positively was reinforced by Ajzen (1991) which proposed that attitudes are a strong predictor to perform a behaviour and is supported by numerous studies (Ahsan et al., 2012, Ahmmed et al., 2013; Costello & Boyle, 2013; Subban & Mahlo, 2017).

Linking this concept to pre-service teachers' attitudes towards IE, when pre-service teachers do have positive attitudes, pre-service teachers will respond positively to inclusive education. Conversely, pre-service teachers with negative attitudes will tend to respond negatively towards inclusive education. The shaping of pre-service teacher attitudes towards inclusive education should be an important aspect of teacher education programs for pre-service teachers (Sze, 2009). It has been suggested that development of such attitudes amongst pre-service teachers can be achieved during pre-service preparation and training of pre-service teachers (Forlin, 2010, Varcoe & Boyle, 2013, Winter, 2006). Developing a positive attitude towards inclusive education during pre-service training of teachers can have an impact on their practice in the classrooms. Teachers who hold positive attitudes towards the inclusion of students with diverse learning abilities were found to be successful in implementing inclusive practices in the classrooms compared to those who held negative attitudes to inclusion (Avramidis, Bayliss & Burden, 2000; Costello & Boyle, 2013; Sharma et al., 2008).

Analysis of data on pre-service teachers' attitudes towards inclusive education in this study showed that pre-service teachers' attitudes had improved significantly after completing the course. This finding supports several studies (Ahsan & Sharma, 2018; Ahsan et al., 2013; Costello & Boyle, 2013; Sharma & Nuttall, 2016; Varcoe & Boyle, 2013) that pre-service teachers generally showed more positive attitudes towards inclusive education after completing a course on inclusive education. Likewise, participating in a course about inclusive education improved pre-service teachers' knowledge, beliefs and values they had about inclusion. This positive result may be due to the notion that the introductory course on special education and inclusive practices covered some important basic information with practical discussion and sessions about inclusive education which were reflected in the statements used on the AIS scale. Analysis of the AIS subscale found that the course is effective at improving the attitude if practices of inclusion are implemented correctly. Likewise, it will not add to the workload or negatively affect a pre-service teachers' ability to manage their classrooms, neither will it create learning challenges for both able students and those with disabilities. Additionally, it may be an indication that the course supported pre-service teachers' knowledge and understanding about how to interact with individual students, and how to provide support for individual students' learning needs. This also increased pre-service teachers' attitudes about inclusion. Developing such attitudes in turn made pre-service teachers less likely to exclude students based on the pre-conceived notion that students with disabilities have limited capabilities.

In the context of the Solomon Islands where the concept of inclusive education still remains a challenge, a National Disability Report (2005) reported that a few students with disability were already entering the mainstream education while others were attending special schools. In responding to these two events, pre-service teachers need knowledge and practical skills to be prepared for the challenge should they go out into a classroom where there is a

student with special needs (Simi, 2008). In order to address this need, a course on inclusive education is vital in the preparation of pre-service teachers in the context of the Solomon Islands.

With the assumption that the success of inclusive education depends largely on teachers' attitudes (Costello & Boyle, 2013; Loreman et al., 2010; Varcoe & Boyle, 2013) the results of the present study are encouraging for higher education institutions and colleges in the Pacific region that are engaged in teacher preparation of pre-service teachers for inclusive education. The findings demonstrate that many of the pre-service teachers within the sample studied held positive attitudes towards inclusive education. As demonstrated from other researchers (Loreman et al., 2010; Sharma et al., 2006; Subban & Sharma, 2005; Yeigh & Lynch, 2017), teachers who possess positive attitudes towards inclusion are more likely to support the learning of students with disabilities in the classroom. Likewise, they can have positive influence on their general students' attitudes towards those with special needs. On that note, it is important that initial teacher education programs prepare pre-service teachers for inclusive education through the courses provided.

This study also examined the impact of several demographic characteristics of pre-service teachers and their attitudes towards the inclusion of students with disabilities into the regular classrooms. As suggested, teachers' demographic characteristics can affect teachers' attitudes towards the inclusion of students with disabilities into the regular classrooms (Avramidis et al., 2000; Forlin, Loreman & Sharma, 2014; Van Reusen, Shoho & Baker, 2001). While that may be the assertion, there are reports of mixed findings in relation to some of the demographic characteristics (Brady & Woolfson, 2008). For example, reports of younger teachers having more positive attitudes towards inclusion than older teachers (Sharma, Forlin & Loreman, 2008), and reports that age has no significant relationship to teachers' attitudes (Avramidis et al., 2001). Other studies reported evidence of inconsistent

findings with regard to gender. For example, while some studies reported that female teachers have more positive attitudes towards inclusion than male teachers (Avramidis et al., 2000; Forlin et al., 2008; Parasuram, 2006), other studies found no gender differences in regard to attitudes towards inclusive education (Al-Zyoudi, 2006; Carroll et al., 2003; Van Reusen et al., 2001; Varcoe & Boyle, 2013). With regard to age, inconsistent results were also reported. For example, in some studies younger pre-service teachers were more positive towards inclusion (Forlin et al., 2011), while other studies found no significant relationship between age groups (Avramidis et al., 2000; Carroll et al., 2003; Varcoe & Boyle, 2013). A few other variables such as education qualifications (Parasuram, 2006), and exposure with contacts with persons with disabilities (Avramidis & Kalyva, 2007; Rakap & Kaczmarek, 2010) can also affect teachers' attitudes to inclusive education. These studies reported positive correlation with teachers' attitudes towards inclusive education.

At the pre stage of this study, results from the findings revealed no significant relationship between pre-service teachers' attitudes and their demographic characteristics (*gender, age, level of qualification and contact with a person with disability*). This may be due to the notion that these pre-service teachers were just being introduced to the course about special education and inclusive practices. Therefore, the demographic characteristics had no significant impact on the attitudes of these pre-service teachers towards inclusive education.

At the post stage of the study after completing the course, only one variable showed a significant result. Participants with 'Below Bachelor' qualification had more positive attitudes towards inclusion than those with 'Bachelor' qualification. This finding is significant in the context of this study as most of the pre-service teachers with 'below bachelor' qualification are young pre-service teachers who have not had any teaching experience compared to those with a bachelor qualification who have had some form of

teaching experience. Researchers have shown that younger teachers often demonstrate more positive attitudes towards inclusion than older teachers (Sharma, et al., 2003).

In relation to gender, this study found no significant relationship between gender and attitudes. This finding is consistent with previous studies (Al-Zyoudi, 2006; Carroll et al., 2003; Van Reusen et al., 2001; Varcoe & Boyle, 2013) which reported no relation between gender and attitudes towards inclusion. This finding is in contrast to studies which found that gender can influence attitudes towards inclusion (Avramidis et al., 2000; Forlin et al., 2009; Parasuram, 2006). Moreover, no differences were found between the three age groups (*less than 25 years, 25 years, above 30 years*) and their attitudes towards inclusive education. This further supports previous studies that have reported no significant differences between age and attitudes towards inclusion (Avramidis et al., 2000; Carroll et al., 2003; Varcoe & Boyle, 2013). In regard to pre-service teachers' level of contact with a person with disability, this present study did not reveal any significant differences between having regular contact with a person with disability and attitudes towards inclusion. This finding is inconsistent with other researchers who have found that pre-service teachers who have regular contact with individuals with disabilities are more likely to display a positive attitude towards inclusion (Avramidis & Kalyva, 2007; Boyle et al., 2012; Loreman et al., 2007). Bradshaw and Mundias' (2005) study provides an explanation for such inconsistencies to the findings of this study. Their study indicated that pre-service teachers' attitudes are not influenced by having a family member or friend with a disability. Attitudes are more likely to be influenced by socialising with individuals with disabilities in schools and the communities (Varcoe & Boyle, 2013).

5.2.3 Concerns

This section discusses the findings in relation to pre-service teachers' level of concerns about inclusive education in the Solomon Islands. Analysis of data from this study showed that pre-service teachers had expressed some concerns about inclusive education. The findings may have some important implications for pre-service teachers programs.

At the pre-stage of the study, pre-service teachers had high levels of concerns about inclusive education. Pre-service teachers were very concerned about five items: inadequate para-professional staff, lack of resources, lack of trained IE teachers and difficulty in providing equal attention to all students in a diverse classroom. At the post stage of the study the results showed that pre-service teachers' overall concerns had reduced but still remained quite high. There were still high concerns about inadequate administration support, inadequate special educational instruction materials and additional paper work to do. The findings of this study are consistent with results of other studies about pre-service teachers' concerns towards inclusive education. Studies have found that before doing a course on inclusive education, pre-service teachers often have a high level of concerns about inclusion, however, at the completion of the course, the level of concern is often reduced (Sharma & Nuttall, 2016; Sharma, 2012; Loreman et al., 2008).

Pre-service teachers were often concerned about inadequate para-professional staff and lack of resources (Sharma et al., 2007; Sharma & Desai, 2002) and difficulty in giving equal attention to all students in the classroom (Ahsan et al., 2012). The concern about inadequate para-professional support and lack of resources may stem out of fear that pre-service teachers may have about inclusion. In reality, the support of para-professionals in inclusive classrooms is important. Para-professionals provide support to teachers in the teaching of children with disabilities in the classrooms. Additionally, the provision of

teaching resources to support teachers in the classroom is important. Teaching resources can be in the form of teaching aids and teaching materials whether they be physical materials or digital resources. These concerns are important to note as teacher education programs prepare pre-service teachers to teach in inclusive classrooms (Sharma & Nuttall, 2016; Ahsan et al., 2012).

This study also noted that there was a significant decline in pre-service teachers' concerns that academic achievement of non-disabled learners will be affected in an inclusive classroom. In other words, as pre-service teachers learned more about how to be inclusive in their teaching practices during pre-service preparedness programs, such knowledge and understanding reduces some of their fears and concerns. Another significant finding from this study revealed that at the post stage of the study pre-service teachers still have high concerns about inadequate administrative support to implement inclusion in schools. Pre-service teachers are concerned that they may not get adequate support from school administration to facilitate inclusive teaching practices in schools and classrooms.

