

Towards Inclusive Education in Tanzania

*A study of pre-service student teachers
training and perceived needs to practice
inclusive education*

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Abstract

This study aimed at investigating pre-service student teachers training and preparation for inclusive education in Tanzanian higher learning institutions. The intention was to find out approaches used in training student teachers, and to investigate their perceived needs in order to practice inclusive education. This study was conducted in one university with a large number of university colleges which offer general teacher education at bachelor level in Tanzania.

The study was qualitative in nature and involved a total of eight (8) participants: six (6) pre-service student teachers and two (2) teacher trainers (lecturers) from the university where data for this study was collected. Since the study was qualitative in nature, a phenomenology research design was adopted to investigate the research problem in hand. The data was gathered through the use of semi-structured interview with the participants, and the curriculum for teacher education was used as a reference material.

The study found out that most of the pre-service student teachers have little knowledge about the concept of inclusive education and its practices. This has been caused by less package of inclusive and special education related courses in the current teacher education curriculum. Furthermore, this study found that most of the teacher trainers use traditional ways in training student teachers about inclusion, whereby the curriculum is used as a guideline. This has resulted into lack of confidence among student teachers; hence, they feel unprepared to handle children with diverse needs included in a general classroom.

Also, the study found that the majority of student teachers need additional courses in the curriculum related to inclusive and special education. Likewise, they need more time for field practical in inclusive and special schools and issues concerning interacting with teaching and learning materials for children with disabilities to be part of their training in order to practice inclusive education. Finally, the study recommends teachers training institutes to restructure or look a way in which inclusive and special education knowledge will be addressed in their current curriculum. It also recommends that curriculum developers should re-design the current primary and secondary education syllabuses to allow flexibility in adopting individualised education plan for children with disabilities used in inclusive schools.

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IV

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Emmanuel Geoffrey Muyungu

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Dedication

I dedicate this thesis to my Mother, **Pauline Mpaligwa** my Father, **Mr. Geoffrey Muyungu** and my uncle, **Mr. Dickson Muyungu**. Mungu awabariki sana, “God bless you both very much”.

Abbreviations

B.A.Ed	Bachelor of Arts with Education
B.Ed (SPED)	Bachelor of Education in Special Education
BEST	Basic Education Statistics
EFA	Education for All
MOEC	Ministry of Education and Vocational Trainings
MoEVT	Ministry of Education and Vocational Trainings
PEDP	Primary Education Development Programme
SEDP	Secondary Education Development Programme
SEKOMu	Sebastian Kolowa Memorial University
TCU	Tanzania Commission for Universities
TDMS	Teacher Development and Management Strategy
UNESCO	United Nations Educational, Scientific and Cultural Organisation
URT	United Republic of Tanzania

Table of Contents

Abstract.....	II
Acknowledgement.....	V
Dedication.....	VI
Abbreviations.....	VII
Table of Contents.....	VIII
List of Figures and Tables.....	X
1 Introduction.....	1
1.1 Background to the Problem.....	1
1.2 Current Situation Towards Implementation of Inclusive Education in Tanzania.....	3
1.3 Conceptual Framework.....	6
1.4 Statement of the Problem.....	9
1.5 Motives for the Study.....	10
1.6 Objectives of the Study.....	10
1.7 Research Questions.....	10
1.8 Significance of the Study.....	11
1.9 Delimitation of the Study.....	11
1.10 Definition of Terms.....	11
1.11 Organisation of the Thesis.....	12
2 Theoretical Background.....	14
2.1 An Overview of Inclusive Education and Pre-service Teacher Education.....	14
2.2 Historical Development of Inclusive Education.....	15
2.3 Inclusion in Education Context.....	19
2.3.1 Rationale for Inclusion in Education Context.....	20
2.3.2 Role of Teacher in Inclusive Education.....	21
2.4 Policies and Practice of Inclusive Education in Tanzania.....	22
2.4.1 Inclusive Education Programmes in Tanzania.....	24
2.4.2 Challenges against Inclusive Education Programmes in Tanzania.....	25
2.5 Pre-service Teacher Education for Inclusion in Tanzania.....	26
2.5.1 The Structure of Pre-Service Regular Teacher Education Curriculum.....	30
2.6 Models of Teachers Training for Inclusive Education.....	33
3 Research Methodology.....	36

3.1	Phenomenology Design.....	36
3.2	Qualitative Approach.....	37
3.3	Selection of Participant and Area of Study.....	38
3.3.1	Selection of Participants	38
3.3.2	Area of Study	39
3.4	Methods of Data Collection.....	40
3.5	Data Analysis	40
3.6	Reliability and Validity of the Data	42
3.6.1	Credibility	43
3.6.2	Dependability	44
3.6.3	Confirmability.....	44
3.7	Ethical Consideration	45
4	Data Presentation, Analysis and Discussion	46
4.1	Pre-service student teachers knowledge of inclusive education	47
4.2	How Pre-Service Student Teachers are Trained for Inclusive Education	53
4.3	Pre-Service Student Teachers Concerns and Perceived Needs In Order to Practice Inclusive Education	61
4.4	Summary of the Findings.....	74
4.4.1	Pre Service Student Teachers Knowledge of Inclusive Education	74
4.4.2	How Pre- Service Student Teachers are Trained for Inclusive Education	75
4.4.3	Pre Service Student Teachers Perceived Needs in Order to Practice Inclusive Education.....	75
5	Conclusion and Recommendations.....	77
5.1	Conclusion	77
5.2	Recommendations	78
5.2.1	Recommendations for Action	78
5.2.2	Recommendations for Further Studies	79
	References.....	80
	Appendix.....	86

List of Figures and Tables

Figure 1: Bronfenbrenner Ecological System Framework and Factors affecting the Implementation of Inclusion	6
Figure 2: A Figure Showing Enrolment of Pupils in Primary Schools by Gender and Disability in Tanzania, as of 2011.....	28
Figure 3: The Structure of Regular Teacher Education Curriculum	31
Table 1: Pre-service Student Teachers Participated in the Study.....	38
Table 2: Teacher Trainers (Lecturers) Participated in the Study	39
Figure 4: Coding Procedure.....	42
Figure 5 An Overview of the Model Used to Present Results for this Study	46
Figure 6. An Over View of the Categories and Sub Categories on the Preservice Student Teachers Knowledge of Inclusive Education.....	47
Figure 7. An Overview of categories and Sub-categories on How Pre-Service Student Teachers are Trained towards Inclusive Education.....	54
Figure 8: An Overview of categories and Sub-categories on Pre-Service Student Teachers' Concerns about the Teaching of Inclusive Classroom and their Perceived Needs to Practice Inclusive Education.	62

1 Introduction

This chapter introduces the study by giving the background to the problem in which the concept of inclusive education is presented using a global perspective to a national level. The chapter also presents statement of the problem; conceptual frame work guided this study, objectives of the study, research questions, delimitation of the study, significance of the study, definition of key terms, and organisation of the thesis.

1.1 Background to the Problem

There is a considerable change and movement toward inclusive education worldwide, where many countries today are reviewing and adjusting special education policies to suit the current changes to inclusive education(Angelides, Stylianou, & Gibbs, 2006). These attributed changes are aiming at increasing educational opportunities, participation, and learning of the children with special education needs in regular classes. Studies suggest that teachers are the foremost and important element in making inclusive education a reality (Florian & Rouse, 2009; Mittler, 2012; Wade, 2000) .Teachers, as key implementers of inclusive education, are supposed to have relevant skills and knowledge on how to practice inclusive education to be able to address the needs of children with disability in mainstream classes.

This kind of knowledge for teachers should be built during their initial teacher education before entering the teaching profession. This has been the case in most of developing countries where studies have concluded that teachers feel that they are not well equipped with enough knowledge, skills, and practice to teach inclusive classes (Eleweke & Rodda, 2002; Kapinga, 2014; Mmbaga, 2002). The international move towards inclusion of special needs children into mainstream classes, rather than educating them in an isolated environments, has been the main concern among educators, policy makers, and researchers in recent times (O'Donoghue & Chalmers, 2000).

Statistics and estimates show that there are about 750 million disabled people in the world, and approximately 10% of the population live in developing countries (UNESCO, 2006). In developing countries, people with disabilities have little or no access to health and education services; the access is only between 2-3% among children with disability. Moreover, UNESCO (2006) indicated that, more than one third of 77 million children who are out of

school are disabled children, and that in Africa fewer than 10% of disabled children are in school.

This trend is worse in Tanzania where only four out of ten (4/10) children with disability attend school and being slightly accommodated with their needs in most of regular classes (Mkumbo, 2008; Mmbaga, 2002). The principles of anti-discrimination, social justice, equity and basic human rights advocate for children with disability to enjoy the same access to education as all other children in inclusive schools (UNESCO, 1994a). Also, article 7 of the Salamanca Statement (1994) requires all children to learn together whenever possible regardless of their difficulties or differences they may have. According to (UNESCO, 2001), classroom teachers must recognize and respond to the diverse needs of their pupils, accommodating different styles and rates of learning.

Eleweke and Rodda (2002) indicated that, although countries in the South are positive towards the concept of inclusive education, the application of inclusive education practices do not take place in most schools. Inclusive education in most of African countries is not well realized due to lack of both human and technical materials to accommodate children with special needs in inclusive schools (Kisanji, 1998). Beyond that fact, most of general teachers fail to implement inclusive education, and at the same time the whole concept of inclusion and its practice is a dilemma to them (Miles et al., 2003; Wade, 2000).

While this is the case, UNESCO (1994b) suggested that pre-service teachers training institutes need to develop inclusive teacher education curricular for diversity to develop effective use of teaching and learning materials, and other human or material resources for full participation of all learners. This position by UNESCO connects well with one by Possi (1996) who stated that pupils with disabilities should be educated in an inclusive education setting because after completion of their studies these children are expected to live in their mainstream societies where the majority of the populations do not have disabilities.

However, many regular teachers face problems in instituting integrated programs within inclusive classrooms because they lack knowledge and strategies needed to implement such programs effectively (Mitchell, 2000). It has to be remembered that under this kind of education system, students with special needs will continue to be excluded from teaching and learning because teachers do not possess enough knowledge to accommodate them and address their needs.

This, therefore, calls for the changes in teacher education system so that it can respond to the diverse needs of the children with disabilities in mainstream classes. To address this, there have been several initiatives that are taken to restructure teacher education curricula so as to prepare teachers to meet learners' differences and diversity, who are included in regular classes (Cooper, Kurtts, Baber, & Vallecorsa, 2008). Due to the increasing demands of well qualified teachers for inclusive classes, questions and serious discussions have been raised in many institutions that train and prepare teachers. Their main concern has been on how to develop relevant skills and attitudes into teachers so that they can accommodate learners' differences in inclusive classes (Harvey, Yssel, Bauserman, & Merber, 2008; Wade, 2000)

Pre-service teacher education has been taken as a steppingstone in developing relevant inclusive practices for prospective teachers as noted above, and a means for shaping teachers' knowledge, attitude, and skills, and how they work with children in inclusive classes (Kaplan, 2013). Since teachers are key implementers of inclusive practices, it is important that, attitudes, skills, and knowledge toward inclusive education are developed from pre-service training. Pre-service teacher education has a significant role toward achievement of inclusive education practices among teachers, which founded the motive behind this study.

Therefore, identification of student teachers perceived needs in order to practice inclusive education will help teacher education programmes to prepare well qualified and competent teachers for inclusive classes. And also, pre-service teacher education is the only way by which inclusion attitude can be addressed and developed among teachers in Tanzania education sector to meet various international declarations concerning provision of education to all citizens.

1.2 Current Situation Towards Implementation of Inclusive Education in Tanzania

Tanzania, as member of international community, has signed and ratified several international declarations such as convention on the rights of the child of 1989. In 2009 the government passed a bill on the laws of the children acts, and the government has also signed a policy document on education for all (EFA), to mention the few (Karakoski & Stroem, 2005). The official implementation of inclusive education in Tanzania started in the early 1998, four

years after Salamanca statement of 1994, which spearheaded the development of inclusive education (MoEVT, 2009; Tungaraza, 1994).

The government of Tanzania in collaboration with UNESCO started pilot project of inclusive schools in seven primary schools in Temeke Municipality. After the pilot, more inclusive schools expanded to a total of 208 primary schools by 2008 and more secondary schools are inclusive accommodating children with diverse needs (MoEVT, 2008). These initiatives by the government have been done hand in hand with development of a number of policies which have promoted the development of inclusive education in Tanzania education sector (Karakoski & Stroem, 2005; MoEVT, 2009).

Since the year 2000, Tanzania has also been implementing several education development programmes related to supporting of inclusive education, such as; Primary Education Development Plan (PEDP I, 2002-2006; PEDP II, 2007-2011), Secondary Education development Plan (SEDP I, 2004-2009; SEDP II, 2010-2015) (MoEVT, 2010). On top of that, Teacher Development and Management Strategy (TDMS) of 2008 have been focusing on attracting, developing, and retaining adequate quality teachers. Among other things TDMS calls for building capacity of primary and secondary school teachers in special needs education methods, as well as reviewing the pre-service teacher education curricula and in-service programmes to include special needs and inclusive education (MoEVT, 2009).

Evidence shows that PEDP and SEDP (I and II) have succeeded, among other things, to increase the enrolment of the pupils and students with disabilities in primary and secondary schools respectively (MoEVT, 2010). According to (MoEVT, 2011), enrolment of children with disabilities have been increasing in Tanzania regular schools, both in primary and secondary education. Data show that the enrolment of pupils with disabilities in primary education has increased from 18992 in 2006 to 26436 in 2011, while in secondary schools has increased from 716 in 2006 to 5534 in 2010, and dropped to 5008 in 2011 (Mkumbo, 2008; MoEVT, 2011).

Considering such achievement in the enrolment of the children with disabilities in special and regular schools, there is a need of well qualified teachers who can be able to address children diversity in inclusive classes. According to Tanzania education policy of 2001, all schools should be able to accommodate children with disabilities and other barriers to learning (MoEC, 1995). However, the constraint toward achieving this is the lack of knowledge in

special education and inclusive education for both regular and special education teachers from their initial teacher education in Tanzania (Kapinga, 2012; Karakoski & Stroem, 2005; Meena, 2014).

Up to 2004, Tanzania had only one college which offered training in special needs education (Patandi Teachers College). This college offered certificate and diploma in special needs education. Then it was followed by the SEKOMU (Sebastian Kolowa Memorial University) and University of Dodoma, both of which offer a bachelor degree in special needs education B.Ed (SPED) (Kapinga, 2012). Tanzania has approximately a total of 44 Universities and University colleges, both public and private Universities, out of which 32 Universities offer a regular bachelor of education¹. Considering the ratio of graduates from regular bachelor of education, it can be said that (approximately) 90% of the teachers who are employed for both regular and inclusive schools are graduates with regular bachelor of education (MoEVT, 2009).

Moreover, since the implementation of SEDP and PEDP, there has been a significant increase in enrolment of children with disabilities in many regular schools in Tanzania. This trend on the enrolment of children with special needs in regular schools does not correspond with knowledge, skills, and practices that teachers possess to address the needs of inclusive classes (Mkumbo, 2008; Mmbaga, 2002). In such a way, most of the students with special needs are continuously being excluded from teaching and learning due to the fact that the curriculum for teacher education seem not to offer enough training for graduate teachers to teach inclusive classes.

Regular teachers constitute a large percentage (approximately 90%) of teachers who are being employed in various schools (including those in special needs units) in Tanzania (MoEVT, 2009). It was therefore the intention of this study to examine how Institutions' curricular that offer regular teachers education programmes (Bachelor of Education) in Tanzania prepare their graduates to have knowledge, skills, and competencies to teach classes with students with disabilities. Again, to find out what are pre-service student teachers perceived needs in order to practice inclusive education in Tanzania.