The Salamanca Declaration (UNESCO, 1994) emphasised that successful inclusion can be achieved in schools and classrooms if teachers are provided with adequate support from the school administration. The support can be in the form of cooperation from the school administration and community, support from other teachers and work colleagues within the school and support from parents of students with or without disabilities in the school (Ahmmed, Sharma & Deppeler, 2013). The level of support further extends to include the provision and supply of teaching resources, materials and training about inclusive education (Ahmmed et al., 2013; Ahsan et al., 2012). Similar concern was expressed from focus group interviews held with the pre-service teachers. One of the respondent summed it up in the following manner:

‘lack of teaching resources. My classroom has limited teaching resources to help me with my teaching. My mentor teacher told me to use whatever resources that are available at hand in the classroom’ (G2/P6).

The concerns from pre-service teachers imply that when pre-service teachers receive adequate support from school administration, they would be more likely to include students with disabilities into regular classrooms. This finding is consistent with studies (Ahmmed et al., 2013; Horne & Timmons, 2009) which contend that support from school administration can have a positive impact on teachers’ attitudes towards inclusion.

Another area of concern was the level of support that pre-service teachers received from mentor teachers at schools during practicum. Mentor teachers, are expected to coach and provide guidance and support to pre-service teachers in demonstrating inclusive practices in the classrooms. As noted by Izadinia (2016) and Rademaker (2013), establishing positive relationship between mentor teachers and pre-service teachers is important. Such positive relationships have an impact on pre-service teachers’ attitudes towards inclusion (Kurth & Forbe-Pratt, 2017). Likewise, is the importance of providing feedback as pre-service teachers strive to develop their teaching skills (Paulsen, DaFonte & Barton-Arwood, 2015).

Respondents in this study revealed that mentor teachers at schools had not provided adequate support to pre-service teachers in demonstrating inclusive practices in the classrooms. These were evident through the following responses:

‘my mentor teacher did not help me much. I did not get much support on how to include a child with special needs in the classroom (G1/P3) and ‘there was no demonstration and discussion about how to include students with special needs in the classroom (G2/P4).

Mentor teachers have the responsibility to provide academic support to pre-service teachers in schools during practicum and other activities related to professional experiences. Pre-service teachers can experience the art of teaching in classrooms when they are out on practicum. That is why it is important that the practicum component of pre-service teachers ensures that pre-service teachers are exposed to situations that will help them in developing positive attitudes towards inclusion. The finding relates well to studies (Sharma & Nuttall, 2016; Ahsan et al., 2012; Sharma et al., 2009; Sharma et al., 2008) that completing a course about inclusive education and participating in professional experience (practicum) can address pre-service teachers' concerns towards inclusive education. Likewise, pre-service teachers in this study may have their concerns reduced upon realising that inclusive education is good practice, which can make them better teachers and can also benefit all students including non-disabled students.

With regards to variables that may influence pre-service teachers' concerns towards inclusion, there have been limited studies done on examining the relationship between pre-service teachers' concerns and their demographic variables (Sharma et al., 2007). Findings from this study reported that variables such as gender, age and level of qualification were non-significant. Only one variable was found to be significant at the pre-stage of the study. Those pre-service teachers who had some contact with someone with a disability, showed some level of concern towards inclusion of those with disabilities into regular classrooms. That concern was reduced at the post-stage of the study. This may be an indication that the course has had some positive impact on their level of concerns.

However, despite such contention, there are studies which showed that completing a course on inclusive education had increased pre-service teachers' level of concerns about inclusion of students with disabilities into the regular classrooms. For example, a most recent study on pre-service teachers in Bangladesh (Ahsan & Sharma, 2018) revealed that pre-

service teachers hold negative attitudes and have high level of concerns about the inclusion of students who require high support needs in the use of Braille and sign language, in the regular classroom. Similar concerns were found in other studies (Forlin & Chambers, 2011; Forlin et al., 2009). Pre-service teachers had high levels of concerns about inclusion of students with disabilities into the regular classrooms.

5.2.4 Teaching efficacy

This section discusses the findings in relation to the level of teaching efficacy of pre-service teachers in the Solomon Islands and the effects of their demographic variables on their teaching efficacy. Based on the work of Bandura (1997, 1982), teachers' self-efficacy beliefs have been associated with positive teaching behaviours and students' learning outcome (Henson, 2001; Sovolainen et al., 2012). Teachers perceived teaching efficacy can influence the kind of learning environment teachers create for students and teachers' ability to perform different teaching tasks that will enhance students learning (Bandura, 1982). Based on that premise, positive learning outcomes can happen in classrooms when teachers have high level of teaching efficacy and believe that all students can learn regardless of their abilities or disabilities. In contrast, teachers with low teaching efficacy can have a negative impact on students' learning (Tschannen-Moran, Woolfolk & Hoy, 1998).

Analysing the overall mean score of the post stage data on the TEIPS, pre-service teachers in the Solomon Islands who participated in this study were found to have a high level of teaching efficacy after completing a course on special and inclusive education. Pre-service teachers had a high level of perceived teaching efficacy about getting parents involved in school activities within the school. Involving parents in school activities have been widely researched with several studies concluding that parents' involvement in school activities can have a positive impact on the learning of children, while at the same time

fostering improved communication between parents, teacher and students with disabilities (Valle, 2011; Strogilos & Tragoulia, 2013; Dwyer & Gidluck, 2009). Another possible explanation would be that pre-service teachers in the Solomon Islands value positive relationship with parents of children attending schools and getting parental support for their child's learning at school is perceived as important. Such behaviour is embedded in the Solomon Islands as well as in the Pacific culture where working and consulting with parents about their child's learning progress and participating in school activities is important. This notion of valuing parents' support in the Pacific cultural context was supported by studies in the Pacific (Sharma et al., 2017; McDonald & Tufue-Dolgoy, 2013, Le Fanu, 2013).

Another interesting finding of this study relates to pre-service teachers and their efficacy to inform others about laws and policies towards inclusive education. At the pre-stage of the study, pre-service teachers had very low rating on informing others about local laws and policies towards inclusive education. At the post-stage of the study, the rating improved significantly, indicating that the completion of the course had enabled them to understand the importance of knowing about local laws and legislation that support inclusive education. The importance of having knowledge and understanding about laws and policies pertaining to inclusive education has been widely researched and was found to be a significant predictor of perceived teaching efficacy of pre-service teachers (Forlin, 2008; Forlin & Chambers, 2011; Forlin et al., 2007), although it was not significant for the other two dependent variables (attitudes and concerns) in this study. This finding may be an indication that as knowledge level about inclusion increased, pre-service teachers showed more enhanced teaching efficacy towards inclusive education. The importance of the positive impact of knowledge about laws and policies on pre-service teachers teaching efficacy was mentioned in other studies as well. For example, Sharma et al., (2007) which found that pre-service teachers were less concerned as they learned more about local legislation and policies

that supports inclusive education. Another study (Brown, Welsh, Hill & Cipko, 2008) found that increased knowledge about terminologies relating to inclusive education also contributed significantly to pre-service teachers' confidence and their teaching efficacy towards inclusion. Therefore, this finding supports the notion that information of local legislation and policies is important and should be incorporated into the pre-service teacher education curriculum, not only in the Solomon Islands, but across the teacher education programs in the Pacific region as well.

This study also noted that at the post stage of the course, pre-service teachers were moderately confident in their ability to manage classroom behaviours. This finding is consistent with results of other studies (Sharma & Nuttall, 2016; Giallo & Little, 2003). When pre-service teachers feel that they are not adequately prepared to manage behaviour problems, they will feel less prepared to meet such challenge in the classrooms. Such a finding clearly indicates that more needs to be done during pre-service teacher education to prepare teachers on how to manage behaviours in the classrooms (Sharma & Nuttall, 2016). It has been suggested that as classrooms become more diverse and inclusive in nature, discipline issues for teachers may also increase. Thus, the acquisition of knowledge about effective classroom management strategies and demonstrating these skills and knowledge in real life classroom situations is desirable for pre-service teachers. Such exposure is important in enhancing pre-service teachers' confidence levels in the area of behaviour and classroom management.

In summary of pre-service teachers' perceived teaching efficacy towards inclusive practices, the findings of this study are consistent with other studies, which have posited that participating and completing a course on inclusive education can enhance pre-service teachers' perceived teaching efficacy towards inclusion (Ahmmed et al., 2012; Forlin et al., 2011; Sharma et al., 2009; Sharma & Nuttall, 2016). The findings support the suggestions of

other studies that pre-service teacher education programs need to strengthen the inclusive education course within the ITE programs. Strengthening inclusive education would ensure that pre-service teachers acquire the necessary skills and knowledge that could facilitate the success of inclusion in the classrooms (Baker, 2005; Gao & Mager, 2011; Shaukat, Sharma & Furlonger, 2013) while at the same time increasing their confidence and teaching efficacy on inclusion. On that premise, pre-service teachers with adequate and high level of training in inclusive education practices will tend to show positive belief about their ability to include and educate students (Shaukat et al., 2013).

This study also examined demographic variables of pre-service teachers and their teaching efficacy to implement inclusive practices in the classrooms. These variables were gender, age, highest level of qualification and contact with a person with disability. In interpreting the relationship between pre-service teachers' teaching efficacy in implementing inclusive education practices and their background variables, analysis of pre-stage and post-stage data found no significant results. This means pre-service teachers' variables such as gender, age, highest level of qualification and contact with a person with disability do not have any significant impact on pre-service teachers' ability and teaching efficacy to include students with disability in an inclusive classroom. This finding is in contrast to other studies about the relationship between pre-service teachers' background variables and their teaching efficacy. For example, studies have reported that male pre-service teachers showed more positive attitude and had higher levels of teaching efficacy than female counterparts regarding the inclusion of students with disabilities into regular classrooms. Additionally, teaching experience and having personal contact and experience with a person with a disability, reported higher levels of self-efficacy towards teaching within inclusive settings (Sharma et al., 2015). The level of qualification can also have an impact on pre-service teachers' teaching efficacy. Baker's (2005) study found that pre-service teachers enrolled in primary

education programs had higher levels of teaching efficacy to teach children with disabilities than those enrolled in secondary education programs. The results from the findings of this study may mean formal education and completing a course on inclusive education is important and desirable in the context of this study. Such training will increase pre-service teachers' skills and knowledge in ways that will enhance their teaching efficacy to inclusion. Likewise, such training could allow pre-service teachers to gain more positive perspective about inclusion, which can lead to increased efficacy of implementing inclusive education in the classroom as supported by Sharma and Nuttall's (2016) study.