Evidences suggest that most of general teachers do believe in medical model approach to inclusive education, and it is the fact that the university curriculum does not offer enough

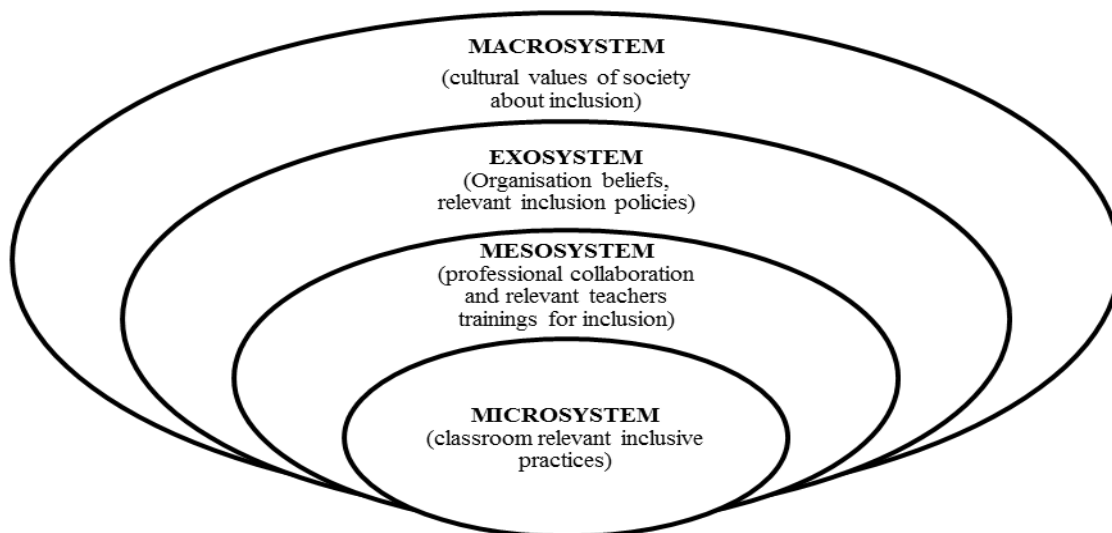
¹ (TCU, 2014) <http://www.tcu.go.tz/images/pdf/Approved%20programme.pdf>

packages to address inclusive education (Forlin & Chambers, 2011). It has been a common practice among teachers to see disability first before the ability that a child possesses or what a child can be able to do. However, understanding of the pre-service student teachers needs to practice inclusive education will provide a way forward on how to restructure teacher education and the manner under which pre-service teachers are prepared toward inclusive education in Tanzania.

1.3 Conceptual Framework

The present study explored pre-service student teachers training and perceived needs to practice inclusive education. Also, it investigated the strategies and techniques that are used to train teachers toward inclusive education in Tanzania. The present study was guided by Bronfenbrenner (2009) ecological system framework and factors that affect the implementation of inclusion. They are included in the cycles of the theory at different levels: Microsystem, Mesosystem, Exosystem, and Macrosystem as shown in the figure below:

Figure 1: Bronfenbrenner Ecological System Framework and Factors affecting the Implementation of Inclusion



Source: Adopted from Bronfenbrenner (2009) with some Modification

This conceptual framework model provided a graphic illustration of the relationships among four elements that seem to be essential for the preparation of teachers toward inclusive education. The conceptual framework reflects factors that might influence the implementation of inclusive education in teacher education, not only from teacher education but also from the

society at large. It also guides the levels on which student teachers seem to be essential for them to practice inclusive education from the society at large to the classroom level. Further, it offers a visual explanation of what the university that trains teachers can consider during implementation of inclusion and inclusive practices in their general teacher training since the components are essential in determining future student teachers' practices toward inclusive education in their trainings. The conceptual framework consists of four interdependent, interrelated, and interacting components which are essential in implementation of inclusion in teacher education.

The first component exists in Macrosystem, which according to Bronfenbrenner (2009) is concerned with the culture in which an individual lives. In this study, cultural value holds a very important role in training teachers for inclusion due to the fact that society culture brings different individual understanding of inclusion. So far, student teachers in Tanzania originate from different cultural backgrounds which then have a big role on their perceptions concerning inclusive education. It is assumed that, in the present study, student teachers with positive or negative conception about inclusion or disabilities will support or hinder their training respectively. Therefore, in this study, pre-service teachers' cultural influences and perceptions as well as understanding of inclusive education have been taken into consideration, and further, how universities that train teachers deal with this cultural diversity.

Exosystem forms a second level in the present conceptual framework, which involves the link between social settings in which an individual does not have an active role and the immediate context the individual is found. In teacher education, it can be said that organisation structure and policies play a great role to a successful inclusive teacher education (Ainscow & Sandill, 2010). The organisation policies and beliefs toward inclusive education at the faculty level have a large impact in training teachers toward inclusive education. Organisation policies, in one way or another, form its own culture in respect to inclusive education, and it affects the whole curriculum structure of the pre-service teachers training. And training for inclusive education is determined by institutions beliefs and practice for inclusive education.

Stayton and McCollum (2002) noted that, an institution as well as teachers trainers' beliefs about inclusion tend to affect and influence pre-service student teachers beliefs concerning inclusion. In addition, it is the role of the organisation (teacher training institute) to shape and change student teachers orientation toward inclusion as this can be done at the policy and training level. Therefore, in this study, an institution beliefs and policies concerning inclusion

have been taken into consideration as, in one way or another; they affect teachers training toward inclusive education.

The third component composes of Mesosystem, which refers to the interaction between exosystem and microsystem. So far, in the present study, exosystem has been taken to mean organisational structure and policies toward inclusion where microsystem refers to the classroom practice in need; that is, inclusive practice. And under this segment, it is truly that, for the two components to work together, professional training and collaboration have been taken into consideration. It is at this point where it has been argued by many scholars that, for successful inclusion training in teacher education, the collaboration between special needs education and general teacher profession need to collaborate for successful inclusion (Harvey et al., 2008; Stayton & McCollum, 2002).

So far, in Tanzania teacher education and training toward inclusive education depend much on professional training and collaboration (MoEVT, 2009). As seen in the previous studies done by (Forlin, 2010; Harvey et al., 2008; MoEVT, 2009; Pugach & Blanton, 2009; Stayton & McCollum, 2002), they all call for collaboration between professions in training toward inclusion in teacher education. This is what will bring about communicating of relevant inclusive practices to the prospective teachers. It is therefore in this study, where the question of skills, knowledge and relevant practice needed for prospective teachers to practice inclusive education has been taken into consideration for effective inclusion.

The last component on the conceptual framework is Microsystem, which refers to the components in the whole system that directly impacts the individual student teacher. In this study, the issue of classroom practice have been taken as the most influential factor toward successful inclusive practice for prospective student teachers. It is in these classrooms where student teachers conduct their teaching practice, where all the theories and knowledge on inclusive education are put into practice. Therefore, classroom with relevant and supportive teaching and learning materials, supportive environment for disabled children, acceptance among peers in the class, relevant physical infrastructure, to mention the few, have a large impact in developing relevant inclusive practices among student teachers (Stayton & McCollum, 2002).

Generally, the interrelations among the four systems in the teachers' education, as seen from ecological system conceptual framework, have a large impact and influence in developing

inclusive teacher education training in order to prepare student teachers for inclusive education. Further to that, student teacher conceptions and practices on inclusive education are largely influenced by what surrounds them in the system (Forlin, 2010).

1.4 Statement of the Problem

There is a gap between teacher's professional competencies, learner's differences and children diversity in Tanzania mainstream classes (Kapinga, 2012; Karakoski & Stroem, 2005). This gap has caused students with special needs to be left out in both social physical and academic achievements due to lack of inclusive knowledge, skills and practices among teachers in Tanzania (Mkumbo, 2008). Several initiatives are being taken worldwide to address teachers training for inclusive settings, one among them, in some countries, are re-shaping teacher education to respond to inclusive education and inclusion.

To achieve the goals and targets of inclusive education, Tanzania has accomplished, among other things, to sign different UN conventions and some international declarations. Also, it has been implementing various programmes since 1998 such as PEDP and SEDP to realise education for all. These initiatives have to a large extent managed to achieve high level of enrolment of pupils and students with disabilities for about 0.36% from 2006-2011 in both primary and secondary schools (MoEVT, 2009, 2011). In spite of achievements in the enrolment of children with disabilities into mainstream inclusive schools, still the ratio between teacher's professional competencies and learners' identified disabilities does not match. This is due to the fact that most of the teachers lack knowledge and skills to teach effectively both special and inclusive classes in Tanzania (Kapinga, 2012, 2014).

Since the majority of teachers in Tanzania inclusive schools are graduates from regular teacher programmes, of whom numbers of studies have shown that they lack knowledge and skills to teach inclusive classes (Forlin & Chambers, 2011; Kapinga, 2012, 2014; Mmbaga, 2002). Therefore, it was the central attention of this study to investigate how the curriculum for pre-service teacher education prepares graduates toward inclusive education in Tanzania. As well as to identify pre-service teachers' perceived needs in order to practice inclusive education so as to improve teacher training for inclusive classes.

1.5 Motives for the Study

There are number of reasons that have motivated me to carry out this study. My motivation has been inspired by my personal experience as teacher educator. During practicum, most of the student teachers have been facing a lot of challenges when they are assigned to do their practicum in an inclusive classroom. And this raised my concern about the package of inclusive and special education in initial teacher education curriculum. So far, my intentions have been to explore the student teachers perceived needs in order to practice inclusive education so as to help re-shaping initial teacher education programme to enable prospective teachers to practice inclusive education.

Again, in Tanzania few studies have been conducted in the area of teacher education curriculum and inclusion. Most of the studies have been focusing on disabilities and special education as well as the challenges that inclusive education is facing. Since there have not been enough studies in the area of teacher education concerning inclusive education in Tanzania, so there is a knowledge gap in the area of teacher education toward inclusive education and this study aim to fill this gap and add to existing body of knowledge (Lehtomäki, Tuomi, & Matonya, 2014) .

1.6 Objectives of the Study

This study was guided by the following objectives

1. To find out pre-service student teachers' knowledge of inclusive education
2. To find out how pre-service student teachers are trained toward inclusive education
3. To investigate pre-service student teachers' perceived needs in order to practice inclusive education

1.7 Research Questions

This study was guided by the following research questions:

1. How are pre-service student teachers trained toward inclusive education in Tanzania?

Sub-research question were,

- i. What knowledge and understanding do pre-service student teachers have concerning inclusive education?

- ii. What are the strategies and techniques that are used to prepare student teachers to practice inclusive education during their training?
- iii. What are the pre-service student teachers' concern and perceived needs to practice inclusive education?

1.8 Significance of the Study

The implication of this study was to contribute to the existing body of knowledge concerning inclusive education and teacher education trainings in Tanzania. Despite the differences that exist among nations, this study will be helpful in understanding issues concerning teachers' trainings for inclusion and will provide a way forward.

Furthermore, this study will be a helpful tool to inform teachers' preparation institutes concerning the ways in which general teachers can be trained to practice and implement inclusive education basing on the student teachers' needs. And further, the study will help much among other things to curriculum developers, education stakeholders in teacher training institutions on how to deal with challenges that are facing inclusive education in Tanzania.

1.9 Delimitation of the Study

This study was conducted limitedly in only one higher learning institution that offers teacher education among others in Tanzania. However, the institution has several university colleges' country wide, which also offer teacher education programmes. On top of that, the present study confined itself in investigating the way in which pre-service teachers are trained toward inclusive education as well as exploring student teachers' perceived needs to practice inclusive education.

1.10 Definition of Terms

Inclusive Education: Refers to the placing of pupils with and without special needs in ordinary classrooms or settings and ensuring that their educational needs are being catered for and met. Again, according to (UNESCO, 2008) definition, stresses that inclusive education should be understood as an ongoing process aiming at offering quality education for all while respecting diversity and the different needs and abilities.

Pre-service Student Teachers: These are prospective teachers who are still undergoing their initial teacher training either in the college or university. In this study, pre-service student teachers are taken to mean student teachers who are pursuing their first degree in the university level.

Regular and Special Teacher: In this study, regular teacher is treated as a professional teacher who has pursued regular bachelor of education and has a minimal knowledge of inclusive education in their initial teacher education. While special teacher is treated as a professional teacher who has pursued a bachelor in special needs education with knowledge of teaching students with specific disability.

Teacher Education: Teacher education is perceived as the policies, procedures and trainings that aim to equip teachers with attitude, skills and knowledge to teach and equip students with academic achievement. In Tanzania teacher education takes different levels and styles from diploma level up to degree level depending on the entrance level of the prospective teachers. Further, in this study, the focus has been on the teacher education at University level where pre-service teachers are trained and prepared to teach in secondary education, primary and college education.

Curriculum: Curriculum is taken to mean the content which is taught to pre-service student teachers during their course of study (3 years) and it is therefore the content that equips prospective teachers with the knowledge, skills, and attitudes to be able to teach. In the present study the curriculum for teacher education at University levels differs from one institution to another; this being the case, most of the curriculum have been divided into four main areas, that is, foundation knowledge in education and related aspects, teaching and learning skills, content area and methodology as well as practicum and classroom teaching. The combination of the four aspects of teacher education curriculum is what makes a total of content that prospective teachers are anticipated to possess.

1.11 Organisation of the Thesis

The present study is organised into five chapters. Chapter one presents the research problem, current initiatives on the implementation of inclusive education, conceptual framework, and rationale of the study, research questions and objectives of the present study. Chapter two presents the theoretical background of the relevant literatures focusing on what other authors

have done on the topic under study. The related literature helped to establish theories base that governed this study and helped to establish the existing knowledge gap. Chapter three describes the research methods and procedures employed to realise the specific objectives of the present study. Chapter four presents analyses and discusses the research findings from the data collected and summarises the findings. Finally, chapter five provides conclusion and recommendation of the study.

2 Theoretical Background

In this chapter, there is a review of relevant studies and literature regarding inclusive education and teacher education training for inclusive education. It provides an overview concerning inclusive education, a historical development of inclusive education globally and in Tanzania as well. It also highlights important policies and practices of inclusive education in Tanzania. Also, it highlights on the pre-service teacher education and their training toward inclusive education in Tanzania. The chapter is finalised by providing summary of this chapter.

2.1 An Overview of Inclusive Education and Pre-service Teacher Education

There is a comprehensible movement toward inclusive educational practices and universal agreement on the basic principles of Salamanca statement which advocated the development of inclusion worldwide (UNESCO, 1994a). Since the declaration of the Salamanca statement of 1994, these principles of inclusion have been reinforced by many conventions including the UN Convention on the Rights of the Person with Disabilities of 2006, which makes an explicit importance of ensuring existence of inclusive system of education.

This has prospered many ministries responsible for education worldwide to start developing and implementing inclusive practices in education system in their respective countries (UNESCO, 2006). As the nations worldwide are moving toward inclusive education practices, and being supported by many international declarations, preparing teachers for this role has become a key issue. This is based on the fact that whatever the policy will state and teaching materials being provided for inclusion, still teachers are standing as a single factor for a meaningful implementation of inclusive education. It is known that teachers require appropriate skills, knowledge and attitude to address diversity in an inclusive classroom (Kaplan, 2013). This kind of knowledge and skills is mainly developed and imparted during initial teachers training.

Forlin (2010) argued that, teacher education has to produce graduates who are competent and have the ability to respond to individual differences in their inclusive classrooms. Therefore, there is a need to look upon pre-service teacher education curriculum in order to ensure that

teachers are prepared to work with students from diverse backgrounds. Mmbaga (2002) in his study found that one of the problems in pre-service teacher education in Tanzania includes the fact that even teacher educators themselves they do not have enough skills to train teachers for inclusion. Angelides et al. (2006) and Harvey et al. (2008) reached a similar conclusion that teacher educators are unclear about their roles in meeting demands of inclusive education through practicum experience, training initiative promoted for preparing teachers for inclusive education. This problem emanates from rigid curricula which for years have been used for preparing teachers toward their career (Eleweke & Rodda, 2002).

Moreover, at the same time the University curriculum for teacher education still focuses on the academic objectives rather than on practices to meet the needs of inclusive education. The curricula emphasis on the academic part has turned the practical part of teacher education to be given less priority during training. Basing on the evidences above, the current study was concerned with major changes which can be done in initial teacher education concerning inclusive education. And the focus was on how teacher education at the University level can be reframed to address inclusive education by reflecting student teachers' needs.

This is because of the fact that over the century teacher education has been changing to keep pace with societal changes, community expectations and new knowledge based paradigm (Forlin, 2010; Mittler, 2012). There is therefore a need to ensure that there is a match between teachers' knowledge and the needs of students in today's inclusive classes.

2.2 Historical Development of Inclusive Education

Inclusive Education is a new trend of thought in international education and society, which obtained global attention in the early 1990s and denoted the change of practices and terminology concerning the so called people with special needs (Vislie, 2003). Inclusive education is concerned with the quest for equity, social justice, and participation and combats all forms of barriers of discrimination and exclusion in education practices (UNESCO, 2008). Skojoorten (2001) further commented that inclusive education should not only be seen in education point of view but also it has to be supported by inclusive legislation, inclusive health care as well as social welfare which treat people equally.