The findings from this study thus conclude that participating in a course on inclusive education can have a positive and significant impact on pre-service teachers' attitudes, intentions, concerns and teaching efficacy. As shown from the results of this study, pre-service teachers' attitudes, intentions and teaching efficacy towards inclusive education had increased after participating in a course while reducing their concerns about inclusion. Likewise, pre-services teachers' knowledge and understanding about inclusive education had improved after participating in the course. Results from the FGD revealed that pre-service teachers perceived inclusive education as the inclusion of students with special needs into the regular classroom and removing barriers that may hinder inclusive education in schools and classrooms. The findings resonate with studies which also concluded that participating in a course on inclusive education can have a positive impact on pre-service teachers' attitudes, intentions, concerns and teaching efficacy towards inclusive education (Sharma & Nuttall, 2016; Sharma & Sokal, 2013, Sharma et al., 2008; Subban & Mahlo, 2017). The result of this finding further reiterates the importance of participating in a course on inclusive education. An undertaking to address this notion, would be to ensure that participating in a course on inclusive education is mandatory in the ITE programs for pre-service teachers.

5.3 Predicting pre-service teachers' intentions to inclusion

This section discusses the findings on predicting pre-service teachers' intentions to include students with disabilities into the regular classrooms. The Theory of Planned Behaviour (Ajzen, 1991) was the theoretical framework used to guide this study. The Theory of Planned Behaviour presented the view that the intentions to perform any behaviour is dependent on three factors: (1) attitudes towards the behaviour; (2) the subjective norms surrounding the performing of the behaviour; (3) the perceived behaviour control. In order to predict how a person will behave in a particular situation depends on a person's intention to perform the behaviour. The intention in turn is determined by the other three factors (attitudes, subjective norm and perceived behaviour control). Accordingly, individuals are likely to perform certain behaviours if they evaluate these behaviours positively. The more positive the attitude, subjective norm and perceived behaviour control a person has, the stronger the person's intentions will be to perform the behaviour (Ajzen, 1991). This theory has been widely used in a number of studies to predict intentions (Ahmed et al., 2013; Ahsan et al., 2012; Fishbein & Ajzen, 2010; Kuyini & Desai, 2007; Subban & Mahlo, 2017) and have found that attitudes is a strong predictor of a persons' intentions to inclusion.

This study used four indicators to identify the overall preparedness of pre-service teachers towards inclusive education. The procedure was done through the consideration of four scales of attitudes, concerns and efficacy about inclusive education and pre-service teachers' intention to teach in inclusive classrooms. The study noted high degrees of concerns of pre-service teachers at pre and post stage of the study. Evidently, participants were concerned about the lack of resources for inclusive education. This finding is validated by studies from both develop and developing countries (Sharma & Sokal, 2013; Sharma et al., 2008; Sharma et al., 2012) which identified lack of resources as a main concern for pre-service teachers. These concerns can have a negative impact on pre-service teachers'

intentions to include students with disabilities into the regular classrooms. This result is not new and is frequently identified as a barrier to implement inclusive education in previous studies across both developed and developing countries (Forlin, 2013; Forlin, Kawai & Higushi, 2014; Sharma et al., 2012; Sharma, Simi & Forlin, 2015).

Simple regression was used to indicate the analysis. While at the pre-stage of the data collection only 19 percent of variance in participants' intentions score could be accounted for by the three predictor variables (attitudes, concerns and teaching efficacy), this increased to 35 percent at the post stage of the study. Also, while at the pre-stage two variables (attitudes and teaching efficacy) were significant predictors. At the post stage, these two variables still emerged as significant predictors of their mean intention scores. Pre-service teachers' attitudes and perceived teaching efficacy toward inclusive education fit in well with the theory of planned behaviour. However, concerns about teaching in inclusive classrooms may not fit nicely within the framework. This could be considered as appropriate representation of pre-service teachers' subjective norm in the theory of planned behaviour as the participants had not yet started working or teaching in a school. It is assumed that when participants reflect on their level of concerns, they are reflecting on practical aspects of implementing inclusion and the level of support they may or may not receive. In this sense, it can be said to represent participants' social norms within the theory of planned behaviour framework.

Considering that within the theory of planned behaviour, participants' intentions towards the behaviour (in this research, the intention to include children with disabilities) is the strongest predictor of a persons' actual behaviour (to include children with disabilities into the regular classrooms). This suggests that for pre-service teachers to have a high degree of intention to teach in inclusive classrooms, their attitudes and teaching efficacy are most critical to improve during the teacher education program with the Solomon Islands context.

The study found that pre-service teachers' attitudes and teaching efficacy are the strong predictors of their intentions to include students with disabilities in the regular classrooms as indicated by the Theory of Planned Behaviour. When pre-service teachers hold positive attitudes and teaching efficacy towards inclusion, it would be reflected in their intention and behaviour to include students with disabilities in the regular classroom. Pre-service teachers would be welcoming to students with disabilities in their classrooms. It must be noted that the notion to improve attitudes and teaching efficacy of pre-service teachers is not something that can be achieved easily in a teacher education course. It involves a range of activities to be undertaken in the course that would have an impact on pre-service teachers' attitudes and teaching efficacy towards inclusion. One way to improve pre-service teachers' attitudes and teaching efficacy towards inclusion is to ensure that they receive exposure to teach, work and interact with children with disabilities in successful inclusive classrooms (Chambers & Lavery, 2012; Forlin & Chambers, 2011). Equally important is learning about the context of local legislation and policies relating to inclusion of children with disabilities (Armstrong, Armstrong & Spandagou, 2010) and how they are being supported in their endeavours to implement inclusive practices (Loreman, Sharma & Forlin, 2013; Sharma et al., 2015).

The application of this theory to this study is explained in the following diagram.

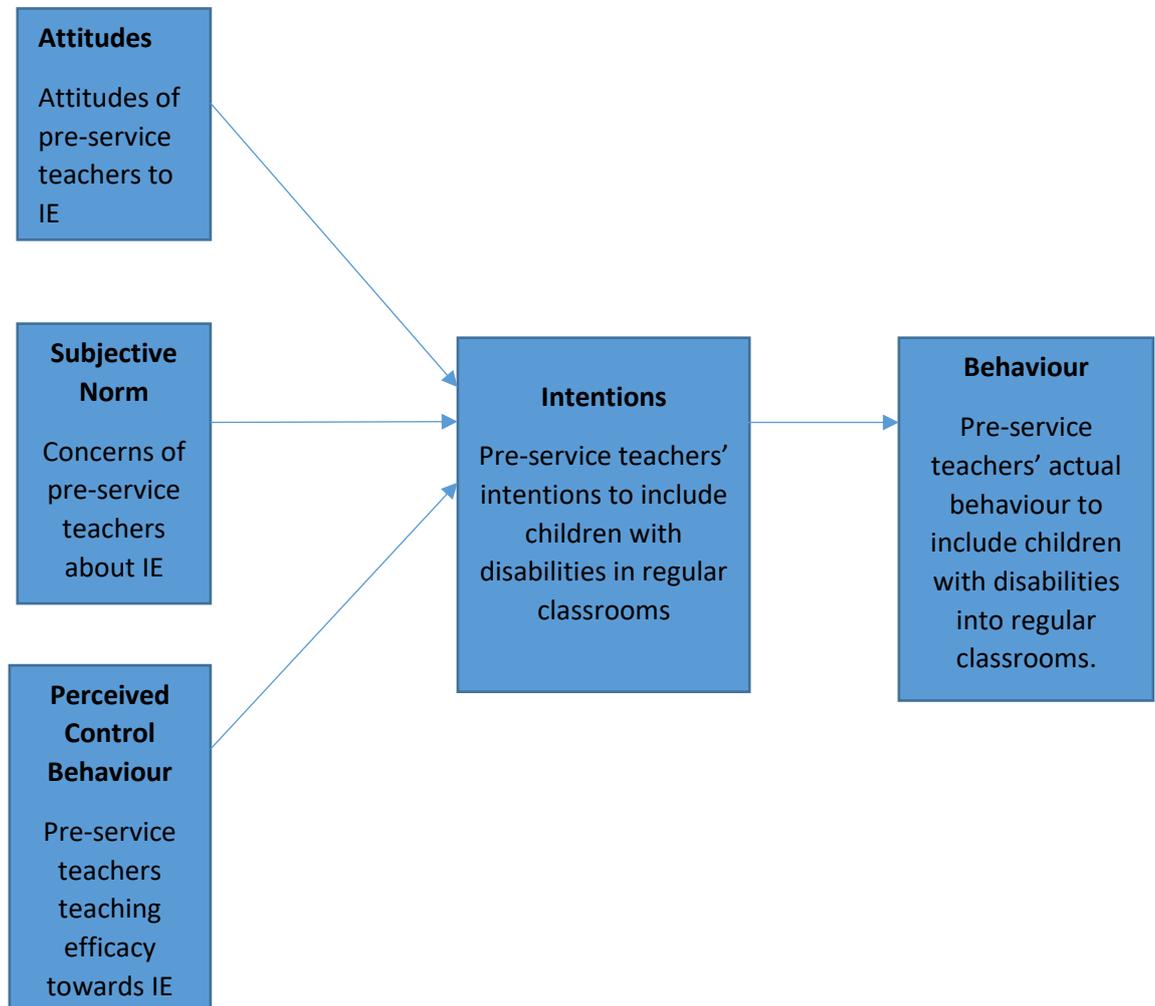


Figure 9: Application of Planned Behaviour Theory to this study

5.4 Conclusion

In conclusion, it is evident from the findings of this study in regard to pre-service teachers' attitudes, concerns and teaching efficacy towards implementing inclusive teaching practices that completing a course on inclusive education can have a positive impact on pre-service teachers' attitudes towards inclusion. Teachers' attitudes towards inclusion are a significant predictor of their intentions to include students with disabilities in the regular classroom. Additionally, it is supported by numerous studies, that when pre-service teachers have positive attitudes towards inclusion it will also have an impact on their level of teaching efficacy. The notion of completing a course will enhance pre-service teachers' confidence to teach and participate effectively in inclusive classrooms. Likewise, completing a course will also help to reduce some of the concerns and fears that pre-service teachers may have about inclusion. Addressing pre-service teachers' concerns during pre-service training may also help in preparing them for the challenges that they are likely to face in the classrooms. More importantly, completing a course on inclusive education should help prepare pre-service teachers to have knowledge about inclusion, being able to translate that knowledge in their daily practice about the moral ethics of inclusion and demonstrate inclusive practices in their teaching. The conclusion of the findings from this study will be the focus of the next chapter.