Additionally, inclusive education is concerned with social justice and reasons that cause injustices are very complicated, involving many factors in religion, race, sex, language, education and intelligence. The principle of inclusive education was adopted at the World Conference on Special Needs Education in Salamanca, Spain (1994) and was restated at the World Education Forum in Dakar, Senegal, 2000 (UNESCO, 2001). It was from the two conferences that inclusive education found its origin and started to be recognized worldwide and its practices started to be implemented into education systems.

Children in special schools were seen as geographically and socially segregated from their peers of the same age and social background (Miles et al., 2003). This has been the trend throughout the life time where people with disability have been considered as a bad luck in the family and has resulted into segregation. Skojorten (2001) contended that due to lack of knowledge concerning the causes of disability in some societies, it developed all kind of ideas concerning people with disability, superstitions being one among them.

This has been similar experience in Tanzania as well where several cases have happened in the past and recently where children with disabilities were thrown away, killed or being locked inside the house cages because of being associated with bad luck in the family (Durand, 2010; Tungaraza, 1994). Most of the children with disabilities in Tanzania and in developing countries are still out of school because of social and cultural reasons attached to them. Such cultural beliefs have largely affected disabled children's rights to education, social living and justice. But it was until the transitional period when new understanding and knowledge raised concerning people with disabilities in the communities where humanity resulted into the attempt to serve these children (Skojorten, 2001)

As the result, studies show that it was the beginning of special schools where children with disabilities were educated in separate environments by special teachers (Peters, 2004; Vislie, 2003). However, as the result of development of knowledge, special schools were abandoned and protested. Due to the fact that these children were seemed to be isolated and discriminated, it developed a kind of stereotype and passivity among these children in special schools (Skojorten, 2001).

This is what encouraged the initial movement to integrate these students in mainstream schools (integration). Integration has been a practice throughout the world where children with disabilities are educated in the separate classrooms accommodated with specialist

teachers in certain disability until when they seem to be ready to join their peers in regular classes. According to Skojorten (2001), there have been different models of integration ranging from sporadic and infrequent meetings to full membership in the classroom. But in Tanzania, for instance, integration model has been a current practice toward inclusion, and pupils are educated in separate classrooms until they are ready to join the mainstream classes (Tungaraza, 2010).

At the same time, these schools which accommodate students with disabilities do not have enough teachers with professional competence to care for these children with special needs (Kapinga, 2012, 2014; Kisanji, 1998). Because of the scarcity of teachers, experience shows that these children are always left alone in the class by themselves without any activity. In this mode of integration children with disabilities have to adjust so as to qualify and fit into a regular classroom and not the class to be able to accommodate them.

This then shifted to one where the whole school was encouraged to become more adaptable and inclusive in its day-to-day educational practices for all students ('inclusive education'). This is where students with disabilities are accepted with their peers, participate in social community of the school, and have all the support needed both human and material that give them the opportunity to achieve their desired dreams (Voltz, Brazil, & Ford, 2001).

However, Peters (2004) argued that, although a definite trend toward inclusive practice and increase in inclusive education programmes is evident in all countries of the North, considerable variation exists, and most notably in the areas of classification and placement decisions. Though in addition, all countries face several challenges when it comes to the state of implementing inclusive education. The most significant of these are meeting the needs of special education need students in secondary schools, funding, and human resource constraints. Forlin (2010) found that in most of the inclusive education projects, teachers have appeared to be an immense challenge and followed by resource constraints.

Peters (2004) noted that, inclusive education as an approach, seeks to address learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalization and exclusion. It implies all learners, young people with or without disabilities being able to learn together through access to common schools and community educational settings (Norwich, 2007). On the other hand, Dyson (2004) argued that, this is possible only in a flexible education system that assimilates the needs of a diverse range of

learners and adapts itself to meet these needs. It considers all stakeholders in the system (learners, parents, community, teachers, administrators and policy makers) to be comfortable with diversity and see it as a challenge rather than a problem.

Nevertheless, Kisanji (1998) indicated that, most of sub-Saharan African countries view students with special needs as a problem and not a challenge. This position has influence in teacher preparation programmes, and most of studies show that teachers have had negative attitude toward inclusion of students with disabilities (Kapinga, 2012; Kisanji, 1998; Mmbaga, 2002). Based on the studies, education systems for teachers have continued to make teachers to see a disability first than ability that a child possesses.

Pre-service teacher education as a forum to change such teachers' attitudes and their practices toward students with disabilities, there is a need to change the manner under which general pre-service teachers are trained so as to develop inclusive teacher education. Therefore, it is the concern of this study to explore how pre-service teacher education programmes prepare their graduates toward inclusive education, and what are the student teachers educational needs to practice inclusive education.

Worldwide teachers have been a core for successful inclusive education, and many studies have shown little motivation and knowledge concerning inclusive education among teachers (Angelides et al., 2006; Cooper et al., 2008; Forlin, 2010). In his study, Kapinga (2014) surveyed a total of 146 teacher trainees in Tanzania and found most of the pre-service teacher who have little knowledge concerning inclusive education; however, they had positive attitude toward students with special needs.

In Tanzania awareness of inclusive education is not clear to the majority of the citizens including regular teachers who view it as a complicated term. Top on that, most of the regular teachers are not well prepared to facilitate teaching in inclusive classes (Kapinga, 2014; Mmbaga, 2002). Different scholars have explained the concept of inclusive education and the challenges which this new dimension of education faces. (Meena, 2014) asserted that, implementation of inclusive education in Tanzania has been affected by so called double standard, that is, teachers professional competences and real situations in inclusive schools. The so called double standard has been due to the mismatch of teacher's knowledge, available resources and the real situation in terms of implementation of inclusive education.

2.3 Inclusion in Education Context

Inclusion in education bears different definitions and meanings, it can refer to an attempt to provide education to children with and without special education needs in the same environment (Vislie, 2003). UNESCO (2008) defined inclusion as an on-going process aimed at offering quality education for all while respecting diversity and the different needs, and abilities, characteristics and learning expectations of the students and communities by eliminating all forms of discrimination. Inclusive education is grounded on the idea that, it is injustice to exclude children having special needs from the mainstream classrooms. This calls for a plan for inclusion of every child into the local mainstream classrooms and society in which they live (UNESCO, 2000). UNESCO endorsed an 'inclusive schooling approach' in order to support the development of special needs education as an integral part of all education programmes (UNESCO, 1994b).

The justifications for inclusion in education context have been outline in the UNESCO policy guideline on inclusion in education (UNESCO, 2003). It sets out the following justification for inclusion education in education context: one being educational justification which proposes that inclusive schools have to develop ways of teaching that respond to individual differences and benefits of all children. Another being based on social framework that inclusive schools are able to change attitudes toward diversity, and form the basis for a just, non-discriminatory society. And finally, an opinion based on economic justification which states that it costs less to establish and maintain schools that educate all children together than setup a complex system of different schools specializing in different groups of children.

Vislie (2003) commented that, the meaning of inclusion has changed and moved beyond the narrow idea of inclusion meaning to overcome deficit, and now it encompasses issues of gender, ethnicity, class, social condition, health and human rights, it encompassing universal involvement, access, participation and achievements. And therefore it should be made clear that inclusion is not all about adding into some structures that pre-existed. But inclusion should be taken as a process of changing society and transforming communities such as schools and higher learning institute to become diversity-sensitive to inclusive education (Mittler, 2012).

Mmbaga (2002) noted that, inclusion is the presence of all learners in one shared education community. It is a set of principles which ensure that children with disabilities are viewed as

valued and needed members of the school community in every aspect. Besides, inclusive education is based on the principle that schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions (Salamanca Conference of 1994). To do so, the only way out, is to have teachers with competence and relevant inclusive education practices to meet students' diverse needs in inclusive classroom.

In Tanzania, the context of inclusion has been well presented in literature and the most significant issue has been the question of teachers' preparedness and their training in teacher education (Kapinga, 2014; Meena, 2014; Tungaraza, 2010). Evidence suggests that most of teachers employed in various special and inclusive schools are regular teachers with little or no knowledge concerning inclusion (Kapinga, 2014; MoEVT, 2009). This being the case, therefore, the need to address teachers training for inclusion is considered necessary in order to deal with this imminent threat to inclusion in education by addressing pre-service student teachers perceived needs to practice and implement inclusive education.

2.3.1 Rationale for Inclusion in Education Context

A child's capacity to learn is not negated by impairment, but is dependent on how the child is enabled and supported to develop their potential (Bryant, Smith, & Bryant, 2008). Regarding the need for inclusion of children with disabilities in regular schools, Salamanca Statement of 1994 makes it clear that, Regular schools with this orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all. Moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost effectiveness of the entire education system (UNESCO, 1994a, 2008).

The promotion of an inclusive environment, both within and outside of education system is crucial for the optimal and meaningful learning of children with disabilities (Vislie, 2003). Children with disabilities are often excluded from education as a result of society's attitude, due to the lack of knowledge about impairment in general, its negative attitudes and the stigma projected on such children (Bryant et al., 2008; Skojorten, 2001). Social prejudices assume that children with disabilities are unable to participate in education. If society can be supported to challenge these assumptions, children with disabilities can be included in regular schools. It is also evident in most of school settings most of the teachers tend to see disability first than what a child is able to do. This kind of perception is acting as barriers toward the

achievement of total inclusion since teachers' attitude are negative which prevents teacher student interaction (Tungaraza, 2010).

Tanzania like many other developing countries has been facing multiple challenges toward inclusion in education; studies show that a total of four million people are living with disabilities in Tanzania, and only a tiny percentage of them have access to education (Mkumbo, 2008; URT, 2008). Such challenge is largely posed by the cultural base which has for longer being negative about the learning capability of children with special needs and their acceptability in the community. This has therefore resulted into low enrolment of the children with disabilities in the main stream schools and inclusive schools.

This implies that the expansion of schools and teachers deployment have been given paramount in several Tanzania education policies so as to bring back children and youth with disabilities into schools (MoEVT, 2009). This idea cannot be successful without appropriate teacher deployment because of their important role in making inclusion relevant and implementable.

2.3.2 Role of Teacher in Inclusive Education

Teachers play an important role in the implementation of inclusive education. Some researches show that teachers are the key to the inclusionary programs as they are viewed as the most concerned in the process of including students with disabilities in regular classes (Ajuwon, 2008; Mmbaga, 2002). According to the (Article 24.4 of UN Convention on the Rights of Persons with Disability), the government should promote the realization of this educational practice by taking appropriate measures such as employing teachers, including those with disability knowledge (UNESCO, 1994b). The recruitment process should include those who qualify in sign language and Braille, and train professionals and staff who work for all levels of education.

Such training should include disability awareness and the use of appropriate augmentative and alternative modes, the means and format of communication educational techniques and materials to support persons with disabilities. Teachers often think they need special skills to teach children with disabilities (UNESCO, 2003). However, experience shows that, although special knowledge may be needed for teaching children with certain impairments, good and relevant inclusive practices are effective in meeting educational needs for all type of learners.

Therefore, there is a need to encourage teachers to extend their notions of educability and be more 'child-centered' in their approach, while enabling them to teach more effectively through adaptation and differentiation, will also have an impact on the quality of education of all children. This is upon the institutions that are responsible for training teachers to make sure relevant inclusive practices are addressed across the curriculum and equip teachers with knowledge to deal with inclusive classroom.

Taking an example from Tanzania where teacher education is divided into two categories; that is, special and general teacher education, It was expected that the ratio between the two categories would balance so that in inclusive classes there will be two teachers cooperating together in teaching. But as stated earlier in this study most of teachers deployed in inclusive schools are regular teachers and not special education teachers (Mmbaga, 2002). This has been due to small number of initial teachers training institutes that offer special education.

Therefore, the collaboration expected by the authority in inclusive classes is no more working. Since special education teachers are specialized in one area of disability, and they are few compared to the number of children with identified disabilities included in regular schools (MoEVT, 2009). This poses a challenge to teacher training institutions on how to train the majority general teachers to implement inclusive education when considering their role in inclusive classrooms.

2.4 Polices and Practice of Inclusive Education in Tanzania

Inclusion in Tanzania has its foundation in the values and norms of the society, where every person, regardless of the differences has dignity, equal opportunity and respect (Tungaraza, 1994). Based on the principles of indigenous customary education and African traditional communalism, everybody was included and was assigned roles according to their abilities (Tungaraza, 1994). Moreover, Tanzania "Development Vision 2025" has been re-emphasizing those principles where the goal is to build a society that promotes equal opportunity for all citizens to participate in and contribute to the development of the nation (MoEVT, 2009).

According to Nydal (2008), the implementation of Universal Primary Education (UPE) in 1977 and Education Act of 1978 at micro level were geared towards the realization of those

principles and values. The education act number 45 of 1978 declared primary education in Tanzania compulsory and for all though not free, which implies the access to education for all children is free regardless of their disability (MoEC, 1995). Such opportunity was available during the pre-colonial education, but it was restricted during the colonial period with the introduction of an elitist school system and establishment of separate institutions for children with disabilities (Tungaraza, 1994).

Since the declaration of independence from Britain in 1961, the government policies have been directed toward promoting inclusive principles in education to ameliorate the effects of colonial practices which excluded the majority of citizens from the right to education. Relevant policy to inclusion is the 1978 Compulsory Education Act which advocated the right to education for every child to be offered within the general education framework (Mmbaga, 2002; Tungaraza, 1994).

Experience shows that, there are good policies and strategies by Tanzanian government, but what is missing is the way of implementation of the said policies. Since there is no official document that guides specifically the provision of education for persons with disabilities in Tanzania either in special schools or inclusive schools, most of the government policies have been in jeopardy (Okkolin, Lehtomäki, & Bhalalusesa, 2010).

A disability survey conducted by the Tanzania National Bureau of statistics revealed that the disability prevalence in the country is about 78% of the population, which counts for two million people in Tanzania (URT, 2008). At the same time the survey revealed illiteracy rate among the person with disability to be high by 46.6% against 25.3% of the non-disabled people, which in real sense it can be said that half of the people with disability are not educated (URT, 2008).

Karakoski and Stroem (2005) suggested that, the way forward for Tanzania to implement and realize international goals concerning inclusive education there is a need to review the policy that guides the provision of education as well as to train enough human resources in this newly established inclusive environment. The national strategy on inclusive education for 2009-2017 has identified some areas of priorities one being teacher education. It states that more strategies will be focused to make sure that all teacher education programmes are designed and aligned according to the principles and practices of inclusive education (MoEVT, 2009).

2.4.1 Inclusive Education Programmes in Tanzania

UNESCO initiated the development of project known as ‘special needs in the classrooms’ as a means to help ordinary schools to respond positively to pupils’ diversity (Sanga, 2000; Tungaraza, 1994). This project aimed at providing compulsory education for all children in the population, integrating students with disabilities into ordinary schools and upgrade teacher training as a means of achieving the above two initiatives (Sanga, 2000).

In 1994, the Tanzania government ratified the Salamanca Statement which emphasizes the need to provide children with special education, and sees this as an indispensable step to reach the goals set at the first Education for All Conference (Lewis & Little, 2007). The framework for action to the Salamanca Statement suggests inclusive education as a strategy to reach these goals. Additionally, in 1998, Tanzania adopted inclusive education project through the financial support from UNESCO and the project started with two primary schools in Temeke Municipality in Dar es Salaam (Tungaraza, 1994).

Currently, two other bodies have joined in, namely, the Salvation Army and Tanzania Association for Mentally Handicapped (TAMH). These three bodies have trained the personnel and introduced inclusive education services in Dar es Salaam, Ruvuma, Mbeya Morogoro, Coastal region and Rukwa. The technical support has been extended to Zanzibar for the establishment of inclusive education (MoEVT, 2008). Despite the development of these inclusive programmes in Tanzania, few projects have been geared toward teachers preparatory for inclusive education in the country

According to Mkumbo (2008), the rate of enrolment in primary schools has exceeded teacher student ratio, which has resulted into crowded classrooms and students with disabilities lack support needed in the classroom. Even though teachers have been offered in- service training, despite of being expensive, these trainings are not frequently offered to teachers. So it is therefore to be acknowledged that these initiatives by the government should be directed to initial teacher education so as to provide a foundation to teachers to be ready to teach and serve in inclusive settings.

2.4.2 Challenges against Inclusive Education Programmes in Tanzania

Several studies have concluded that, inclusion and inclusive education is perceived positively by society and educational stake holders including teachers in Tanzania (Kapinga, 2014; Mmbaga, 2002; Tungaraza, 2010). However, there are several problems which affect its implementation.

According to Mmbaga (2002), poverty has been a major problem which affects education budget, and as a consequence, priority in education is given to sections which do not conduct inclusive education. Poverty has been the cause for the lack of teaching and learning materials for inclusive schools where again infrastructures such as classes, toilets, libraries (if available) are not inclusive friendly (Tungaraza, 1994). Likewise, there is lack of a specified policy guiding implementation of inclusive education. Education Act of 1978 advocates education for all children to be offered within the framework of general education; does not empower stakeholders and parents (especially parents of children with special needs) to fully participate in providing education for these children (Mkumbo, 2008; MoEVT, 2009).

Further to that, there been curriculum issues for both primary and secondary education. (Meena, 2014; Tungaraza, 1994) noted that the curriculum that is used for teaching students with disabilities and those without disabilities is the same. However, it is clear that the teaching and assessment methods for the children with disabilities in inclusive settings are different because teachers have to adopt the curriculum based on their needs (curriculum adoption).

So, the curriculum for education in Tanzania primary and secondary education is not flexible enough to cater for the needs of the disabled children in inclusive settings (Meena, 2014). There is also a challenge of trained human resources in Tanzania, meaning teachers who can accommodate inclusive schools (Mmbaga, 2002; MoEVT, 2009). Further to that, there are considerable shortages in special needs and inclusive education teacher training programs in Tanzania (MoEVT, 2008, 2009). It is said that currently less than 1% of teachers have any knowledge of special educational needs, and even these teachers lack pedagogical skills and knowledge involved in inclusive teaching and learning processes (MoEVT, 2009).

As already explained above, the training for special education in Tanzania is currently done in only five institutions. This has created a pervasive shortage of both inclusive and special

education teachers in Tanzania because the overall capacity of training is low compared to the current need of inclusive education (Mboya et al., 2008). According to Tungaraza (1994), most of the disabled children are living in rural areas where they count for 94% of the whole disabled population, and only 6% are living in urban areas where services are available. Considering this, it has to be noted that, there will be no inclusion if there is no human resource to implement inclusive education. Kapinga (2014) noted that for successful inclusive education, teacher education must be given a priority to be able to equip prospective teachers with relevant skills to handle inclusive classes. However, the majority of teachers in Tanzania inclusive schools are from general teacher education programmes, with minimal knowledge concerning inclusive education.

It has been suggested by many studies that, initial teacher education should be injected with inclusive education principles and practices so as to allow pre-service teachers to practice and implement inclusive education (Kaplan, 2013; MoEVT, 2009; Rose, 2007). It has been, therefore, the focus of the present study to explore pre-service student teachers' needs to practice inclusive education so as to improve their training in general teacher education.

2.5 Pre-service Teacher Education for Inclusion in Tanzania

Teacher education is a wider concept which accommodates a lot of conceptions in it, as it does not imply education offered by the university curriculum. The meaningful teacher education is the one which engages students to learn by practicing in schools with children, fellow experienced teachers, parents and the curriculum (Angelides et al., 2006). Since experience and practice have a big role in teacher education, changes and reforms have been part of teacher education throughout the time (Florian & Rouse, 2009; Forlin, 2010).

Teacher education has changed over centuries to reflect the raising societal technological and other changes that are happening in the world; one among them is the inclusion movement worldwide (Mittler, 2012). The increasing diversity in the needs of the students has become more intense and difficult to respond to, when considering teachers professional status which has been said to be irrelevant in inclusive classes (Florian & Rouse, 2009; Kapinga, 2014). While the diversity and difference among student in inclusive schools are increasing, little has been reflected in teacher preparation and professional development. This has not been only

the case in teachers' professional development but also during their preparation for the teaching role, considering the diversity among pupils in current inclusive classes (Kapinga, 2012).

The capacity of the university that trains teachers toward the new inclusive settings has become a challenge toward inclusive education. This being the case, student expectations has made teaching so challenging, which has resulted into teaching profession that is disappointing and teaching experience which has made many children to drop out of school and making life unpleasant for their teachers (Forlin, 2010). Based on the current study conducted in Tanzania, it has compiled a number of evidences which show the increasing number of dropouts among students with special needs in many primary and secondary schools in Tanzania (Mkumbo, 2008). Moreover, the education sector in Tanzania recorded a significant achievement in enrolment by 2006-2007; however, the number of student dropout for learners with disabilities remained high (MoEVT, 2009).

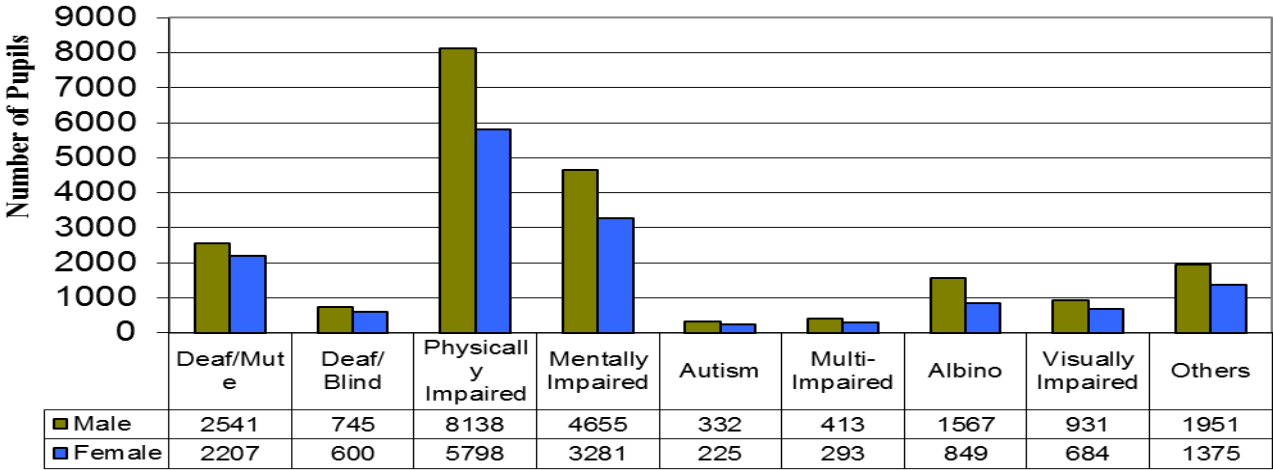
After children with disabilities started to be educated in inclusive environment, this has placed a big challenge to schools and teachers' expectations, and the concern has been on how to keep children with disabilities in school path (Forlin, 2010). So far, these challenges in Tanzania have been dealt with by providing in-service teachers with seminars and trainings concerning inclusive education (MoEVT, 2009). But in a real situation, in-service trainings have also failed to deal with the challenge that mainstream school faces concerning inclusive education (Mboya et al., 2008; Mmbaga, 2002). Further to that, such in-service trainings have been producing minimal results due to the fact that the issue of budget and funds allocated are too limited to cover the needs that the current education system requires (MoEVT, 2008).

The challenging issue however is, have teacher education preparation programmes coped with these student diversities in mainstream schools in Tanzania? And the answer to that question is very difficult to address considering the nature and quality of teacher education in Tanzania and the teaching profession in general. Thus, in preparing teachers for inclusion, there are main issues that need to be grasped and taken into consideration. Forlin and Chambers (2011) suggested that teacher education should allocate enough time and resources to those areas that are important in preparing teachers especially during practicum.

In Tanzania, pre-service teachers use 40% of their training time for practicum, which gives them a time for reflection of the content knowledge to a real situation. During practicum,

student teachers have the opportunity to integrate between theory and practice so as to reflect upon their learning. However, practicum have produced minimal outcome especially when student teachers are allocated in inclusive classes during their practicum. The most challenge they face is on how to include children with disabilities during their teaching, methods to use and the use of teaching and learning materials. Since an inclusive class composes children with different disabilities, for pre service teachers, this has been a challenging role and difficult to address the needs. In most cases, Tanzanian inclusive schools enrol students with the visual, hearing, learning disabilities, emotional and behaviour disorders, communication disorders and physical disabilities as shown in the figure below:

Figure 2: A Figure Showing Enrolment of Pupils in Primary Schools by Gender and Disability in Tanzania, as of 2011.



Source: Tanzania Basic Education Statistics (MoEVT, 2011)

According to presented data above, it shows a significant number of pupils with disabilities in primary schools in their categories of impairment. Consequently, pre-service teachers have to be prepared to accommodate those children with special needs in inclusive classes contrary to what they have been trained. As for the case of this study, the courses that are embedded in the curriculum do not provide a full dosage for teachers to be able to deal with pupils in inclusive settings. Based on the data above, it shows the highest enrolment of pupils with physical impairment and those with intellectual disability compared to other disabilities (MoEVT, 2011).

Teacher education for pre-service regular teachers does not provide specialized education in the mentioned areas of disability, but provides a general knowledge about diagnosis and early

intervention. In Tanzania there has been a general conclusion among teacher educators that in order for pre-service teachers to learn about inclusion there should be a separate course about inclusion rather than being embedded in a general teacher curriculum (Kapinga, 2012; Meena, 2014). But according to Forlin and Chambers (2011) this approach as suggested by teacher trainers, does not only involve extra time but it continues the myth that inclusion is different from regular education, and can only be taught by specialists and not general teachers. Further to that, it can continue the myth that inclusive education is only for special education teachers and not general teachers.

It is therefore evident that, considering the number of enrolment of pupils with disabilities and teacher deployment, there is an acute need for addressing regular teachers' needs in order to practice inclusive education. Wade (2000) suggested that, teacher education programmes suitable for preparing teachers for inclusion should help teachers to understand the needs of the parents and students. Whereby developing understanding of attitudes and experience in problem solving, that teachers will need to work successfully and collaboratively in inclusive settings. Further, she argued that such inclusive teacher education can be offered either as a part of initial training or ongoing professional training for the prospective teachers.

In Tanzania most of the teacher education programmes in universities last for three years, and every university has the autonomy over their own curriculum in terms of development, implementation and evaluation (Kapinga, 2014). Tanzania does not have a central system for controlling curriculum for these universities. But there is Tanzania Commission for Universities (TCU); its role is to regulate curricula brought forward for approval, but does not have a say on what to be taught because the concerned universities have autonomy on it.

However, most of the universities that offer regular bachelor of education use approximately the same curriculum in content for teacher education. This provides a ground for change and assessment, as noted earlier the majority of teachers are coming from regular teacher programmes which produce a large number of graduates. Considering that fact, it is a true fact that teacher education curriculum can be adjusted to reflect upon the needs among pre-service student teachers. The following subsection examines the content structure of pre-service teacher education curriculum.

2.5.1 The Structure of Pre-Service Regular Teacher Education Curriculum

The current pre-service teacher education curricula in Tanzania have been developed independently by the institution that offers teacher education. So, their curricula and teaching approaches differ from one institution to another depending on the priorities of the institution that offers teacher education. However, this is not the case, most of pre-service teacher education institutions have similar curriculum content which can be said to be adopted from the mother university, the University of Dar es Salaam (Kapinga, 2014; MoEVT, 2009).

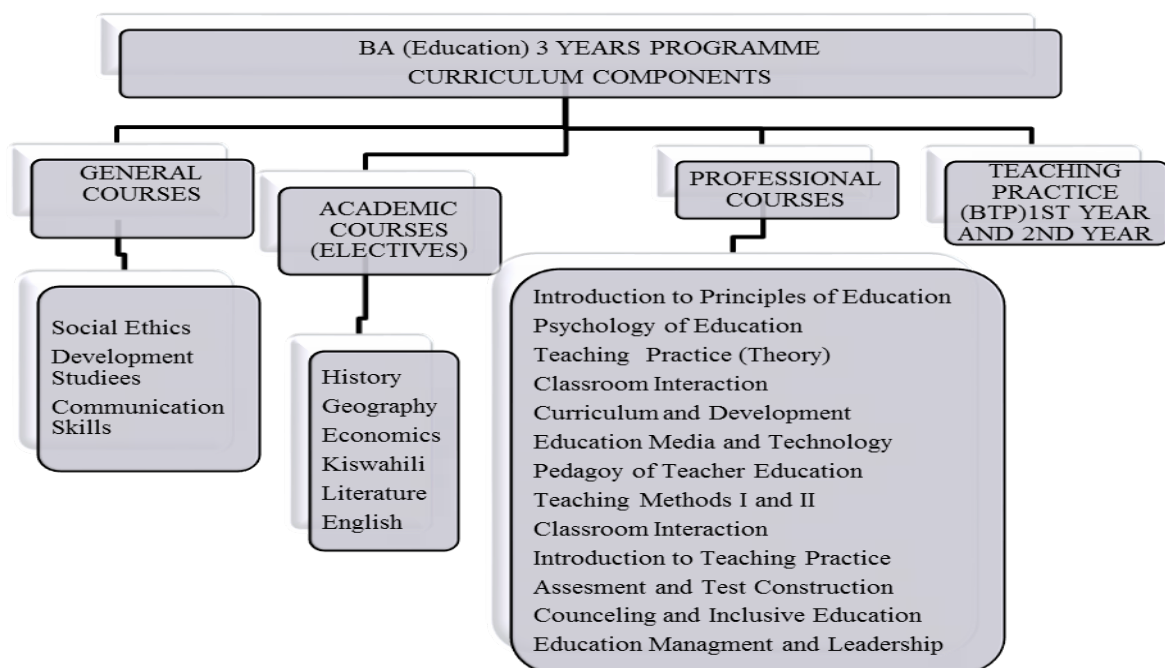
In Tanzania two categories of teacher education can be identified: special education teachers, who are trained to teach special schools and regular teachers or sometimes are referred to as general teachers (Meena, 2014). But regular teacher education is the one where teachers are trained for general education teaching, and they receive minimal dosage concerning inclusive education. So, in Tanzania majority of the teachers who are deployed in both inclusive and regular schools can be found in the second category of regular teachers. Since regular teacher education programme is the main focus of the present study, it can be said that most of their curricula are influenced by a number of pedagogical traditions for the past decades. These traditions, according to Schepens, Aelterman, and Vlerick (2009), include academic, practical and critical or social re-constructionist traditions, all of which have shaped general teachers identity against special education teachers in regard to content and dosage that they receive.

However, there is no an appropriate curriculum model which could shape a teacher that is able to handle inclusive classes. On the other hand, special teacher education curriculum has also been so categorical; therefore, does not allow flexibility within teachers' profession in regard to diversity among learners. Rao (2009) argued that, in a strict categorical approach to special needs education, a number of special education teachers have not kept up to date with new practices. That is, new classroom with diverse students with diverse needs as opposed to what they have been specialized with during their initial teacher education training. Applying such a philosophy makes it difficult for prospective teachers to implement inclusive education especially when a class composes of several children with a number of difficulties and disabilities included in main stream classes

As a result of teacher education programmes that do not effectively address diversity, it has become a common practice to label students based on their disability instead of focusing on

their instructional needs. In his study, Rao (2009) suggested a multi-categorical approach to service delivery in teacher education where teachers can be trained in different areas of disabilities. Moreover, for a better practice in inclusive education settings, teachers have to be trained to focus on the student’s instructional needs rather than focusing on the disability. The figure below presents the curriculum structure of regular bachelor of education which is taught for 3 years. It has been modified for educational purpose from the institution where data for this study was collected.

Figure 3: The Structure of Regular Teacher Education Curriculum



Source: Field Data 2014

The figure above has been created to give a snapshot of what regular teacher education curriculum composes in relation to inclusive education. For the common purpose teacher education curriculum is divided into four components; namely, general core courses, academic courses (electives), professional trainings courses, and Practicum.

The first component, that is core courses, are taught across the university, and they are universal where all undergraduates student have to take them since they are obligatory; include development studies, communication skills, and social ethics. Social ethics, as a common course in this institution understudy, has been giving this university an exceptional standard since its objective has been geared toward humanity in professionalism, and

advocates the respect for each human being and the value for respect. It can be said that, as advocated by Salamanca statement, the value of respect for humanity and love have been a core value of inclusive education (UNESCO, 1994a, 2008).

The second component composes of academic courses or electives which are optional to student teacher to opt. Student teachers are allowed to opt up to two subjects, and make one a major subject; however, they both carry equal credit units. These electives are part of academic courses of which students are going to teach when they finish their degree programme. They are taught throughout three years of the programme in combination with other professional courses as in third components.

The third component composes of the professional training courses which are also taught throughout three years of the degree programme. These are professional courses because they compose elements which are important in teaching, and the successful completion of these course leads to teaching profession. Professional trainings courses are important in this study since they provide a cognitive map and big picture to prospective teachers on how to deliver academic content to a diverse group of students. This part of curriculum composes of several courses such as psychology of education, foundation and history of education, curriculum development, assessment, and evaluation, school leadership and management as well as pedagogy and teaching methods.