CHAPTER SIX

This chapter provides the conclusion of this study. The chapter is divided into the following sections:

6.0 Conclusion

6.1 Implications and recommendations

6.1.1 Deans and principals of higher education institutions

6.1.2 IE curriculum reform

6.2 Limitations of the study

6.3 Future directions

6.4 Conclusion

Conclusion

This chapter presents the conclusion from the findings of this study. Thereafter, implications and recommendations are made in relation to how inclusive education can be addressed within teacher education programs of higher education institutions and colleges in the Pacific region and the Solomon Islands.

This study was based on gaining an understanding about how current teacher education programs prepare pre-service teachers for inclusive education in the Pacific region and with more specific focus on the Solomon Islands. The study was done in two phases. Phase One involved nine deans and principals of higher education institutions and colleges in the Pacific. The second phase involved 78 primary pre-service teachers enrolled in the Diploma in Teaching Program at an institution in the Solomon Islands. The aim was to ascertain if the current pre-service teacher education programs offered by higher education institutions and colleges in the Pacific region equipped pre-service teachers with adequate knowledge and skills about inclusive education. This is to ensure that when pre-service teachers complete their teacher preparation program, they can be confident to meet inclusive challenges in their schools and classrooms. The following conclusions have been drawn from this study:

- (1) This study concluded that deans and principals of higher education institutions and colleges had adequate to satisfactory knowledge and understanding about inclusive education.
- (2) The deans and principals of HEIs believed that while there are gaps within the current teacher education programs about preparing pre-service teachers towards inclusive education it is desirable that pre-service teachers are equipped with adequate knowledge and skills about inclusion which need to be addressed within the curriculum of the pre-service teacher education programs.

- (3) This study concluded that the deans and principals of higher education institutions in the Pacific region perceive IE as important. Likewise, they perceive inclusive education as high quality education that should be accessible to all students regardless of their abilities or disabilities. In this regard, pre-service teacher education programs within the Pacific region need to work in collaboration with one another to prepare pre-service teachers for this endeavour in the region.
- (4) This study concluded that participating in and completing a course on inclusive education can have a positive impact on pre-service teachers' attitudes, concerns and teaching efficacy towards the implementation of inclusive education in regular classrooms. Pre-service teachers in this study had positive attitudes and high levels of teaching efficacy towards the implementation of inclusive education after completing the course. Likewise, participating in the course had a positive impact on pre-service teachers' level of concern. The course helped in reducing some of their fears and concerns. Lastly, completing a course on inclusive education can have a positive impact in pre-service teachers' intentions to include students with disabilities into the regular classrooms.
- (5) This study concluded that pre-service teachers needed more exposure to teaching and interacting with students with disabilities in regular inclusive classrooms. The amount of exposure will reduce some of their fears in working with students with disabilities. Likewise, it is important to give them the practical experience of working with those students in order to boost their level of confidence and attitudes towards students with disabilities in the classrooms.

6.1 Implications and Recommendations

The findings of this study have significant implications for teacher education institutions in the Pacific region and the Solomon Islands context in their endeavour to prepare pre-service teachers for inclusive education. This implies that deans and principals of higher education institutions and colleges involved in teacher preparation of pre-service teachers for inclusive education need to work collaboratively as stakeholders in this undertaking. In order to achieve this goal, the following recommendations are made based on the outcome findings of this study. The following Table provides an over - view of the recommendations as suggested from the outcome of this study.

Table 16: Recommendations from the outcome of the study.

Recommendations	
1	Deans and principals of HEIs should view inclusive education in a broader context.
2	Professional development for leaders and teacher educators should focus on the fundamentals of inclusive education.
3	HEIS and colleges in the Pacific region be in the front line to advocate for IE within their respective countries.
4	HEIs and colleges in the Pacific region work in collaboration to develop an IE curriculum that can be used within ITE programs across the Pacific.
5	ITE programs take action in reviewing and developing IE courses that integrate and reflect positive attitudes to inclusion and equality concepts throughout
6	A thorough review on IE curriculum is necessary. IE curriculum should build upon what will work within the Pacific context.
7	HEIs in the Pacific region to have an IE framework in place
8	IE curriculum needs strengthening through progressive evaluation of the course
9	Pre-service teachers needed exposure to teach in inclusive classrooms
10	SOEH in the Solomon Islands needs to review its current IE curriculum for pre-service teachers.

6.1.1 Deans and principals of higher education institutions

The study found that deans, principals and heads of institutions and colleges had adequate to satisfactory knowledge and understanding about inclusive education. On this premise, this study recommends that such knowledge and understanding should be viewed in a broader context that IE not only addresses the inclusion of students with special needs into regular classroom. IE is a reform that welcomes and supports diversity amongst all learners. IE aims to eliminate social exclusion that often arises as a result of negative attitudes. Additionally, IE responds more positively to diversity in race, gender, ability, religion, social class, and ethnicity (UNESCO, 1994; UNESCO, 2013; Ainscow, 2005). By having a broader knowledge and understanding about IE, heads of institution can provide guidance and leadership on how IE is addressed within Initial Teacher Education programs of HEIs in the Pacific. This goal can be achieved by providing professional development for these leaders of higher education institutions and colleges in the Pacific. The professional development about inclusive education can be extended to include teacher educators involved in the preparation of pre-service teachers to ensure that teacher educators are themselves familiar with the concept of inclusive education as well. Such undertaking is supported by Ahsan et al., (2012), Ainscow and Sandill, (2010) with Agbenyega and Sharma, (2014) about the importance of being knowledgeable with inclusive practices that will contribute positively to their leadership role that will support the facilitation of inclusive education curriculum within the teacher education programs.

The professional development for these leaders and teacher educators should focus on the fundamentals of inclusive education. This means providing them with contents of inclusive education that will help them learn and know more about the inclusion concept. This undertaking can be achieved by providing learning activities about

inclusion within the PD program and organising excursions for these leaders to visit inclusive schools and classrooms. Moreover, it is anticipated that through the PD, these leaders will realise the importance of their roles and responsibilities as facilitators of inclusive education within the curriculum of their ITE programs. This can be demonstrated through their inclusive leadership actions, which may require these leaders to familiarise themselves with how they can display inclusive characters in their practice and behaviours within their respective institutions. Additionally, the level of administrative support that these leaders of institutions and colleges can provide to support teacher educators in implementation of inclusive education within the teacher education programs (Agbenyega & Sharma, 2014).

This study concluded that deans and principals of higher education institutions in the Pacific region perceive inclusive education as important. Likewise, they perceive inclusive education as quality education that should be accessible to all students. On this premise, an undertaking to this perception would be to recommend that higher education institutions and colleges in the Pacific region be in the front line to advocate for inclusive education within their respective countries' institutions. This expectation can be achieved if deans and heads of higher education institutions work closely with their respective Ministry of Education in this undertaking. This will involve collaboration and consultations in finding ways to achieve the goal of inclusion happening in schools within their countries. Such consultations can also lead to review of legislations and policy development that will support inclusive education. Furthermore, working in collaboration with the Ministry of Education may have an impact on discussions pertaining to inclusive education, when the Ministry of Education meets annually at the PIFS. This leads to the next recommendation.

This study found that inclusive education curricula varied across institutions. However, based on the outcome of this study, it is recommended that higher education institutions and colleges in the Pacific region need to work together to develop an inclusive education curriculum that can be used within teacher education programs across the Pacific. One way to achieve this undertaking is through engaging in developing a Community of Practice (CoP) amongst them. A CoP is a theory of practice that has gained momentum recently. It refers to a group of people who share a passion for something they do and learn how to do it better as they interact regularly (Wenger, McDermott & Snyder, 2002). The success of CoP lies on members to be actively participating within the group through their contributions and being responsible to ensure that the CoP stays relevant, engaging and offers values to their domain of interests. In developing a CoP, three key elements were identified. 1) the community of people of same interest work together through interaction, discussions, collaborative activities and relationship building through time, 2) the domain of shared interest and 3) shared practices where they share resources through techniques, tools, experiences and positive process that would enhance their practices (Wenger, 1998). In relating this concept within the context of inclusive education, CoP is an important avenue whereby likeminded leaders, scholars, teacher educators and other educational professionals work together as they exchange information and knowledge to facilitate the progress and implementation of inclusive education within the curriculum of teacher education programs for pre-service teachers. Through this CoP, heads of HEIs and inclusive teacher educators can also use this avenue to share challenges they face when trying to facilitate inclusive education within their pre-service teacher education programs and how best they can address those challenges.

6.1.2 IE curriculum reform

This study found that deans and principals believe there are gaps within the current teacher education programs about preparing pre-service teachers for inclusive education. The gap is within the content of inclusive education curriculum, which varied across institutions. Therefore, reform is needed on inclusive education curriculum offered by HEIs in the Pacific region. Deans and principals of HEIs are expected to provide support to achieve that goal. This implies that ITE programs take action in reviewing and developing inclusive education courses that integrate positive attitudes to inclusion, rights and equality concepts throughout (UNESCO, 2013). The inclusive education curriculum for pre-service teachers in the Pacific should be made relevant to the Pacific context, featuring a balance of content on knowledge, information on skills and providing practicum opportunities for pre-service teachers. This call is supported by studies on pre-service teacher preparation (Angelides et al., 2006; Ahmed et al., 2013; Ahsan et al., 2013; Bartolo, 2010; Loreman et al., 2010, Sharma & Sokal, 2013). It is a desire that inclusive education curriculum reform for the Pacific region should help deepen pre-service teachers' understanding of individual differences while addressing student diversity within the Pacific context. In this regard, it is important that the curriculum should build upon what will work with the Pacific context rather than just on what has worked in other countries, particularly in western countries (Sharma, 2011). One way of undertaking this task, is to apply Shulman's (2004) 3H framework. Although Shulman's (2004) 3H framework was developed for teacher preparation in general, the concept is relevant and applicable to preparing teachers for inclusive education. This undertaking can be achieved by designing course contents that will equip pre-service teachers with cognitive knowledge and theoretical basis of teaching and inclusion (head),

understanding the moral and ethical attitudes of inclusion (heart) and developing technical and practical skills (hand) that are necessary for inclusion. Through gaining such attributes, pre-service teachers will know and understand their roles as inclusive teachers in the profession (UNESCO, 2013; Florian & Rouse, 2009; Sharma et al., 2009). Moreover, the attributes will equip pre-service teachers with confidence to teach in inclusive classrooms and to have the perception that inclusion is possible. This thought is supported by Hemming and Woodcock (2011), Forlin and Chambers (2011), Sharma and Nuttall (2016), Sharma, Simi and Forlin (2015) and Subban and Mahlo's (2017) study on pre-service teachers, which reported evidences of improvement in pre-service teachers' attitudes towards inclusion through participating in inclusive education courses. Likewise, more recent studies (Ahsan et al., 2012; 2013) conducted in Bangladesh, based on data collected from interviews with heads of higher education institutions that are providing pre-service teacher education, also revealed that existing curriculum need thorough revision in regard to inclusive education.