These are general professional courses listed in the above curriculum. However, these professional trainings are further divided into 15 courses for the three years of the study. It is under this part where courses related to inclusive education are embedded as module, or taught as a separate course in the curriculum for regular pre-service teacher education curriculum. For instance, in the first year, student teachers are taught psychology of education which is the introductory course aiming at imparting basic skills necessary for application and analysis of psychological principles related to teaching and learning. Moreover, the objective of the course is to help prospective teachers to be able to identify the learning needs of the special children or exceptional children. However, the whole course only composes one module which is concerned about inclusion. And the units under this module are directed toward identification of various disabilities without showing how to teach these children considered different (See Appendix IV and V).

Again, in second year of study in relation to professional training, there is no direct course related to inclusion. However, the course introduction to teaching practice stipulates how teaching is practiced in real classroom and some aspects of it are concerned with special education. For instance, in page two of the course outline (See appendix IV) prospective teachers are taught about strategies of identifying learners with special educational needs in general classrooms and how they are going to interact with them.

My concern here is the consistency between the theory part of the course and the present practical part of the curriculum. This is due to the fact that the connection between educational psychology and practicum in real classrooms does not correlate. This is because student teachers have been taught about identification of special needs students, but not how to teach and attend them in inclusive classes. And finally, in the third year of the study, students are taught three professional courses, and only one course is concerned with counselling and inclusive education. It is only in this course where issues concerning inclusive education are highlighted. The course introduces inclusive education and how it is practiced, and also core values of inclusion are identified.

And the fourth curriculum component is practicum as illustrated earlier in this study; practicum takes about 40% of the time of students spent in the university. And it is the important part of the curriculum where students reflect about what they have learnt in the classroom for application. Practicum is what enables student teachers to develop appropriate expertise on how to deal with diverse classes and the like in real inclusive environment. Practicum stresses the need for pre-service teachers to learn to engage in serious and informed intellectual analysis of their teaching and how it can be improved as something which they do in schools and bring the feedback to the university (EADSNE, 2010). As far as this study is concerned, teaching practice is what informs pre-service preparedness for inclusive education as well as it provides a big picture on where to be changed and where to be reformed in the current teacher education curriculum.

2.6 Models of Teachers Training for Inclusive Education

Due to the increasing number of the children with disabilities in mainstream classes and schools as well as the current move toward inclusive education ,teacher preparation for this

role is a critical issue (Harvey et al., 2008). Considering the nature of teacher education, especially general teacher education, experience and research conclude that teachers are not well prepared to teach inclusive classes. Cooper et al. (2008) concluded that, most of the practicing teachers feel that they have not been well prepared for this role especially for the students with identified disabilities. So, the main issue here is that how well can teachers be trained for inclusion.

UNESCO (2003) offered five recommendations on how well general teachers can be prepared for inclusion, and be able to work with students with disabilities. In the first place, they recommended an establishment of clinical experiment for both regular and special education teachers especially during block teaching practice. Secondly, they suggested the renewal of teacher education curriculum in order to establish a shared language that supports collaboration of special and general education teachers. They also advocated a provision of support which will be an on-going one during their (teachers) first three years of teaching. And finally, they suggested an establishment of shared governance of teachers' education and then reflect collective responsibilities for teacher educators, content specialists, and practicing teachers. Similar suggestion were made by Pugach and Blanton (2009), who specifically stressed on collaborative teaching and cooperation between special needs experts and the general teacher education trainers in training teachers for inclusion. Further to that, the UNESCO report on inclusive education stressed much on translation of relevant research (especially brain research, language acquisition, and social context) into real teaching environments (UNESCO, 2008).

Considering the above suggestions and recommendations toward current teacher education curriculum, it can be said that teacher education needs to be reframed to accommodate all the above suggestions. However, it can be noted that the curriculum for teacher education in Tanzania composes none of the mentioned components. So, based on these, it is clear that the models which have been used in training teachers have been ineffective for years, so it needs to be changed. There have been several approaches that have been suggested by a number of studies on how to prepare teachers for inclusion. A study by Stayton and McCollum (2002) identified three models that can make the existing teacher education curricular to address inclusive education across their curriculum: the infusion model, collaborative training, and unification model.

The infusion model is the one which student teachers take 1-2 courses that inform about inclusive education, special education needs, and areas of disabilities. This is the model which has dominated general teacher education curricular in Tanzania as well. As noted above, the curricular under study comprises three courses related to inclusion and inclusive education. However, Jelas (2010) reported that model to be ineffective and not sufficient to prepare teachers for inclusive education.

The second model is collaborative training. In this model of teacher training for inclusion more courses that inform concerning inclusive education and special needs education are offered. And collaborative teaching between special needs trainers and general teacher trainers is insisted, and on top of that, student teachers from special needs education and general teacher education are required to conduct their practicum together.

Lastly, it is the Unification model where all students study the same curriculum which has both elements of special needs education and mainstream education with the focus on the special needs children. Similar to Avramidis and Norwich (2002) in their study in Ireland, they identified three models of initial teachers training for inclusive education that seem to reflect other systematic approaches. These include a single unit study delivered by specialist, infused study across all curricular areas, and combination of both. Nevertheless, when teachers are asked about their most favoured approach, they all prefer direct teaching experience with children with special needs: attending university courses and in service training are most favoured.

Similar conclusion was reached by (Hammerness et al., 2005) who insisted on active connection between coursework and field work with actual pupils with disabilities and diverse needs in general classrooms. Studies suggest that, there should be a direct Linkage between teacher education training institutions and inclusive or special schools so as to have a great pollination between the two so as to provide teachers with a great practice in reality of the inclusive classroom. All in all, it can be said that in the current move toward inclusion and inclusive education there are some aspects in teacher education which should be taken care off. One being that , for successful inclusion student teachers' belief about inclusion tends to be affected by school, teachers' trainers, and organisation belief about inclusion (Harvey et al., 2008). So, in this study, all concerns have been explored and examined carefully, and pre-service student teachers' concerns have also being taken into consideration so as to inform teacher training institutions on how to better prepare general teachers for inclusion.

3 Research Methodology

This chapter deals with the procedures used in conducting the present study. It covers the research approach, research design, which is phenomenology, methods of data collection, and a qualitative analysis of the data. Finally, the issue of validity is discussed as well as ethical consideration has been considered.

3.1 Phenomenology Design

The present study aimed at investigating how pre-service student teachers are prepared for inclusive education in Tanzania, in order to understand the research problem in details phenomenology design was used. Phenomenology is the philosophical interpretative qualitative approach which seeks to explore personal experience as perceived by participants (Smith, 1996). Moreover, the design gives an opportunity to understand individual understanding and conception of a certain situation as experienced by themselves in their daily life (Gall, Gall, & Borg, 2007).

In this study, student teachers personal experiences in the teaching of inclusive classes have been taken into consideration in order to understand how pre-service student teachers are trained toward inclusive education. Creswell (2014) contended that individuals get to know their experiences only through what they practice and experience with their sensory organs. For this matter, phenomenology fits appropriately in this study since the investigation of the problem under study was based on what student teachers experienced during their practicum.

Phenomenology is concerned with how individual people describe things and experience them through their senses (Gall et al., 2007; Patton, 2005). Moreover, phenomenology seeks to understand lived experiences of an individual or group of individuals about particular phenomena (Cohen, Manion, & Morrison, 2011). Generally, phenomenology as a research paradigm focuses on the structure and essence of individual or group of individuals' experiences.

Therefore, phenomenology is concerned with how we put together phenomena we experience to make a sense of the world around us, and hence to develop a world view. As for this case student teachers experience and training for inclusive education have been important in understanding their preparedness for inclusive education in Tanzania. In addition to that, in

order to achieve that I used semi- structured interview so as to listen to participants' deeper lived experience concerning training for inclusive education and their needs. This did not only make me closer to the participants but also to the situation that was experienced by pre service student teachers in their initial teacher education.

3.2 Qualitative Approach

Since this study aimed at investigating how pre-service student teachers are trained toward inclusive education, and also to understand their perceived needs to practice inclusive education, qualitative approach was seem appropriate. The choice of qualitative research approach has been due to the current research trend that has changed when investigating experiences or perceptions of individual people (Cohen et al., 2011; Wallen & Fraenkel, 2001).

Again, the choice of qualitative approach has been influenced by the need to investigate phenomena at hand through the eyes of people who are experiencing a given phenomenon (Bryman, 2012). Creswell (2014) noted that the aim of qualitative research is to explore social phenomena as experienced by people, and therefore in order to understand student teachers educational needs to practice inclusive education, qualitative design was chosen among other approaches.

Patton (2005) reminds us that research studies that are qualitative in nature are designed to discover what can be learned about some phenomena of interest, particularly social phenomena, where people are participants. In this study, the focus is on pre-service teacher training toward inclusive education, and further explores prospective teachers' perceived needs to practice inclusive education. The understanding of pre-service teachers' educational needs will inform teachers' preparation programmes and institutions on what should be considered for change in addressing inclusion and journey to inclusive education.

3.3 Selection of Participant and Area of Study

3.3.1 Selection of Participants

This study composed of eight (8) participants i.e. six (6) pre-service student teachers and Two (2) teacher trainers (Lecturers). The selection of these participants was made purposively in order to gain a deeper understanding of the phenomenon under study (Creswell, 2014). Patton (2005) argued that the quality of a good research project does not only rely on the suitability of the methodology but also the suitability of the sample to be studied. So, in this study purposive sampling was chosen in order to understand closer the research problem by gathering data directly from participants who have experience the phenomenon, who are student teachers and teacher trainers. This is based on the logic that appropriate sampling always yields appropriate data for the phenomenon under study, and gives a complete picture of what is investigated (Gall et al., 2007).

So, in this study purposive sampling was considered appropriate because it allowed the researcher to access knowledgeable people concerning the research problem under study (Cohen et al., 2011). For example, all pre-service student teachers who participated in this study have been into teaching practice in inclusive primary and secondary schools, and some are holders of diploma in special needs education. And the two teacher trainers are teaching professional courses that are related to inclusive education: psychology and counselling in the institution under study.

Table 1 and 2 present respectively the number of pre-service student teachers and teacher trainers participated in the study. The name of the university has not been included in the table in order to protect the individuals and the university integrity.

Table 1: Pre-service Student Teachers Participated in the Study

Name	Age	Gender	Majors	Year of Study	Programme
ST1	24	F	History & Geography	3 rd Year	BA(Education)
ST2	25	M	Kiswahili & English	3 rd Year	BA(Education)
ST3	36	F	English &Geography	3 rd Year	BA(Education)
ST4	27	M	Economics &Geography	3 rd Year	BA(Education)
ST5	30	F	Literature & Kiswahili	3 rd Year	BA(Education)
ST6	40	M	Geography &Economics	3 rd Year	BA(Education)

Source: Field Data 2014

Table 2: Teacher Trainers (Lecturers) Participated in the Study

Name	Age	Gender	Level of Education	Teaching Subjects	Experience
TT1	42	M	Master's	✓ Psychology of Education ✓ Classroom Interaction	6 Years
TT2	67	F	PhD	✓ Counselling and Inclusive Education	10+ Years

Source: Field Data 2014

(Cohen et al., 2011) argued that, the quality of a good piece of research does not only fall on the appropriateness of the methodology and instrumentation but also the suitability of the participants used in the research. In this study, the above presented participants provided the researcher with rich information concerning pre-service teachers training toward inclusive education.

3.3.2 Area of Study

This study was carried out in Tanzania mainland in the Lake zone area, and involved one private university which offers bachelor of education. The choice for the area of the study based on the reason that the Lake Zone area is one of the areas in Tanzania where there have been a lot of reports concerning strong cultural beliefs against people with disabilities. Among these include several reports which were published worldwide concerning killings of people with albinism, and other bad cultural practices including killing of children with disabilities (Durand, 2010; Possi, 1996).

To this study the area was very important since cultural ties have had strong impact on pre-service teachers' attitude and training for inclusive education as they form an important element in the implementation of inclusive education. As described in the conceptual framework society influences is at macro level which have large impact on implementation of inclusive education (Bronfenbrenner, 2009). Though the majority of students are not from Lake Zone, their experiences of living with such communities were very important to this study.

3.4 Methods of Data Collection

Data for this study was collected through interviews with six pre-service student teachers and two teacher trainers. The interviews were conducted in the university campus where the participants' teaching and learning process takes place. This implies that this study was conducted in a natural setting where participants conducted their daily activities. Bryman (2012) contended that human experience is shaped in particular contexts, and cannot be understood if removed from those contexts.

Thus, qualitative research attempts to be as naturalistic as possible, meaning that the context must not be constructed or modified. Therefore, the interviews for this study were conducted in the natural environment, meaning the university campus where student teachers and their trainers conduct their daily activities. Data collection, in the words of Jyothi (2011), is the process of obtaining evidence in a systematic manner so as to ascertain answers to the research problem. This study employed interviews as primary source of data collection with the purpose of exploring teachers' trainings toward inclusive education.

Again, an interview guide was used in the process of interview. Creswell (2014) defined the interview guide as a relatively brief series of topics or questions the researcher uses to guide the conversation. On top of that, the curriculum document for teacher education was also used in analysing participants' responses in relation to training for inclusive education, and served as a reference material for this study.

The interviews were semi structured in nature which allowed the researcher to explore deeper the problem under study (Creswell, 2014). These interviews provided openness and clear understanding of the research problem it also provided a researcher with opportunity to ask some follow up question and gave the researcher rich data. All interviews were tape recorded since the question were open ended in nature.

3.5 Data Analysis

In this study interviews (semi-structured interviews) were used as the main source of data (Creswell, 2014). The choice for using semi-structured interview was to achieve participant flexibility and to allow researcher to gain deep understanding of the phenomena in hand, so this allowed the researcher to gain deep understanding of the research problem from

participants point of view (Patton, 2005). Since the interviews were conducted in the university campus using Swahili, the national language, a deeper description of the phenomenon under study was achieved as the participants used their mother tongue during interviews (Patton, 2005). So all interviews as stated above were tape recorded, with participant's consent that they are being recorded and anonymity was maintained. Transcription was used to transform audio recorded data from Swahili to English for the purpose of analysis (Best & Khan 1993). A thematic analysis of data was followed in order to develop categories of description and making meaningful understanding from recorded data through coding procedure (Braun & Clarke, 2006).

In conducting thematic analysis of data six steps were followed as suggested by Braun and Clarke (2006) thus, familiarisation with the data by reading and re-reading the data, generation of preliminary codes, fitting the codes with the theme, reviewing the themes, defining and naming the themes and finally the production of the report. The coding process of the raw data was done in order to develop categories of description which helped to establish meaning from the data.

Coding in qualitative research means breaking down of the interview responses into separate statements, sentences and paragraphs based on the interview questions and developing categories out of the paragraphs or sentences analysed (Patton, 2005). Coding sometimes refers to a name or a label that a researcher gives to a piece of text that contains an idea or a piece of information (Cohen et al., 2011).

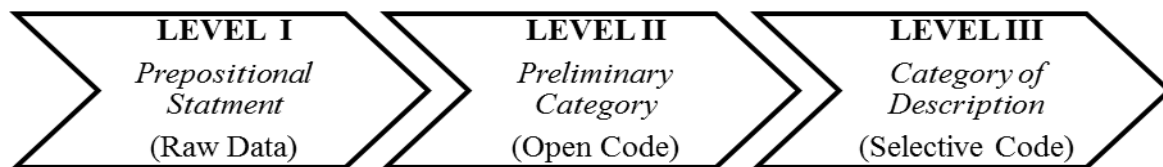
Gibbs as cited in (Cohen et al., 2011) goes beyond by asserting that a code refers to when a writer or a researcher writes the same statement which means the same in response to a given research question. So basically coding procedure during the analysis was guided by what actually said by the participants during interview. Three major types of coding were used in this study and can be distinguished as open coding, axial coding and selective coding (Boyatzis, 1998; Creswell, 2014; Patton, 2005).

Open coding is the initial type of coding and the analytic process by which concepts are identified, developed, then labelled, and grouped to form categories of particular phenomenon identified in the data (Boyatzis, 1998; Patton, 2005). By making connections between categories, data are then put back together in new ways, and this is *axial coding*. The process is focused and geared towards discovering and relating categories in terms of a paradigm

model (Boyatzis, 1998). The aim of *selective coding* is to select a core category, and relate the major categories both to it and to each other in congruent with the theme (Patton, 2005).

The relationship between the categories must be validated against data, and categories that may need further development can be filled in. Therefore, coding enables the researcher to identify similar information from different texts that are carrying the same meaning and information. The coding process as was used in this study is explained below in the following figure below:

Figure 4: Coding Procedure.



Source. Field Data 2014.