The reform in inclusive education can be best explained in the following diagram:

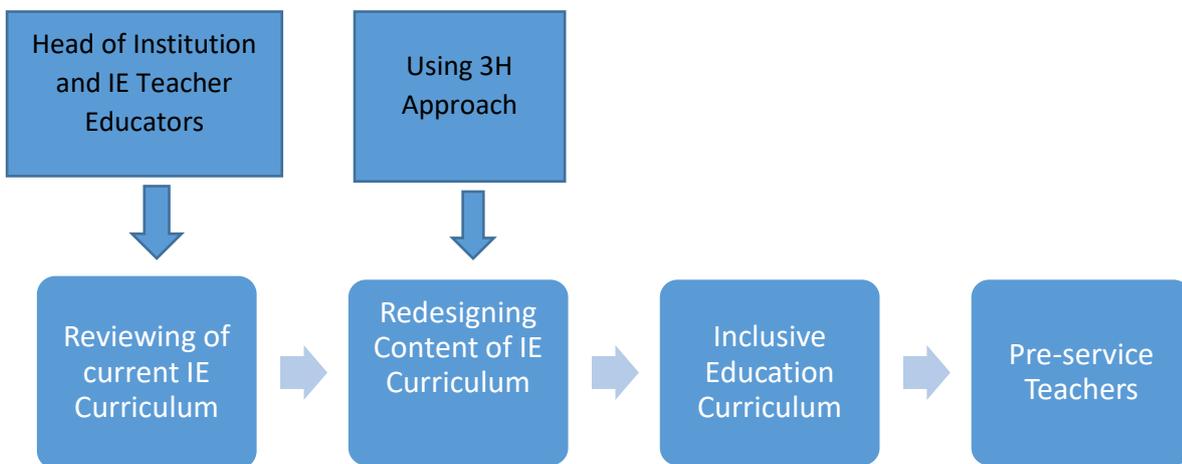


Figure 10: The Reforming Process of IE Curriculum

In this process, the institutional heads with inclusive education teacher educators meet together and review the current inclusive education curriculum in terms of the content, resources and course duration. They identify the gaps and areas that need strengthening. The outcome of the reviewing stage should inform the next stage of redesigning the IE curriculum in terms of improving and strengthening the contents of the curriculum. The contents need to address the 3H approach of preparing pre-service teachers for inclusive education. Attention needs to be given to the duration of the course to ensure that course contents are covered within the timeframe of the program as expected. Likewise, when redesigning the curriculum, it is important to identify resources that are needed to facilitate the delivery of inclusive education within the teacher education programs. The revising and redesigning of the inclusive education curriculum will then feature in the outcome of the new inclusive education curriculum. However, it is strongly recommended that at the end of the program a course evaluation be conducted. The feedback can be used to improve the course progressively.

The findings of this study, which supports a reform of the inclusive education curriculum, further recommends the need for higher education institutions in the Pacific region to have an IE Framework in place. This inclusive education framework is a set of guidelines which can be used by HEIs to assist them in planning, measuring and improving how pre-service teachers within teacher education programs can be supported. The development of this IE framework is important, as it will ensure the continuity and sustainability of the IE course within the pre-service teacher education programs.

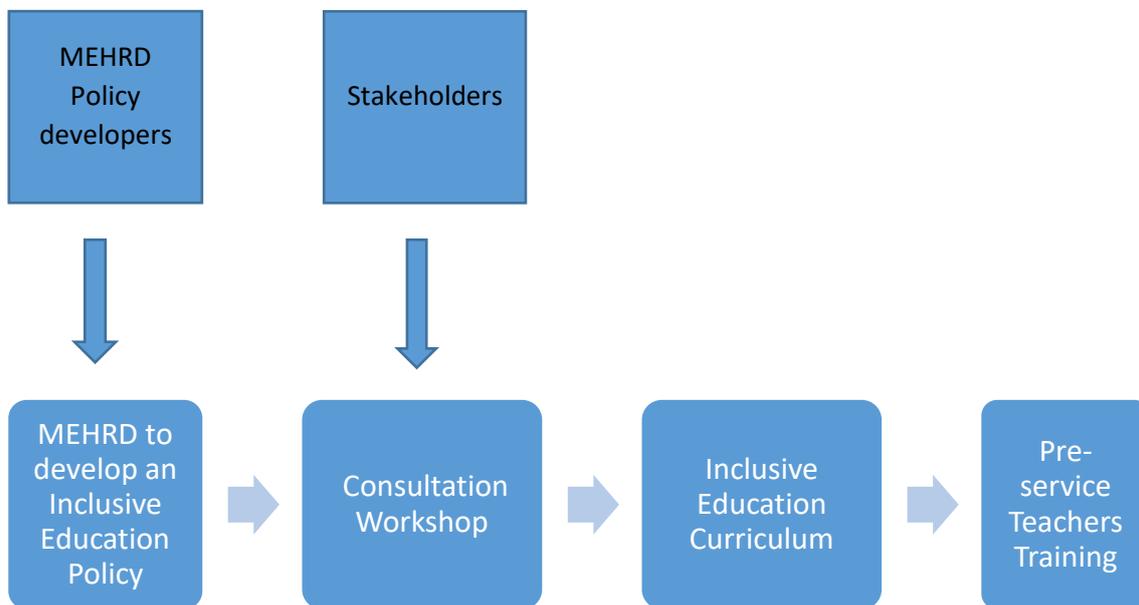
This study found that participating in a course on inclusive education had significant impact on pre-service teachers' attitudes, concerns and teaching efficacy and intentions to include students with special needs into the regular classrooms. While the study found that pre-service teachers' attitudes and teaching efficacy improved after doing the course and their concerns about inclusion had reduced moderately, it is recommended that the IE curriculum needs strengthening. This undertaking may involve constant evaluation of the course to ensure that course contents are validated with insertion of new information about inclusion. Moreover, practical learning activities should be incorporated that will help to instil positive attitudes and confidence within pre-service teachers, while at the same time addressing some of their fears and concerns. These learning activities can be tailored in the form of role plays, songs, poems and debates depending on the nature of the lessons. Additionally, inviting guest speakers from within the communities of people living and working with disabilities to deliver lectures and getting students to visit schools that includes students with disabilities.

This study found that pre-service teachers needed exposure to teaching in inclusive classrooms. Therefore, this study recommends that pre-service teachers are given that opportunity to teach in inclusive classrooms. While this recommendation is deemed as important, inclusive education still remains a challenge in the Pacific region including the Solomon Islands. While most countries in the Pacific region have endorsed inclusive

education through their Governments, most have yet to implement it within their education systems. However, this challenge should not hinder ITE programs from achieving the goal of preparing pre-service teachers for inclusive education because already a few students with disabilities are entering the mainstream classrooms, which proves that inclusion benefits everyone. This recommendation is done in light of exposing pre-service teachers to teach in inclusive classrooms where pre-service teachers will get first hand practical experience of teaching and interacting with all students including those with disabilities in regular classrooms. This leads to the next recommendation.

The reforming of the inclusive education curriculum also has significant implications for the School of Education and Humanities (SOEH) that offers Teacher Education program for pre-service teachers in the Solomon Islands. This implies the need for SOEH to review its current IE curriculum within the teacher education program. In this regard, the process of reviewing and redesigning of the current inclusive education needs to take place. Doing so may require an input from a few stakeholders which includes the Ministry of Education and Human Resources (MEHRD), Solomon Islands National University (SINU), Non-Government Organisations like UNICEF, World Vision, People with Disability Solomon Islands (PWDSI), Solomon Islands National Teachers Association (SINTA) and the Red Cross Special Development Centre. These stakeholders can engage in consultation workshops facilitated by the School of Education and Humanities within SINU, to share their views on aspects of inclusion that can be featured within the IE curriculum for pre-service teachers. The process can be illustrated in the following diagram:

Figure 11. Development of an IE Curriculum for the Solomon Islands



This process requires MEHRD to develop a policy that will support IE. This development of IE policy can be done in consultation with stakeholders. Formulation of an IE policy will inform the next stage of the process where stakeholders are brought together to review the IE curriculum and identify the areas which the curriculum needs to address. The feedback from this consultation workshop will inform the development of the IE curriculum for pre-service teachers. The School of Education and Humanities needs to review the mode of delivery of the inclusive education. The teacher education program structure at SOEH is quite rigid and a seven week semester is not enough to adequately cover the inclusive education curriculum. In addressing this situation an option of delivering the inclusive education curriculum would be through the ‘infusion model’ where contents and strategies for inclusive education can be broadened and infused across all curricular areas. The content infusion model has been well researched and used (Loreman, 2010, Cameron & Cook, 2007).

Ultimately, since Ajzen's (1991) Theory of Planned Behaviour was used to govern this study, it is appropriate to conclude with elements of this framework. With regard to the deans and principals of higher education, it is evident that improved attitudes, increased control over the phenomenon of inclusive education and the need for the Solomon Islands to meet world standards with regard to inclusion are the key factors driving the inclusion process. Aligned to this, pre-service teachers are also facilitated by improved attitudes towards inclusion, their self-efficacy beliefs regarding their ability to include all students, and reducing their concerns may be productive with advancing inclusive practice in the Pacific region and the Solomon Islands.

6.2 Limitations of the study

The findings of this study represent an insight into investigations carried out in the field of education. As such, the results are applicable to the constituents of this particular study and it would be imprudent to generalise these findings to other pre-service teaching populations.

The literature review encapsulated studies from around the globe to offer a holistic and accurate view of inclusive education in contemporary settings. Only a few studies have been conducted in the Pacific, which were alluded to in the investigation. Additionally, the sample size, drawn from a single institution, was an attempt at representing the wider demographic of pre-service teachers, and as such may have potentially provided a partially complete picture of their perspectives regarding inclusive education. Further studies in the field may consider larger samples, drawing on populations from across the Pacific region.