At level I, interview responses were used to identify prepositional statements. At level II, each sentence was coded into as many codes as possible to ensure full thematic coverage. Level II codes are also called preliminary categories. Level III codes elevate the data to a more abstract level by forming categories of descriptions. Boyatzis (1998) described that level III codes are theoretical constructs and are derived from a combination of academic and clinical knowledge.

3.6 Reliability and Validity of the Data

Reliability and validity carry a significant importance in any scientific study as they address quality in any qualitative study. However, in many qualitative studies the two issues are concerned with the trustworthiness and quality of the study, which have been questioned by many scholars since they cannot be addressed in the same way in naturalistic work (Shenton, 2004). Since this study was qualitative in nature, the issue of reliability and validity in pursuit of quality was considered by addressing three issues, that is credibility, dependability, and Confirmability (Guba, 1981).

3.6.1 Credibility

Credibility is one of the key concepts used in addressing quality in qualitative study. The term has been used to represent internal validity of the study, which seeks to ensure that the study measures what is actually intended (Bryman, 2012; Guba, 1981; Shenton, 2004). On the other hand, Creswell (2014) argued that credibility aims to answer the question how congruent are the findings with reality. According to Bryman (2012) and Guba (1981), several techniques can be used to address credibility of the study, such as triangulation, member check, adoption of appropriate methods, to mention the few.

The present study employed more than one method of triangulation to ensure the consistency of the data collected since triangulation entails the use of more than one method in gathering information (Gall et al., 2007). In the process of data collection I used interviews and document review; that is, the curriculum for teacher education so as to get a real picture of teachers training toward inclusive education. Apart from methods, in order to achieve diversity of informants in this study, I decided to involve both teacher trainers and student teachers to pursue the truth concerning training for inclusive education. Creswell (2014) argued that the use of diversity informants allows the researcher to check out beats of information across the informants and ensures credibility.

On the other hand, to ensure credibility in this study a pilot study was conducted prior to data collection so as to gain a complete understanding of the organization under study. Bryman (2012) referred to this as a prolonged engagement which allows both parties involved in the study to gain understanding and to establish a relation of trust among two parties. During pilot study, I managed to adjust some interview questions and to get familiar with the environment under study as well as to gain access to some documents such as the curriculum.

Apart from pilot study, a member checks technique was also employed in assuring the accuracy of the data gathered, Bryman (2012). Since the interviews were recorded, a verbatim transcription was used to ensure that what were actually said by participants were their actual words, I asked them to reread the transcriptions so as to confirm if that is what they actually said. Finally, the use of direct quotes during data presentation ensured truthfulness of the data gathered as they present what were actually said by the participants during the interview (Gall et al., 2007).

3.6.2 Dependability

In qualitative studies, the term dependability and trustworthiness is used instead of the term reliability which stands for accuracy of measure (Creswell, 2014). Dependability focuses on the fact that if the study was repeated using the same method, participants, and context, it would produce similar results (Bryman, 2012; Guba, 1981; Patton, 2005). However, due to change of circumstance, two studies conducted in similar situations may bear different results, and still be dependable and reliable considering that they present similar social phenomena (Cohen et al., 2011). So, according to (Cohen et al., 2011; Shenton, 2004), consistency of the findings in qualitative study is counted by the extent to which variations can be tracked and explained between two studies.

To ensure dependability several methods can be used. As suggested by Shenton (2004) and Bryman (2012), methods such as audit trail, data and method triangulation, and replication logic can be used. However, in the present study data and method triangulation have been used to ensure dependability. Again, the time frame when data was collected has been shown when the participants were interviewed during their third year of study. Finally, according to Guba (1981) argued that, there is close ties between credibility and dependability; that is, demonstrating the former goes some distance ensuring the latter.

3.6.3 Confirmability

Confirmability refers to the extent to which results of the study could be confirmed or corroborated by others (Creswell, 2014). Patton (2005) associated Confirmability with objectivity of the study; however, he stressed that it is difficult to avoid human error in any scientific study. So, to him objectivity is concerned with the use of instrument that is not dependent on human skills and perception (Patton, 2005; Shenton, 2004). It is difficult to address objectivity in qualitative studies due to the fact that even instruments such as questionnaire or interview guides are constructed by human (Bryman, 2012).

Based on that assumption, Shenton (2004) stressed that, the use of triangulation can be used to address Confirmability, and also reflexivity of the researcher can be employed.

Confirmability in this study has been ensured by the use of method triangulation and data triangulation so as to reduce the effect of the investigator bias.

3.7 Ethical Consideration

The issue of ethics in any research which involves interaction between individual human beings and the researcher has to be considered. Cohen et al. (2011) contended that a major ethical dilemma in research is one which requires a researcher to strike a balance between the demand placed on them as a professional scientist in pursuit of truth, and their subjects' rights and values potentially threatened by the research.

It is therefore important to put into consideration ethical issues in research to prevent potential harm that might be caused by the research to the participants (Cohen et al., 2011; Gall et al., 2007). The following ethical considerations have been taken into consideration in conducting this study, these include:

Informed consent of the participants who participate in the study: where the permission for conducting this study was given. This was done through attainment of the letter of approval from the University of Oslo (see appendix, VIII) and also from the university faculty where data was collected (see appendix III). But also participants signed a consent form which described the nature of the study i.e. was for academic purpose only (see appendix VII) so in this study informed consent among the participants was taken into consideration

Privacy: The data collected from the informants was coded to protect their identity and ensure their privacy (Creswell, 2014). During interviews, the researcher used more positive words to avoid making participants uncomfortable (Patton, 2005). Furthermore, the researcher also had a private room for interviews to make the interviewee feel free to express their concerns. And the entire recorded interview was erased after being put into written document for analysis.

Confidentiality: Was taken into consideration where participants were given pseudo names (example **ST1** to mean student teacher one and **TT1** to mean teacher trainer one) to protect them from any harm might be caused by this study. And also participants were informed that the nature of the study was for the academic purpose only and not otherwise. In addition, I have acknowledged of all the people who have participated in this research in one way or another for their contribution and support (Cohen et al., 2011).

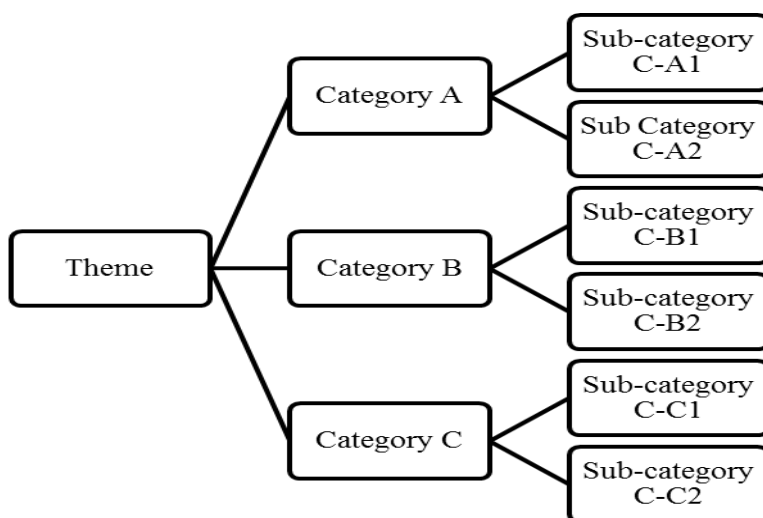
4 Data Presentation, Analysis and Discussion

This chapter presents and analyses and discusses the data collected from the field. The study aimed to find out how pre-service teachers are trained toward inclusive education in Tanzania. Further, to find out pre-service student teachers' perceived needs to practice inclusive education. Data analysis for this study followed a phenomenological data analysis approach. The approach was descriptive in nature in a sense that what participant said was described (Creswell, 2014).

The results were divided and presented in inform of themes based on the three research questions as shown in chapter 3. Each theme includes a number of different categories of description as a result of data analysis process. In the presentation, each category system was divided into their corresponding sub-categories found, which were then described and explained with extracts from participants' statements, explaining the meaning of the content.

Alphabets have been used to indicate categories of description (A-C) while the sub categories are represented by alphabets and numbers, the letter C in each sub-category stands for a word category. And the ratio number in each sub-category represents the frequency of participants responses appeared under each sub-category, see figure 5.

Figure 5:An Overview of the Model Used to Present Results for this Study



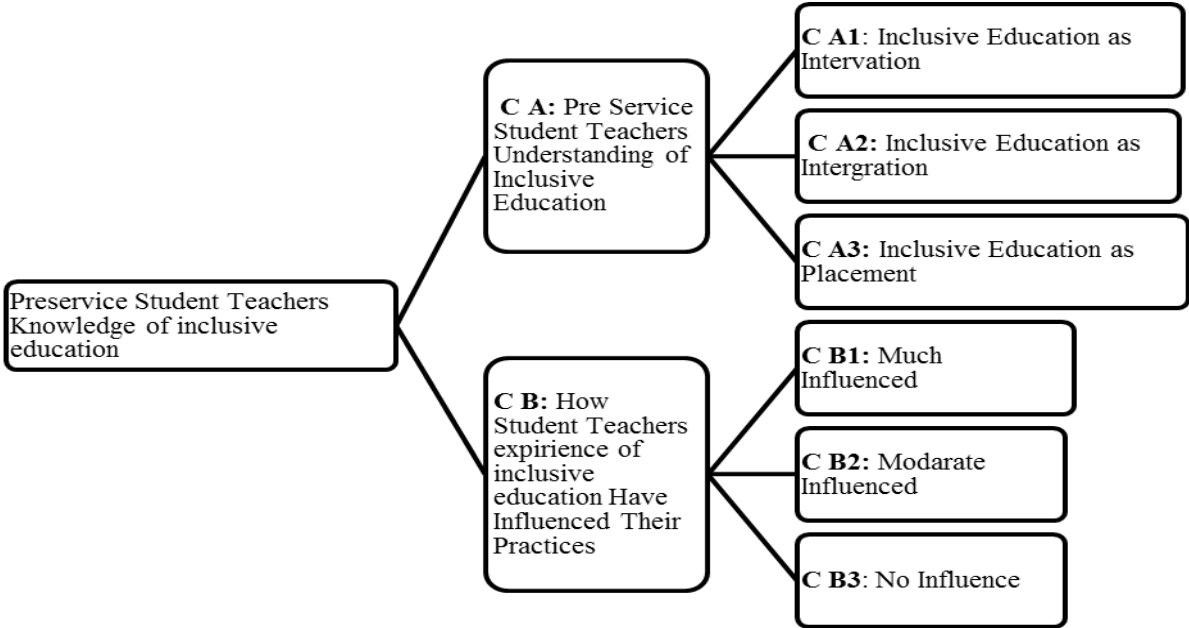
The analysis of data is organised based on three research question. These are (1) pre-service student teachers knowledge of inclusive education, (2) approach and strategies used in pre-

service teachers training for inclusive education and (3) pre-service student teachers' perceived needs to practice inclusive education.

4.1 Pre-service student teachers knowledge of inclusive education

My first research question focused on the pre-service teachers' knowledge of inclusive education. The question aimed to finding out how student teachers understand the concept inclusive education and how that knowledge has influenced their practice during their teaching practices. The analysis of theme of pre-service student teachers' knowledge of inclusive education was presented by two interview questions which resulted into development of two categories. These include pre-service student teachers understanding of inclusive education and how student teachers experience of inclusive education has influenced their practices.

Figure 6: An Over View of the Categories and Sub Categories on the Preservice Student Teachers Knowledge of Inclusive Education



Category A: Pre-Service Student Teachers Understanding of Inclusive Education

The analysis of pre-service student teachers' understanding of inclusive education was based on how pre-service student teachers understood and explained the concept inclusive

education. As a result of analysis, a total of three different sub-categories could be distinguished from category A (CA).

C-A1: Inclusive Education as Intervention, (1/6)

Participants under this sub-category viewed inclusive education as an attempt or intervention to help students with special needs. Most of the participants under this category viewed students with special needs happen to be in general school as the result of being segregated in the community. In the analysis, it seemed that student teachers view inclusive education as an attempt that is done by the government to help disabled children to learn by placing them in general schools with their peers. The following interview script illustrates such kind of thinking:

“I have been in inclusive school in my last BTP, and based on my experience I think inclusive education is there to help pupils with disabilities to be out of their home....i mean to make them feel welcome by their peers since they don't learn in the classes” (ST4)

From the observation above it seems that student teachers described and understood inclusive education as a means of intervention to help vulnerable children from segregation or dangers that they face in society by being in school. To him considers no learning is taking place in inclusive schools for children with disabilities, so he understands inclusive as an intervention.

C-A2: Inclusive Education as Integration (2/6)

Some student teachers viewed inclusive education as the integration process, whereby they see education for students with disability to be separate from main education. In their explanations, they seem to understand the purpose of inclusive education. They explained inclusive education in contextual point of view, where there is existence of the link between special unit and general classroom. To them the existence of the two units in one context is there for moderation and transferring purposes especially when a child with special needs qualify to be in a general class. For example one participant said:

“I can say Inclusive education is happening when student with disability educated in separate class and when they improve are move to a join their peers in the regular class” (ST3)

According to her understanding of inclusive education, she seems to understand the process under which inclusiveness in Tanzania is conducted. Because many schools have special units for disabled children taught by special education teachers separately, and when a child

improves is moved to general inclusive classes. Another participant explained that, Inclusive education is a system where there are two separate types of education, that is special education and general education but in the same area or school as illustrated by the following script.

“I am not sure....but I see inclusive education as the system where there is existence of both special education classes and regular education classes in the same school and sometime they learn together....”(ST5),

According to this participant inclusive education exists when there is existence of two units, that is, special units and regular classes. This explains, as said earlier, that what is actually happening in most of inclusive schools in Tanzania is separation between special units and general education in the same school. And the last category of teachers’ understanding of inclusive education was as the aspect of placement.

C-A3: Inclusive Education as Placement (3/6)

Three out of six participants in this sub-category understood and explained inclusive education as the placement process. The analysis resulted into finding of similarities in their statements concerning helping children to learn in the regular classes. Under this category student teachers understood the purpose of inclusive education and the support needed by special needs students in inclusive classes. This was evidenced by the following statements from participants;

“Inclusive education involves the teaching of learners with and without disability in the same school or in the same environment....and provides them with necessary support in the class that they are placed...” (ST6)

“[...]...on my point of view inclusive education concern with putting pupils with disability in a class with non-disabled children and provide the disabled with necessary needs to learn for instance Braille materials, and other assistance.” (ST2)

For that matter, it can be said that under this sub category student teachers understood inclusive education as the means of placing children in regular classes so they can be provided with necessary support. The second participant went further by illustrating kind of support which includes teaching and learning materials for children with disability.

In examining teachers’ understanding of inclusive education, it can be said that 1/6 understand inclusive education as an intervention, again 2/6 perceive it as integration process, and the majority 3/6 view inclusive education as a placement. In the next category student

teachers were asked to explain if their experience in inclusive schools has influenced their practice during their teaching.

Category B: How Student Teachers Experience of Inclusive Education have Influenced their Practices

Under Category **B (CB)** student teachers were asked by the follow up questions as perceived by themselves to state whether their experiences of inclusive education have influenced their practices. The explanations focused on the way student teachers reflected their experiences during practicum, and were asked how they controlled inclusive classes. In this category the question asked demanded student teachers to rate how their understanding of inclusive education helped them in lesson planning, preparation of teaching and learning materials and classroom management in inclusive classes.

The degree of experience and practice was judged upon the ability of student teachers to do at least three of the above activities, that is lesson planning (development of individualised curriculum), ability to prepare and use teaching and learning materials for children with disability, and lastly techniques of classroom management. As the result of analysis, three sub-categories were distinguished under category B.

C-B1: Much Influenced, (2/6)

Some students during analysis seemed to be influenced much by their knowledge in dealing with inclusive classes. Especially, most of the students seemed to be able to manage the classes where they had a support with special unit teachers in planning their lessons. But in one case, due to previous training in special education, one participant was able even to design teaching materials for students with speech impairment in his class.

“Yes to that because I have been working with special school and during my BTP the knowledge of inclusive education helped me design teaching material for deaf child in a class I was able to use illustrations , drawings and signs language...”(ST6)

However, other student teachers commented that the knowledge helped him to prepare a lesson plan during teaching practice with the help of resource teacher. From his explanation the resource teacher helped him in developing the lesson plan but also in classroom management and he applied his previous knowledge in teaching inclusive class.

“[...].....yes it have influenced my practice because I had a help from resource teacher from special education unit to prepare a lesson plan and teaching materials for speech impaired children...” (ST2)

It was clear that the role of previous experience in the field and assistance from fellow teachers have a role in helping teachers to practice in teaching inclusive classrooms as witnessed above. The next category was those who seemed to be moderately influenced by their knowledge.

C-B2: Moderate Influenced, (1/6)

The analysis of the student teachers' responses under this category indicates that some student teachers were moderately influenced by their knowledge of inclusive education. Under this category, student teachers seemed to be able to identify students with special needs in their classrooms, to identify their needs, but they could not help them during their lessons because they did not know what to do due to lack of competence.

“Well am not sure....but you see I was in the class and I could see a pupil who was partially visually impaired (albinism) in the middle of the class and she was struggling I knew what she needed but I couldnt help her...” (ST5)

This explains that student teachers know what disability does exist in the classroom based on their previous knowledge and also their needs, but they could not help them. So, this also explains the nature of teacher education which only helps students to identify but not to practice and attend the needs of disabled children.

C-B3: No Influence, (3/6)

The majority of the student teachers under this category saw their knowledge had not been of helpful in their practices. During analysis of their statements it seemed like most of the student teachers saw their training to be insufficient to address inclusive education. So, when they rated their knowledge it seemed they did not have any knowledge of inclusive practices at all. For instance, two participants said in their responses that: Not at all, I need further training.... (ST2), No I think I will have to go for further studies (ST3). While the third participant further commented that:

“Honestly....I have been in teaching practice but nothing worked out because I couldn't even know how am supposed to teach them....well I was just teaching normal no extra efforts or practices that I associated”.(ST1)

From the above statements, it can be said that most of the student teachers from this sub category had neither competence nor good knowledge of inclusive education practices. It

seems like their essence of incompetence has resulted from poor training on inclusive education during their course of study.

As the result of analysis of category B, it seems that the knowledge of inclusive education that student teachers have, have not influenced their practices in inclusive settings. As the analysis shows that out of 6 student teachers 2/6 think their knowledge have influenced their practices and 1/6 statement has moderately influenced, and lastly the majority 3/6 they feel their knowledge have not influenced their practices.

Discussion

Findings from this theme indicate a great variation among student teachers concerning their knowledge as well as understanding of inclusive education. The analysis resulted into development of two category systems, that is, pre-service student teachers' understanding or conception of inclusive education and how such understanding or experience has influenced their practices. The word conception has been used to indicate the ability of student teachers to reflect upon realities of inclusive education and what it means to them during the teaching of inclusive classes in their practicum.

Peterson (2005) defined conception as way of seeing something in qualitative relationship between individuals and their real experiences. So student teachers' conception of inclusive education has been connected with their practical experiences and knowledge of inclusive education. The results indicated that pre service student teachers discuss and understand inclusive education in different perspective. However, in their explanations such conceptions were grouped into three concepts related to inclusive education, that is intervention, integration, and placement (Skojorten, 2001)

Although the overall pre- service student teachers' knowledge indicates that most of the pre-service student teachers do not understand what inclusive education is and its purposes that it serves. These findings are consistent with those drawn by Kapinga (2014) when investigated pre-service student teachers' preparedness for inclusive education, where majority of the student teachers were found with little knowledge of inclusive education. If taken into consideration, the Salamanca statement of 1994 stipulates clearly that, inclusive education is the dynamic approach of responding to diversities among the students, by modifying the

education systems to cater for the needs of all students in inclusive settings (UNESCO, 1994a).

Moreover, the national strategy on inclusive education in Tanzania also stresses on minimization of barriers and maximization of resources to allow children with disability to succeed in regular schools (MoEVT, 2009). To this end, therefore, pre service student teachers seem to have no knowledge or understanding of inclusive education due to the fact that most of their conceptions are concentrated on the aspect of intervention, integration and placement.

Also, findings from category B in which pre- service student teachers were asked to state how their knowledge of inclusive education have influenced their practices during the teaching of inclusive classes. The findings indicated that only 2 out of 6 participants were influenced by their knowledge of inclusive education. So, this indicates that the nature of the curriculum that is used for teacher education has little to offer concerning the handling of inclusive education. This is the result of little experience that student teachers have concerning teaching of inclusive classes and their general training toward teaching profession. Studies that have been conducted in Tanzania indicate the variation of knowledge of inclusive education and among student teachers and their trainers, where majority do not understand inclusive education properly (Kapinga, 2012; Lewis & Little, 2007; Miles et al., 2003).

So, it is clear from this study that the majority of student teachers do not have knowledge of inclusive education and their current understanding or experience of inclusive education seems not to influence their practice during their teaching practice. The essence of these findings can be drawn from the current teacher education curricula which offer a little concerning inclusive education to the prospective teachers.

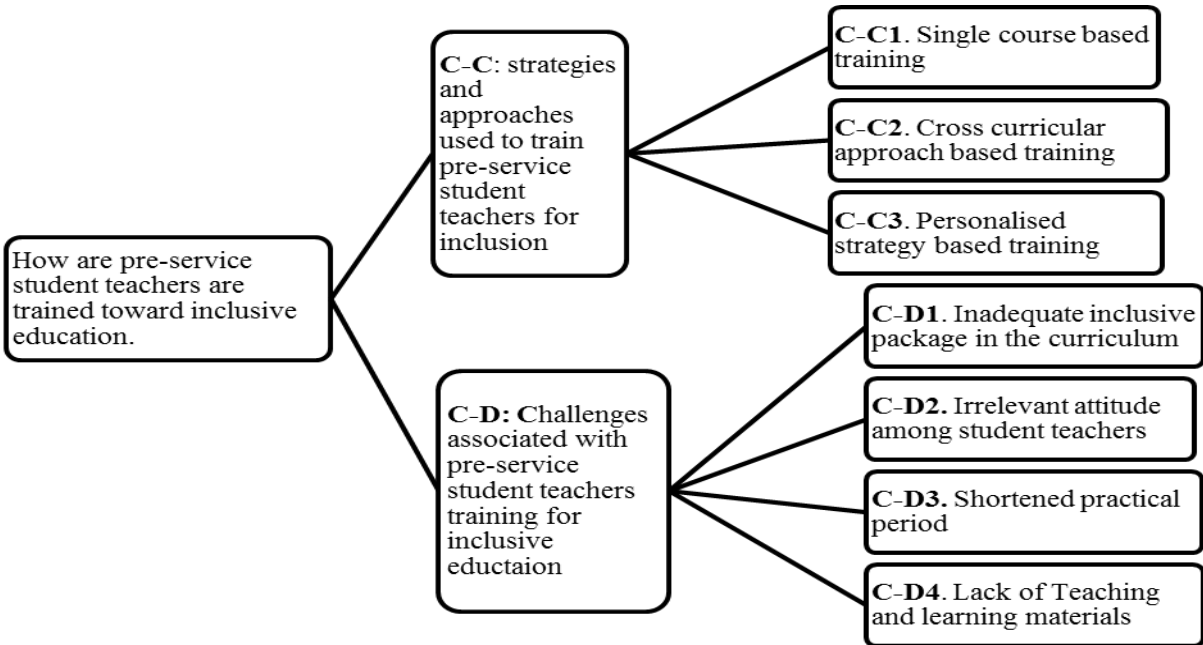
4.2 How Pre-Service Student Teachers are Trained for Inclusive Education

My second research question focused on how pre-service student teachers are trained for inclusive education in their undergraduate studies. This question was investigated to teacher trainers who are referred to as lecturers, and also I reviewed the curriculum as a reference material. The interview with teacher trainers and the review of undergraduate curriculum were done in order to clarify what was said by teacher trainers and what is actually presented in the

curriculum. Training here refers to the teaching strategies and approaches that are used in teacher education to help student teachers to deal with inclusive classes. To acquire appropriate information, I reviewed the curriculum content which is used for undergraduate programme in relation to inclusive education, and also I interviewed teacher trainers (lecturers).

The review of the curriculum document as presented in chapter two was done to understand how courses and modules relating to inclusive education have been weighted in the curriculum. So, in order to come up with concrete results, I decided to interview only teacher trainers under this research question. This research question formed a second theme and resulted into the development of the following categories which includes strategies and approaches used for training teachers for inclusive education (Category C) and challenges associated with teachers training toward inclusive education (Category D). The figure below presents a summary of the findings of the research question two concerning how pre-service student teachers are trained for inclusive education in Tanzania.

Figure 7: An Overview of categories and Sub-categories on How Pre-Service Student Teachers are Trained Towards Inclusive Education



Category, C: Strategies and Approaches used for Training Teachers for Inclusion

Under this category teacher trainers were asked to describe and explain the strategies and approaches which are used to train and prepare student teachers for inclusive education. I asked teacher trainers to explain how relevant skills, knowledge, and attitudes concerning inclusive education are taught to student teachers. And also, I asked what strategy or approach is used to help pre-service student teachers to deal with inclusive classes during their teaching practice or for their future carrier. As the result of analysis, three sub-categories were identified in response to these questions as follows:

C-C1: Single Course Based Training (2/2)

In this first sub-category among others, teachers' trainers both mentioned the use of the curriculum based courses embedded in the curriculum to impart knowledge concerning inclusive education. However, during the probing questions the participants affirmed that the courses with inclusive education content are not well packed in the curriculum for teacher education. So, in their statements the participants mentioned mainly two courses which are *introduction to education psychology*, which is taught in the first year and *counselling and inclusive education*, which is taught in the third year as course based for inclusive education (see appendix IV and V). This was illustrated by the teacher trainer statements below:

“Well so far in the current curriculum have only two courses which specifically addresses inclusion.... meaning education psychology ,counselling and inclusive education.....but for my understanding they are not well packed for inclusion or inclusive education.....so I can say the training with exception of other strategies we use the present curriculum...”(TT2)

“Student receives only introductory part of inclusive education...and this it seem to be in course like [...] (subject codes mentioned) one of which is my teaching subject but to be frank the course only deals with disabilities and special education areas little is presented for inclusive skills....”(TT2)

In their statements, teacher trainers mentioned two courses as shown above that are used to impart inclusive skills and knowledge. However, it seems to both participants that the two courses lack real packages to address issues related to inclusion and inclusive education. So, in my probing questions, I asked teachers trainers if they have used supplementary approaches to improve training for inclusion. The response to the follow up question resulted into the development of the next sub-categories.

C-C2: Cross Curricular Based Training (1/2)

Having asked teacher trainers more concerning the approaches and strategies used in training teachers for inclusion, this category was developed. This question was asked to the second participant who was the dean of faculty of education in the University where this study was conducted. And her response revealed that separate trainings are also conducted to other subject teacher trainers in the faculty, which she specified to be the whole faculty approach to inclusion. In the response the participant commented that:

“[...] for years we have been conducting quality assurance workshops for lecturersi think it was last academic year (referring to 2013) we had a seminar concerning cross curricular issues in education..... And one of the agenda was inclusion.....so you see even history, geography teachers were involved and we had training on how to train teachers to attend special needs student when teaching their specific subjects...” (TT2).

From the above response the participant showed clearly the existence of in-service training seminars for teacher trainers, and most of which include the whole faculty where issues of inclusive education are being addressed. From this observation, it can be said that inclusive skills are not only imparted through teachers who are teaching the specific subjects but the whole faculty members are supposed to induce the skills for inclusion to student teachers.

C-C3: Personalised Strategy Based Training (2/2)

As the previous sub-category focused on the cross curricular based training, the present category focuses on the personalized teacher trainers' strategies. Personalized strategies are taken to mean teachers trainers personal initiatives to help students to practice inclusive education or on how to teach inclusive classes. In their responses, teacher trainers seem to use different strategies and approaches for training inclusion to student's teachers. One of them being teachers trainers often arrange field visits in inclusive and special schools to help students to observe and experience how inclusive education is conducted:

“I have personally before completing the course arrange visits in groups of 20 students as part of their coursework for student teachers to visit and observe teaching in inclusive schools and special school [...] they have to come with written report. this helps a lot to student teachers to understand inclusion through experience in schools...” (TT1)

Another personalised teaching strategy revealed was the personal teacher's initiative to show student teachers on how to use and interact with some teaching materials for student with disabilities in inclusive settings. This kind of thinking is demonstrated in the following statement.

“I am a special needs educator by profession... and I have a resource room where one of our blind student uses.....I sometime invites student to learn how to use Blaire machine that we have, and I teach them how to design teaching and learning materials for blind pupils apart from classroom teaching...” (TT2).

However, both of the two personalised initiatives seem to be extra-curricular activities; teacher trainers seem to have not been using them frequently since they are personal based and they are not indicated in the curriculum. They are not indicated in the curriculum but seem to work much since they expose student teachers to the real world of inclusive education. But my concern was if student teachers are interested in them or not because according to teacher trainers these personalised teachings are voluntary in nature. And being voluntary activity most of student teachers seem not to be interested in them which again poses a challenge in imparting relevant experiences to inclusive education. The second category (category, D) is concerned with challenges that teacher trainers face during training for inclusion.

Category, D: Challenges Associated with Pre-Service Teachers Training for Inclusive Education

After I asked teacher trainers concerning strategies and approaches that are used to train teachers for inclusive education, I questioned them about the challenges that they face during training for inclusion. Challenges here are taken to mean all the obstacles that teacher trainers face in imparting appropriate knowledge and skills to student teachers concerning inclusive education. In the analysis of this category, the results indicated that the obstacles or challenges mentioned were only limited to teachers training or the whole process of teaching and learning as follows:

C-D1: Inadequate Inclusive Package in the Curriculum (2/2)

The issue of the inadequate inclusive package in the current teacher curriculum emerged from both participants. Participants considered the package for inclusive education in the current curriculum is not enough for student teachers to deal with inclusive classrooms, and they insisted that it was only the introductory course which has been included in the curriculum as explained by the response below;

“It should be clear that the content taught is not enough...just imagine to expect a graduate to teach inclusive class alone where he/she have only learned two introductory course...”(TT1)

“[...] student teachers need a lot of onsite practice and knowledge to implement inclusion. Well to my opinion there should be more inclusive based courses across the curriculum...” (TT2).

From the responses above, two issues arose concerning insufficient package of the curriculum. The first respondent concerned with the content which is not well packed for inclusive education, and the second respondent concerned with practicality of inclusive education. It can be said that the current curriculum offers little concerning practical part of inclusive education. From their opinion it seems evidently that student teachers have not been receiving enough dosage to attend inclusive classes due to insufficient package of the curriculum. While the issue of course and related inclusive subject was seen to be a problem, the second obstacle was based on the student teachers attitude toward inclusive education.

C-D2: Irrelevant Attitude among Student Teachers (1/2)

Teacher trainers mentioned irrelevant student teachers' attitude toward inclusion to be the obstacle. To them attitude holds a meaning when comes to teaching and learning, and they described student teachers always find the courses related to inclusive and special education difficulty to perform during their exams. The responses show that most of student teachers have no interest when it comes to courses related to inclusive and special education. This now poses an obstacle when it comes to inclusive education and related practices. This was, for example, illustrated by the following statement:

[...] it is difficult to teach student who are not interested most of the course that are concerning with special education and inclusive education majority of student fails I think they not interested in them (TT1)

The analysis shows that student teachers are considered to have negative attitudes toward inclusive and related courses. This is because of the nature of the subject where most of the students tend to fail, and their attendance seems to be down. So, to teacher trainers' lack of interest among student teachers in attending the classes and their low performance poses a challenge when it comes to implementation of inclusion. In the second sub-category, teacher trainers also insisted that the nature under which teaching practice is conducted poses a challenge to impart inclusive education.

C-D3: Shortened Practical Period (BTP) (2/2)

The time which student teachers spent during their practical training was also seen to be a problem. The response shows that a prolonged teaching practice will help student teachers to work with students with disability. As the result of analysis, it seems that the time allocated

for field practical (block teaching practice) is very short. This, then, causes student teachers to lack appropriate onsite experience:

“BTP is now days irrelevant I mean student teachers need more time to internalise their knowledge on site in spite of that the time have been reduced they spent few month on field more time is needed for them to experience inclusive settings” (TT2).

The issue of practical teaching seems to pose a challenge in a sense that there is sometimes no closer supervision from the university. And since teaching practice is graded, student teachers tend to concentrate only during evaluation. The next sub-category is concerned with teaching and learning materials.

C-D4: Lack of Teaching and Learning Materials (2/2)

Teacher trainers in this category talked about teaching and learning materials as an obstacle to address inclusion in teacher education. The analysis revealed lack of teaching and learning materials in both schools where teaching practice took place, and in the university where training is conducted. Teacher trainers insisted on the issue of the relevance training to be ignored in teachers training for inclusive education.