Moreover, the questionnaire utilised to measure pre-service teachers' attitudes, concerns and self-efficacy beliefs regarding inclusive education were primarily designed for Australia settings and have been used in multiple international context. Care should be

exercised when extrapolating these results as some cultural, social and contextual factors may have impacted on participants' responses. Although AIS and the CIES have been used widely in international context, they have not been widely used in the Pacific context. It is possible that some of the concern/statements identified in the scales may need to be fine tuned if a researcher wished to use them for another Pacific context. In this study, all scales were validated for the Solomon Islands context.

This study also considered the perceived self-efficacy beliefs of pre-service teachers, and as such should be distinguish from actual self-efficacy practice. Much of the collected data is based on self-reports, and should be viewed with this limitation. Further investigations should be conducted with regard to self-efficacy in practice, once teachers have received additional training or development.

6.3 Future Direction

This study is the first of its kind in the Pacific region in relation to teacher preparation of pre-service teachers for inclusive education. While many PICs have acknowledged the importance of inclusive education, more research is still needed within this area and in regard to how different PICs are addressing inclusive education within their education systems and the challenges that teacher education programs face in preparation of pre-service teachers for IE. Additionally, further investigation is required regarding the perceptions of the deans of schools, using more qualitative methods, to obtain their in-depth views about inclusion.

Furthermore, seeing that this study is about pre-service teacher preparation for inclusive education, follow-up studies are needed when pre-service teachers are out in the classrooms. This is to ensure that pre-service teachers are practising inclusive knowledge and skills learned from their teacher education programs. Likewise, such follow-up study will

also identify gaps that were not covered within the teacher preparation curriculum of pre-service teachers.

6.4 Summary

Inclusive education has become a global agenda especially when many developed and developing countries are now focusing on including students with disabilities into the regular classrooms. That has also become an agenda that PICs are working towards despite the many challenges that these countries are faced with. The following analogy thus concludes the importance of this study.

Pacific Islanders are known for travelling the vast ocean in large canoes. In relating this analogy to Inclusive Education, I want to sum up this study with this simple illustration. Pacific Island Countries are paddling a canoe in their quest for Inclusive Education. Travelling on an ocean can be peaceful when the sea is calm, but can be dreadful when the sea is rough. The journey in quest for IE is not easy in the Pacific where the ocean is always rough, referring to the challenges in terms of inadequate of policies to support inclusion, inadequate preparation of trained teachers for inclusive education, limited resources in terms of funding for IE infrastructure, teaching with learning materials and negative attitudes from within the societies. Despite these challenges, PICs can still paddle together in working together to overcome the challenges they face through developing a Community of Practices amongst them. Although diverse in culture, there is one thing that holds PICs together – their LOVE for one another paddling together in the vast ocean. DIVERSE CULTURE, ONE OCEAN, ONE PEOPLE.

This can be best illustrated by the following figure.



Figure 12. Diverse Culture, One Ocean, One People

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APPENDICIES

Appendix A – Ethics Certificate of Study Approval



Human Ethics Certificate of Approval

This is to certify that the project below was considered by the Monash University Human Research Ethics Committee. The Committee was satisfied that the proposal meets the requirements of the *National Statement on Ethical Conduct in Human Research* and has granted approval.

Project Number: CF15/2423 - 2015000976

Project Title: Understanding perceptions of university academics about the preparedness of pre-service teachers to teach in inclusive classrooms.

Chief Investigator: Assoc Prof Umesh Sharma

Approved: **From:** 17 June 2015 **To:** 17 June 2020

Terms of approval - Failure to comply with the terms below is in breach of your approval and the Australian Code for the Responsible Conduct of Research.

1. The Chief investigator is responsible for ensuring that permission letters are obtained, if relevant, before any data collection can occur at the specified organisation.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must include your project number.
6. **Amendments to the approved project (including changes in personnel):** Require the submission of a Request for Amendment form to MUHREC and must not begin without written approval from MUHREC. Substantial variations may require a new application.
7. **Future correspondence:** Please quote the project number and project title above in any further correspondence.
8. **Annual reports:** Continued approval of this project is dependent on the submission of an Annual Report. This is determined by the date of your letter of approval.
9. **Final report:** A Final Report should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected date of completion.
10. **Monitoring:** Projects may be subject to an audit or any other form of monitoring by MUHREC at any time.
11. **Retention and storage of data:** The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

Professor Nip Thomson
Chair, MUHREC

cc: Ms Janine Simi

Monash University, Room 111,
Chancellery Building E 24 Sports
Walk, Clayton Campus, Wellington
Rd Clayton VIC 3800, Australia
Telephone: +61 3 9905 5490 Facsimile: +61 3 9905 3831
Email: muhrec@monash.edu
<http://intranet.monash.edu.au/researchadmin/human/index.php> ABN 12 377
614 012 CRICOS Provider #00008C

Appendix B – Invitation Letter to Deans

To : Deans of Teacher Training Education Faculties
From : Janine Simi

Date : June 12th 2015

Subject: Invitation to participate in study

I am currently pursuing a course of study on '***understanding perceptions of university academics about the preparedness of pre-service teachers to teach in inclusive classrooms***'. A key aim of the study is to understand how well initial teacher education programs are preparing pre-service teachers for inclusive education across the Pacific Countries but more specifically in Fiji, and Solomon Islands. While this study will be conducted in Fiji and Solomon Islands, it would be good to gain an understanding on how other teacher education providers in the Pacific region are addressing this topic of 'Inclusive Education' in their teacher education programs.

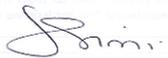
As more students with disabilities enter regular classrooms across the Pacific countries, regular classroom teachers will be expected to acquire new skills and knowledge. The purpose of this survey is to gain an understanding of how well your university / college is preparing pre-service teachers for inclusive education.

Higher educational institutes particularly those involved in preparation of pre-service teachers will play a key role in preparing the workforce for inclusive education.

You are kindly invited and requested to take part in this study by filling in the survey form and returning it within the next two weeks. Your participation in the study will be greatly appreciated.

Any queries regarding this proposed study can be directed to me.

Thanks you for your understanding.



Janine Simi

PhD Student

Monash University

Melbourne, Victoria

Australia

Appendix C – Explanatory statement for Deans and Principals of HEIs

Explanatory Statement

(Deans of Higher Education Institution)

Study title: *Understanding perceptions of university academics about the preparedness of pre-service teachers to teach in inclusive classrooms.*

Chief Investigator : Associate Professor Dr. Umesh Sharma

Phone: + 61 3 99052052

Email: umesh.sharma@monash.edu

Student' name: Janine Simi

Phone: 0416 419 837

Email: jsim27@student.monash.edu

You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not you participate in this research. If you would like further information regarding any aspects of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

My name is Janine Simi and I am conducting a research project with Associate Professor Dr. Umesh Sharma of Monash University. This project forms my research towards a PhD in Education at Monash University. Your valuable input and contribution will ensure the viability of this project which will be produced as a thesis.

Study background

Inclusive education has been suggested as a way forward of education for all children. It is based on the premise that all children can learn together in the regular classroom regardless of their abilities or disabilities. Research has suggested that teachers play a critical role in the successful implementation of inclusive education. Therefore, their training on inclusive education is important. Teachers need to develop attitudes and acquire knowledge and skills that will enable them to become effective inclusive teachers during their pre-service training. This expectation forms the base of this study.

Aim / Purpose of the Study

This study aims to gain an understanding on how well current teacher education programs prepare pre-service teachers for inclusive education in the Pacific. The aim of the study will be achieved by answering the following question: What are the perceptions of Deans of Higher Education Institution in the Pacific about the preparedness of pre-service teachers to teach effectively in inclusive classrooms?

Why were you chosen for this study?

The decision to have you as study participants was based on the notion that your institution is involved in training of pre-service teachers in the Pacific. Therefore, information gathered from you will contribute to answering the key question of this study and will also inform us if the new teaching force is ready to include students with disabilities in their classrooms or not.

Possible benefits

Your participation in this study will help us to learn about how well your teacher graduates are being prepared to teach in inclusive classrooms. Your participation will also allow you to reflect on the core areas that need to be targeted in teacher education for adequate preparation of teachers. It is likely that your participation may also stimulate discussion on the issue of inclusive education within your Education faculties. This may result in your institution making adjustments in your education programs.

What does the research involved?

This study involves completion of a survey questionnaire and response to a few open ended questions. If you are willing to participate by responding to the survey, please also complete the attached consent form. It is anticipated that the completion of the survey questionnaire will take no more than 20 minutes to complete.

Consenting to participate in the project and withdrawing from the research

To collect data, your consent to participate is important. Consent process involves the following:

- For the Survey Questionnaire – your participation is voluntary. You can choose not to participate if you are not comfortable with it. However, a consent form is attached. If you wish to participate, please fill out the consent form and send it back with the survey form through email.
- Please note that it may not be possible to withdraw data once they have been collected and submitted.

Confidentiality

Data collected for this study will be treated as confidential. All measure will be taken to protect your identity and to maintain the confidentiality of the data collected. In the final analysis, no findings which could identify any of the individual participants will be included in the survey questionnaire. Codes will be used for analytical purposes. Data collected from the study will be published through thesis and may be presented at conference. A copy can be made available online for viewing.

Storage of data

All data collected will be solely used for the purpose of this study. The data can only be accessed by the supervisors. Furthermore, all data collected will be stored at least five years as prescribed by the University's regulation. Data collected will be

stored for five years before discarded through shredding as prescribed by the university's regulation.

Should you have any concerns about the conduct of this study, you are welcomed to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer

Monash University Human Research Ethics Committee (MUHREC)

Room 111, Building 3e

Research Office

Monash University VIC 3800

Tel: +61 3 9905 2052

Email: muhrec@monash.edu

2) Associate Professor – Dr. Umesh Sharma

Krongold Centre

Faculty of Education, Room G10A

Building 5, Monash University

Melbourne, Victoria, 3806

Tel: +61 3 9905 4388

Email: umesh.sharma@monash.edu

Thank you

Janine Simi

Tel: 0416 419 837

Email: jsim27@student.monash.edu

Appendix D - Survey Questionnaire for Deans of Higher Education in the Pacific

Survey Questions

Please answer the following questions

- 1) What is your understanding of Inclusive Education?

- 2) Does your initial teacher education program cover Inclusive Education? Circle – Yes or No.

- 3) If 'Yes', do you cover it in

- a) one subject ? or
b) in more than one subject
Please circle one only.

- 4) Describe the content of the course. What information do you cover?

- 5) Can you send us a copy of your curriculum on Inclusive Education?

- 6) In your view, how much knowledge do you believe pre-service teachers acquire in the course for them to be able to teach students with disabilities in inclusive classrooms? *Please circle one response below.*

Nothing at all To some extent To a larger extent

- 7) In your view, how much information on skills do you believe pre-service teachers acquire in the course for them to be able to teach students with disabilities in inclusive classrooms? *Please circle one response below*

Nothing at all To some extent To a larger extent

8) In your view, how much practice (practicum during initial teacher education program) do you believe pre-service teachers acquire in the course for them to be able to teach students with disabilities in inclusive classrooms? *Please circle one response below*

Nothing at all To some extent To a larger extent

9) In your view, how willing (attitudes) pre-service teachers are at the completion of initial teacher education program to teach students with disabilities in inclusive classrooms? *Please circle one response below*

Nothing at all To some extent To a larger extent

10) In your view, how confident pre-service teachers are at the completion of initial teacher education program to teach students with disabilities in inclusive classroom? Please circle one response below.

Nothing at all To some extent To a larger extent

11) In your view, what skills are critically necessary for pre-service teachers in order to teach students with disabilities in inclusive classroom? ***Please list them from Most Important to Least Important***

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____

12) Are there any comments that you would like to add in regard to how your institution prepares pre-service teachers for inclusive education?

Thank you for your participation

Appendix E - Consent Form – Deans of Higher Education Institution

Study title: *‘Understanding perceptions of university academics about the preparedness of pre-service teachers to teach in inclusive classrooms’.*

Investigator: Janine Simi

I have been asked to take part in the research project specific above. I have read and understood the Explanatory Statement and I hereby consent to participate in this study.

I consent to the following:

	Yes	No
Taking part by completing the survey questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
Returning the complete survey questionnaire	<input type="checkbox"/>	<input type="checkbox"/>

Name of participant _____

Participant signature _____ **Date** _____

Appendix F – Letter of Permission to Dean of SOEH

Janine Simi
100 Clyde Road
Monash University
Berwick, 3806
Melbourne, Australia
December 2nd 2014

Dean
School of Education and Humanities
Solomon Islands National University
Panatina Campus
P. O. Box R113, Honiara
Solomon Islands

Dear Dr. Sade

Subject: Requesting permission to do Research Study at SOEH

I am a student at Monash University. In order to full fill the requirement of my program, I need to do a research study. Being a teacher educator at SOEH, I have decided to do a study on the year 1 primary pre-service teachers currently studying at the School of Education and Humanities. My study aims to gain an understanding on the extent to which teacher education programs prepares pre-service teachers for inclusive education in the Pacific and more specifically in the Solomon Islands. The study will involve doing a survey and holding two Focus Group Interviews with the year 1 primary pre-service teachers in order to gain that understanding and the extent to which their training prepares them for inclusive education.

It will take three months to collect the required data for the study. During this time, participants will fill in a survey questionnaire at the beginning and at the end of their course on ES104 – Introduction to Special Education and Inclusive Practices. Data collected from the study will help in answering the topic of the study and will be used solely for that purpose. Before participating in the study, an explanatory statement will be read and given to students, outlining the nature of the study.

This study will benefit SOEH because the findings will help to review and improve the current course - ES104 and to see how the training program can prepare pre-service teachers for inclusive education. This study will ensure that the identity of participants will be protected and students will be asked to give their consent whether or not to participate in the study. With this background information I can assure you that the study will comply with all ethical standards. Information collected will be used solely for the purpose of this study. Therefore, I am humbly requesting your permission to do my study at the School of Education and Humanities and involving your students in this study.

Thank you for your understanding.

Yours sincerely,

A handwritten signature in blue ink that reads "Janine Simi". The signature is stylized with a large, looping initial "J" and a cursive "S".

Janine Simi

Appendix G - Explanatory statement and Survey questionnaire for Pre-service Teachers

Explanatory Statement – Pre-service Teachers

Study Title: *To what extent do current teacher education programs prepare pre-service teachers for inclusive education in the pacific and more specifically in the Solomon Islands?*

Chief Investigator : Associate Professor Dr. Umesh Sharma

Phone: + 61 3 99052052

Email: umesh.sharma@monash.edu

Student' Name: Janine Simi

Phone: 0416 419 837

Email: jsim27@student.monash.edu

You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not you participate in this research. If you would like further information regarding any aspects of this project, you are encouraged to contact the researchers via the phone number or email address listed above.

My name is Janine Simi and I am conducting a research project with Associate Professor Dr. Umesh Sharma of Monash University. This project forms my research towards a PhD in Education at Monash University. Your valuable input and contribution will ensure the viability of this project which will be produced as a thesis.

Study background

Inclusive education has been suggested as way forward of education for all children including those with disabilities. It is based on the premise that all children can learn together in the regular classroom regardless of their abilities or disabilities. Research has suggested that teachers play critical role on the success of inclusive education in regular classroom. Therefore, training on inclusive education is important. Teachers need to develop attitudes and acquire knowledge and skills that will enable them to become effective inclusive teachers. In addition, teachers' attitudes, concerns and teaching beliefs on inclusive education are equally important and needs to be addressed during their pre-service training program. This expectation formed the basis of this study.

The aim / purpose of the study

This study aims to gain an understanding on the extent to which pre-service teachers are prepared for inclusive education in their pre-service training program in the Solomon Islands. More importantly, to understand the attitudes, concerns and level of teaching efficacy pre-service teachers have towards teaching students with disabilities in regular classroom. In addition, if participation in a course improves their attitudes, concerns and teaching efficacy beliefs on inclusive education. We are also interested in understanding what factors may

contribute in changing pre-service teachers' attitudes, concerns and teaching beliefs. In order to gain that understanding, a Survey questionnaire and Semi-structure Interview will be used to collect that data from pre-service teachers.

Possible benefits

Your participation in this research is to help us understand how well prepared pre-service teachers are to teach in inclusive classroom and what else can be done at the time of teacher training to better prepare them to teach in inclusive classroom. Data collected will be used to compare with international data collect in other countries. This should inform us about any exemplary practice that could be beneficial to teacher education programs in the Solomon Islands as well as other countries.

What does the research involve?

This study involves completion of a survey questionnaire and response to a few open ended questions at the beginning of the teacher education course (pre-test) on special education and inclusive practices and once again at the completion of the course (post-test). We would like to invite some of you to participate in focus group interviews. The focus group interview will be done after you do your teaching experience (practicum). If you are willing to participate in the interviews, please also complete the attached consent form

How much time will the research take?

It is anticipated that the completion of the survey will take no more than 30 minutes at the pre-test stage and 30 minutes at the post-test stage. The Focus Group Interviews will take an hour and a half (1.5hr) to complete.

Why you were chosen for this research

You are invited to participate in this study on teacher preparedness for inclusive education. Please note that your participation in the survey is voluntary and you do not have to complete the survey if you do not wish to participate in the research.

The decision to have you as study participants was based on the notion that you are doing a Diploma of Teaching (Primary) pre-service program. You are currently doing an introduction course on Special Education and Inclusive Practices. Information gathered from you will contribute to answering the key question of this study.

Consenting to participate in the project and withdrawing from the research

To collect data, this study will use *Survey Questionnaire* and *Focus group interview*. Your consent to participate is important. Consent process involves the following:

- For the Survey Questionnaire – your participation is voluntary. You can choose not to participate if you are not comfortable with it.
- For the Focus group Interview – participants will be required to sign and return a consent form. If you wish to withdraw from the focus group interview, please give the researcher at least five days' notice in advance.

- Please note that it may not be possible to withdraw data once they have been collected and submitted as responses are anonymous.

Inconvenience/discomfort

Please note that your participation in this research study will not impact in any way on your grades/marks in the subject. The information you provide will be used for the purpose of this study.

You can withdraw from the study

Being in this study is voluntary and you are under no obligation to participate. You do not need to answer all the questions if you do not feel comfortable answering any of the questions.

Confidentiality

The School of Education and Humanities is a small community. Data collected for this study will be treated as confidential. All measure will be taken to protect your identity and to maintain the confidentiality of the data collected. In the final analysis, no findings which could identify any of the individual participants will be included in the survey questionnaire or the focus group interviews. Codes will be used for analytical purposes. Data collected will solely be used for the purpose of this study.

Storage of data

All data collected will be stored in accordance with Monash University regulation, kept on University premises. The data can only be accessed by the supervisors. The data collected will be stored at least five years as prescribed by the University's regulation. A report of the study may be submitted for publication, but individual participants will not be identifiable in the report.

Use of data for other purposes

Only group data will be used to report the results of the survey and the focus group interviews. Nobody will be named and will not be identified in any way.

Concerns

Should you have any concerns about the conduct of this study, you are welcomed to contact the following:

(1) The Executive Officer, Monash University Human Research Ethics (MUHREC)
Monash University Human Research Ethics Committee (MUHREC)

Room 111, Building 3e

Research Office

Monash University VIC 3800

Tel: +61 3 9905 2052

Email: muhrec@monash.edu

(2) Associate Professor – Dr. Umesh Sharma

Krongold Centre

Faculty of Education, Room G10A

Building 5, Monash University

Melbourne, Victoria, 3806

Tel: +61 3 9905 4388

Email: umesh.sharma@monash.edu

Thank you

Janine Simi

Tel: 0416 419 837

Email: jsim27@student.monash.edu

Appendix H – Survey Questionnaire for Pre-service Teachers

A SURVEY OF EDUCATORS' PERCEPTIONS ABOUT INCLUSIVE EDUCATION

In order to be able to track pre and post data please include the first four digits of your student number. This will not be used to identify individuals and will be removed from the data following the second administration.

PART A

Attitudes to Inclusion Scale

The AIS measures educators' attitudes to the inclusion of students with diversities in regular schools. Inclusion means that students who have diverse learning needs are educated in regular classrooms alongside their peers with necessary support to students and the teacher. Please rate your degree of agreement by choosing one of the 7 anchors that best reflects your agreement with each statement. Please note that there are no right or wrong answers.

1	2	3	4	5	6	7
Strongly disagree	Moderately disagree	Slightly Disagree	Undecided	Slightly agree	Moderately Agree	Strongly agree

	1	2	3	4	5	6	7
1. "I believe that all students regardless of their ability should be taught in regular classrooms."							
2. "I believe that inclusion is beneficial to all students socially."							
3. "I believe that inclusion benefits all students academically."							
4. "I believe that all student can learn in inclusive classrooms if their teachers are willing to adapt the curriculum."							
5. "I am pleased that I have opportunity to teach students with lower acadmic ability alongside other students in my class."							
6. "I am excited to teach students with a range of abilities in my class."							
7. "I am pleased that including students with a range of abilities will make me a better teacher."							
8. "I am happy to have students who need assistance with their daily activities included in my classrooms."							

Questions 11 to 17 relate to your teaching in relation to working with students who need additional support. Please indicate how likely will you do this. Please note that the anchors used for the items below are different from those used above.

1	2	3	4	5	6	7
Extremely unlikely	Very unlikely	Somewhat unlikely	Not sure	Somewhat likely	Very likely	Extremely likely

	1	2	3	4	5	6	7
11. "Change the curriculum to meet the learning needs of a student with learning difficulty enrolled in your class."							
12. "Consult with the parents of a student who is struggling in your class."							
13. "Consult with your colleagues to identify possible ways you can assist a struggling student in your class."							
14. "Undertake a professional development program so you can teach students with diverse learning needs well."							
15. "Consult with a student who is displaying challenging behaviours to find out better ways to work with him/her."							
16. "Include students with severe disabilities in a range of social activities in your class."							
17. "Change the assessment tasks to suit the learning profile of a student who is struggling (e.g providing longer time to complete the task or modifying test questions)."							

**PART B
CONCERNS ABOUT INCLUSIVE EDUCATION**

Inclusive education is one form of educational provision that may be made for students with disabilities within the school system. In the context of your **expectations** regarding the school situation and/or your **personal experiences**, **please** indicate whether any of the following items will be of concern to you if a student with a disability were included in your class/school.

INSTRUCTIONS

Please indicate your level of concern by circling the most appropriate number that applies to you.

4	3	2	1	
Extremely Concerned	Very Concerned	A Little Concerned	Not at All Concerned	
1. I will not have enough time to plan educational programs for students with disabilities.	4	3	2	1
2. It will be difficult to maintain discipline in class.	4	3	2	1
3. I do not have knowledge and skills required to teach students with disabilities.	4	3	2	1
4. I will have to do additional paper work.	4	3	2	1
5. Students with disabilities will not be accepted by students without disabilities.	4	3	2	1
6. Parents of children without disabilities may not like the idea of placing their children in the same classroom with students with disabilities.	4	3	2	1
7. My school will not have enough funds to implement inclusion successfully.	4	3	2	1
8. There will be inadequate para-professional staff available to support students with disabilities (e.g., speech pathologist, physiotherapist, Occupational therapist)	4	3	2	1
9. I will not receive enough incentives (e.g. additional remuneration or allowance) to teach students with disabilities.	4	3	2	1
10. My workload will increase.	4	3	2	1
11. Other school staff members will be stressed.	4	3	2	1
12. My school will have difficulty in accommodating students with various types of disabilities because of inappropriate infrastructure (e.g. architectural barriers).	4	3	2	1
13. There will be inadequate resources/special teacher staff available to support inclusion.	4	3	2	1
14. My school will not have adequate special education instructional materials and teaching aids (e.g. Braille).	4	3	2	1
15. The overall academic standard of the school will suffer.	4	3	2	1

16. My performance as a classroom teacher will decline. 4 3 2 1
17. The academic achievement of students without disabilities will be affected. 4 3 2 1
18. It will be difficult to give equal attention to all students in an inclusive classroom. 4 3 2 1
19. I will not be able to cope with students with a disability who do not have adequate self-care skills (e.g. students who are not toilet trained). 4 3 2 1
20. There will be inadequate administrative support to implement the inclusive education program. 4 3 2 1
21. The inclusion of a student with a disability in my class will lead to a higher degree of anxiety and stress in me. 4 3 2 1

PART C

Self-efficacy in Implementing Inclusive Practices Scale

This survey is designed to help us understand the nature of factors influencing the success of routine classroom activities in creating an inclusive classroom environment. Please circle the number that best represents your opinion about each of the statements. Please attempt to answer each question

1 Strongly Disagree	2 Disagree	3 Disagree Somewhat	4 Agree Somewhat	5 Agree	6 Strongly agree
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		SD	D	DS	AS	A	SA
1	I can use a variety of assessment strategies (for example, portfolio assessment, modified tests, performance-based assessment, etc.).	1	2	3	4	5	6
2	I am able to provide an alternate explanation or example when students are confused.	1	2	3	4	5	6
3	I am confident in designing learning tasks so that the individual needs of students with disabilities are accommodated.	1	2	3	4	5	6
4	I can accurately gauge student comprehension of what I have taught.	1	2	3	4	5	6
5	I can provide appropriate challenges for very capable students.	1	2	3	4	5	6
6	I am confident in my ability to get students to work together <i>in pairs or in small groups</i> .	1	2	3	4	5	6
7	I am confident in my ability to prevent disruptive behaviour in the classroom before it occurs.	1	2	3	4	5	6
8	I can control disruptive behaviour in the classroom.	1	2	3	4	5	6
9	I am able to calm a student who is disruptive or noisy.	1	2	3	4	5	6
10	I am able to get children to follow classroom rules.	1	2	3	4	5	6
11	I am confident when dealing with students who are physically aggressive.	1	2	3	4	5	6
12	I can make my expectations clear about student behaviour.	1	2	3	4	5	6
13	I can assist families in helping their children do well in school.	1	2	3	4	5	6
14	I can improve the learning of a student who is failing.	1	2	3	4	5	6
15	I am able to work jointly with other professionals and staff (e.g. aides, other teachers) to teach students with disabilities in the classroom.	1	2	3	4	5	6
16	I am confident in my ability to get parents involved in school activities of their children with disabilities.	1	2	3	4	5	6

17	I can collaborate with other professionals (e.g itinerant teachers or speech pathologists) in designing educational plans for students with disabilities.	1	2	3	4	5	6
18	I am confident in informing others who know little about laws and policies relating to the inclusion of students with disabilities.	1	2	3	4	5	6

A. **PART D: Background Information**

Instructions: Please respond to the following questions by ticking the box that corresponds with the most appropriate answer that applies to you.

I am a Teacher in training pre-service teacher

1. Your gender

Female Male

2. Your age is

Below 25 years 36 – 40 years
 25 – 30 years Above 40 years
 31 – 35 years

3. What is your highest level of qualification?

Less than Bachelor's degree Educational Specialist degree
 Bachelor's degree Doctor of Education
 Master's degree Doctor of Philosophy

4. Which grade do you currently teach or planning to teach?

Preschool
 Grade 1 – Grade 6 (primary)
 Grade 7 – Grade 12 (secondary)

5a. Do you know any person with a disability?

Female Male

5b. If yes, state the nature of your relationship? (please tick all that is applicable)

Acquaintance (eg neighbour or store clerk)
 Casual (eg fellow student, co-worker, employee)
 Close (eg room-mate, near relative)
 Intimate (eg spouse, child, sibling)

6. Throughout your teaching career, please estimate the relative amount of exposure you had to the education of students with a disability.

None
 Some
 High

7. Please rate your degree of success to date in teaching students with diverse learning needs in a regular classroom.

Low
 Average
 High

8. Please rate your level of confidence in teaching with students with a disability in a regular classroom.

Low
 Average
 High

9. Please rate the level of training you have in the following:

▪ Preservice training in special education

None

1 unit/subject

2 units/subjects

More than 2 units/subjects

▪ Preservice training in inclusion

None

1 unit/subject

2 units/subjects

More than 2 units/subjects

B. Can you list three factors that will facilitate inclusion of students with disabilities in your class(in other words what support will make it easier for you to include students with disabilities in your class)

a. _____

b. _____

c. _____

C. Can you list three factors that hinder or will hinder inclusion of students with disabilities in your class

a. _____

b. _____

c. _____

**Thank you for your time and effort.
You can be assured that all information will be kept confidential.**

Appendix I – Focus Group Interview Questions

Focus Group Interviews

The purpose of this research is to gather information on how pre-service teachers are being prepared for inclusive education in their initial teacher education program. I am interested in your view about how well you are being prepared to teach in inclusive classrooms. Secondly, in your view if professional experience (practicum) had prepared you for inclusive education.

Focus Group Discussions – Interview Questions

- 1) What do you understand about Inclusive education?
- 2) Do you think the course ES104 – Introduction to Special Education and Inclusive Practices has prepared you well for inclusive education?
 - If 'yes' explain how
 - If 'no' explain why not
 - What extra changes can be done to improve the course?
- 3) Talk about your teaching experience. How did it go for you?
- 4) During your practicum (professional experience) how were you supported to teach CWD at the school?
- 5) If you think you need more support, what support would that be?
- 6) In your view what do you think about the length of time allocated for practicum (teaching experience), was sufficient for you?
- 7) In your view, how do you think the course – ES104 can be improved for you to become an Inclusive Education teacher?

Appendix J – Consent Form for Pre-service Teachers to participate in FGD

CONSENT FORM

(Pre-service teachers – Focus Group Interview)

Study Title: *To what extent do current teacher education programs prepare pre-service teachers for inclusive education in the Pacific and more specifically in the Solomon Islands?*

Investigator: Janine Simi

I have been asked to take part in the research study specified above. I have read and fully understood the Explanatory Statement and I hereby consent to participate in this study.

I consent to the following:	Yes	No
My participation in the study is voluntary	<input type="checkbox"/>	<input type="checkbox"/>
I can withdraw from the study at any time	<input type="checkbox"/>	<input type="checkbox"/>
I can be interviewed about my professional experiences on teaching and learning in inclusive classrooms in the Solomon Islands.	<input type="checkbox"/>	<input type="checkbox"/>
The data that I provide may be used in future research	<input type="checkbox"/>	<input type="checkbox"/>
My participation on follow up visits of the study with the researcher	<input type="checkbox"/>	<input type="checkbox"/>

Name of participant _____

Participants' signature _____ Date _____

I consent to Audio recording of the FGD Interview

Name of Participant _____

Participants' signature _____ Date _____