“[...]... you cannot teach about how to attend a visual impaired child without a braille machine....hearing impaired child without audio material and so forth...just imagine I only use one braille machine which is not enough compared to number of student teachers, there is no reality here no teaching and learning materials...” (TT2)

The participants insisted that the current practice in teacher education is only done for knowledge purpose and not for practice purpose. The current teacher education training lack connection between theory and practice due to lack of teaching and learning materials. From the analysis of the current theme, variations of approaches and strategies have been used by teacher trainers as shown above. These include the use of single course based training, cross- curricular teaching, and personalised based teaching, which are being used. Also, the obstacles and challenges associated with teachers training for inclusion were addressed showing variation among teacher trainers; these include inadequate curriculum package concerning inclusive education, irrelevant attitude concerning inclusive education, irrelevant shortened practicum, and lack of teaching and learning materials, which have been identified.

Discussion

Findings from analysis provide an overview of how student teachers are trained for inclusive education in Tanzania. The result from the first sub-category concerning the strategies and approaches that teacher trainers have been using in training for inclusion shows that varieties of strategies are used for training student teachers. First, they use single course based training where the content addresses inclusive education. However, this approach has proved failure in a sense that it is common in all teacher education programme. Some findings have been addressed by Kapinga (2014) where the courses that are embedded in the curriculum with inclusion content are inadequate to prepare teachers for inclusive education.

The same thoughts were addressed by Stayton and McCollum (2002) who referred to this approach as infusion model where students take one to two courses related to inclusive education. They have concluded the approach to be ineffective to prepare teachers for inclusion. From the findings again, a cross curricular approach was used through workshops, where teachers trainers from different disciplines in education department were encouraged to incorporate inclusive education in their lessons. However, the model is hard to practice; it also lacks consistency since different teacher trainers have different thoughts and attitude concerning inclusive education.

The last approach was the use of the personalized strategy training which involved teacher's personal initiative apart from the curriculum. Teacher trainers identified the use of field trips to inclusive schools as part of course work. This strategy has also been concluded by Kapinga (2014), Brownell, Ross, Colón, and McCallum (2005), and Mmbaga (2002) that it gives student teachers a real connection between planned course work and the field work so as to make their learning meaningful. It can be said that the techniques and approaches that are used by teacher trainers have been so ineffective since they have not been used commonly, and they bear some weaknesses for teacher preparation for inclusive education.

The second sub category was a result of probing questions of which I wanted to understand major challenges that teacher trainers encounter during preparing student teachers as far as inclusive education is concerned. The result indicated inadequate inclusive package of the curriculum concerning inclusive education, which was frequently repeated by the participants.

However, some issues concerning negative attitude among student teachers, shortened practical period, and insufficient teaching and learning materials were also mentioned. From

teachers training point of view, the other challenges mentioned emanated from inadequate inclusive package of the curriculum, which is a common agreement among scholars that the current curriculum has been the source of the incompetence among student teachers concerning their preparation for inclusive education (Brownell et al., 2005).

In his study, Kapinga (2014) reported that, a number of student teachers agreed upon the fact that the curriculum does not offer much knowledge concerning inclusive education. It has to be understood that practical training is a crucial part of teacher education; however, teacher trainers themselves agree upon the fact that the practical period allocated to student teachers is not enough. Hammerness et al. (2005) and Brownell et al. (2005) have considered practical training to student teachers concerning inclusive education to be highly prioritized during their pre-service teacher education.

Thus, the results have clearly indicated that the paramount challenge in teachers training for inclusive education in Tanzania is the inflexible curriculum for teacher education, which does not offer enough content for student teachers to address inclusive education during their pre-service teacher education.

4.3 Pre-Service Student Teachers Concerns and Perceived Needs In Order to Practice Inclusive Education

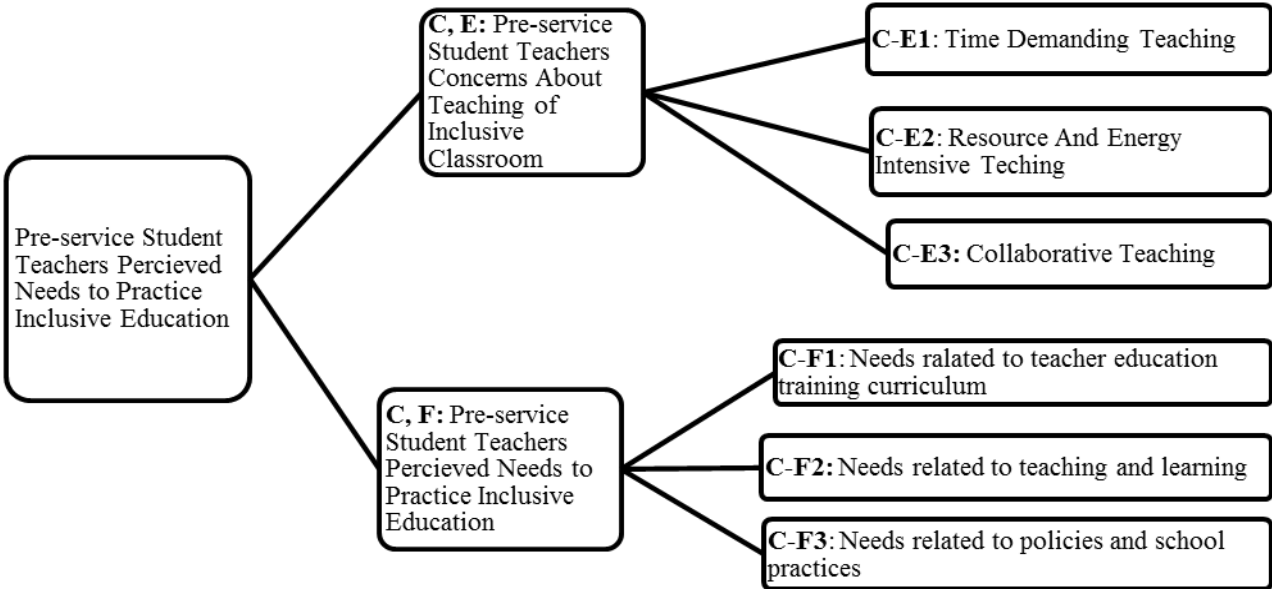
My third research question focused on the pre-service student teachers' concerns and perceived needs in order to practice inclusive education. Perceived needs here are taken to mean all supports or changes that student teachers thought they needed and still need so as to implement and practice inclusive education in the future. Student teachers were asked to reflect upon their practices, knowledge, and skills that they have had so far so as to see what can be done to improve their training to practice inclusion.

However, my focus was on the student teachers' perceived needs to practice inclusive education; I first asked them to give out their concerns about the teaching of inclusive classes. The reason for this question was motivated by the fact that I wanted to know what it meant to them concerning the teaching of children with disabilities accommodated in regular classes.

But the central issue of the theme was to reveal student teachers’ perceived needs to practice inclusive education.

As the result of analysis, this theme has been divided into two categories of description: pre-service student teachers’ concerns about the teaching of inclusive classes (**Category, E**) and pre-service student teachers’ perceived needs to practice inclusive education (**Category, F**). The results of each category are presented in accordance with their corresponding sub-categories they presented under this theme as shown in the figure below:

Figure 8: An Overview of categories and Sub-categories on Pre-Service Student Teachers’ Concerns about the Teaching of Inclusive Classroom and their Perceived Needs to Practice Inclusive Education.



Category, E: Pre-Service Teachers’ Concerns about Teaching of Inclusive Classroom

Pre-service student teachers under this category explained their concerns about the teaching of inclusive classrooms. Their concerns were based on the reflection upon their practices during teaching practices. However, pre-service student teachers’ perceived needs to practice inclusive education were the main purpose of this theme; their concerns about the teaching of inclusive education were important. This category emerged during probing questions because I wanted to understand what it meant to them concerning the teaching of inclusive classes before explaining their needs to practice inclusive education. The qualitative analysis of

Category E resulted into three sub-categories in relation to similarities and differences of pre-service student teachers' statements as explained below:

C-E1: Time Demanding Teaching, (2/6)

Under this sub-category, two student teachers explained and considered inclusive classroom teaching as a time demanding teaching. They expressed their concern in the perspective that, to teach inclusive classrooms demands a long period time of teaching than normal classes since teachers need to pay attention to every individual child accommodated in the classroom. Beyond that, they considered the time that is allocated for each period in the class to be not enough to meet all needs of the children in the class. As one of them said:

“...inclusive classes teaching to me it needs more time... I mean the time and attention needed to pay for every child is not enough especially disabled child it is difficult...” (ST3)

However, some student teachers expressed the concern about time in teaching inclusive classes because of much time that is needed in the preparation of teaching and learning materials, especially for disabled. A typical statement was:

“I can say teaching of inclusive classes consumes time. As teacher spend a lot on the preparation for teaching such classes...” (ST5)

Therefore, based on the above statements, it is considered by student teachers that the time needed for teaching inclusive class is more than that needed for teaching normal class. According to them, more time is spent on providing and showing attention required for all pupils, and also on preparing teaching and learning materials. The next sub- category of the result was resource and energy intensive teaching.

C-E2: Resource and Energy Intensive Teaching (4/6)

Pre-service student teachers under this sub-category considered the teaching of inclusive classes to be resource and energy intensive teaching. Resources are taken to mean all the financial and non-financial materials that are required for the teaching of inclusive classes while energy refers to the teachers' personal motivation and dedication to teaching of inclusive classes. Therefore, student teachers considered the teaching to be resource and energy demanding since a lot of resources are required in inclusive classes for successful learning. This is demonstrated in the statement below;

“...to me teaching of inclusive education with exception of teachers professionalism requires a lot of resource like audio visual, listening aid kits etc...Which I can say they are lacking in the university and schools that I personally did my BTP” (ST6)

The issue of resources was also connected with the use of much energy, which requires teachers' dedication and positive attitude toward inclusion. Following is pre-service student teacher's views on the teaching of inclusive classes to be energy demanding:

“Well if I was a full time teacher I think inclusive classes’ demands many resources and energy when there is no teaching and learning materials....really it is tough to teach the classes without supporting materials...” (ST4)

From the analysis above, student teachers insisted on the issue of teaching and learning materials and other resources which are required for a successful inclusive teaching. So, considering the nature and the way that current inclusive education is practiced in Tanzania, absence of resources make teaching of inclusive education challenging and stressful. From the data analysis, results show that four out of six student teachers consider teaching of inclusive education resource and energy intensive teaching while the rest consider it as time demanding task. The next sub-category falls into statements that explained the teaching of inclusive education as the collaborative teaching:

C-E3: Collaborative Teaching (2/6)

Under this sub-category, student teachers perceived inclusive teaching as a collaborative teaching task. They explained this based on their experiences that they have had during their practices in inclusive schools. To them a meaningful inclusive teaching should include both teachers with general education background and special education background. Their argument based on the fact that their level of knowledge was too low to manage inclusive classes. So the presence of special education teacher in the classroom during the lesson, to some extent, helped the achievement of meaningful teaching. However, the absence of special education teacher in the classroom presses an inevitable challenge to them to meet all needs of the children in the classroom.

The analysis of **category E** indicates that the majority of student teachers consider inclusive teaching as a resource based and energy intensive teaching, by the ratio of 4/6 statements which fall under this sub-category. However, 2/6 statements consider inclusive teaching as time demanding and collaborative teaching based upon their experiences and practices. So, it can be said that, to student teachers what challenges more in inclusive teaching is the issue of resources and teachers' self-motivation.

The next category is concerned with student teachers' perceived needs in order to practice inclusive education. The previous category aimed to establish an understanding among student teachers concerning teaching of inclusive classes because an understanding of their concerns had a direct connection to their professed need to practice inclusive education. So, in the next category pre-service student teachers were asked to mention their needs in order to practice inclusive education. They were not limited to talk about the needs based on their trainings only but also I asked them to reflect upon their training, teaching practice, and their personal experiences in inclusive education as explained below in category F:

Category, F: Pre-Service Student Teachers' Perceived Needs to Practice Inclusive Education

The previous category focused on the pre-service teachers' concerns about the teaching of inclusive classes. In this category, pre-service student teachers were asked to mention their perceived needs to practice inclusive education. During the interview, student teachers were not limited to number of the needs that they desired as a means to improve their inclusive practices.

So, in this category numbers of needs were mentioned, and as a result of analysis, their needs were categorised into four main sub-categories. These sub-categories include needs related to teacher education, needs related to teaching and learning, and needs related to policies and school practices. These sub-categories have been presented in number of responses that are fitting in each sub-category. Since some needs were repeated by participants several times, the ratio number presented below in each category represents the frequency in which such aspect was repeated by participants.

C-F1: Needs Related to Teacher Education Training Curriculum

Pre-service student teachers under this category talked about improvement of the teacher education training curriculum. Teacher education curriculum is taken to mean all experiences, skills, and knowledge that student teachers received in their course of study before entering teaching profession. Here a number of needs were mentioned; these include:

More Inclusive Courses to be introduced in the Curriculum (5/6),

Five out of six responses mentioned the need for more inclusive education courses in their curriculum since the package that they are receiving now is inadequate for them to practice

inclusive education. The participants went far by mentioning that, courses that are offered in the curriculum do not prepare them for inclusive classes since it is only introductory part of special education and inclusive education that is offered. For example, one participant commented that:

“[...] if am supposed to grade myself I can say I haven't received enough courses and content in inclusive education....so I suggest more subject should be added in the curriculum concerning inclusive education...”(ST1)

It was also obvious, in the curriculum, that student teachers are only given some views of inclusive education in only two courses which actually address inclusive education. So, the majority suggested the introduction of more inclusive courses so as they can know much about inclusive education and how practice to it. The next need under this sub-category was to increase time spent in teaching practice.

Extension of Teaching Practice Period (4/6)

The suggestion for increasing teaching practice was mentioned in four responses during the interview. Student teachers suggested that time which has been allocated in their teaching practice is not enough, which is almost filled up with paper work than practicing their knowledge. For instance, participant ST4 stressed that:

“My opinion to the faculty is that they need to expand the period we spend in teaching practice, two month are not enough we are always busy with lesson plans and scheme of works which has made the practice irrelevant...”(ST4)

However, one respondent went further by suggesting more time and relevant teaching practice to be done in inclusive schools rather than non-inclusive schools. He suggested that for the students who are interested in teaching of inclusive education should be assigned to inclusive schools in their teaching practices.

“[...] more time during BTP.....and for us who are interested in inclusive education at least we should be having real inclusive classes to practice” (ST6)

So, in this aspect, student teachers explained the need for more time during teaching practice as well as the relevant practices in inclusive settings. So, it seems that the current teaching practices are not well organised since student teachers do not experience real teaching of inclusive classes during their studies. In the curriculum, student teachers are allocated with four months in total, distributed between first and second year. However, most of the courses

concerning inclusive education are allocated during final year of their study. The next aspect in this subcategory was the need for more knowledge on disability

More Knowledge on Disability (2/6)

Two statements out of six mentioned the need for more knowledge concerning the disability and special education. In this aspect, participants saw inclusive education was not a problem to them but they thought that knowledge on disability and special education was crucial for them to practice inclusive education. They saw that in the current training they lack disability knowledge, and sometime poses difficult to engage students with disability in general classroom:

“...I think I need more knowledge on disability for instance enhanced training on communication skills for person with hearing impairment” (ST6)

“Inclusive education is not a challenge I think....but the challenge is on how to teach the disabled pupils so if I will get to know much about disability will be better for me...” (ST3)

As the result of the analysis of the sub-Category **F1**, it seems that the needs that are related to teachers training curriculum are concentrated on increases of more inclusive courses, the expansion of the teaching practice period, and more knowledge on the disability and how to cope with them. Since the statements in this subcategory concentrated on the needs related to teachers training curriculum, the next sub category focused on the needs related to teaching and learning.

C-F2: Needs Related to Teaching and Learning

Pre service student teachers in this sub-category talked about needs related to teaching and learning in inclusive environments. What pre-service teachers mostly insisted on here was based on the actual classroom teaching and learning, so they explained their needs in relation to how to facilitate meaningful learning in an inclusive classroom.

Need for Resources (Teaching and Learning Materials) (3/6)

Participants here insisted on the need for more teaching and learning materials in inclusive classrooms since most of classes are accommodated with poor resources for students with special needs. Apart from that, they pointed out that the inconsistency in their training concerning how to interact with such resources for inclusive education was also a problem. Participants also noted the absence of such assistive technology tools in the university because they learn them theoretically without interacting with them in a real situation. The

next need was concerned about professional collaboration between general teachers and special teachers.

Professional Collaboration (2/6)

Under this aspect, pre-service student teachers insisted on the collaboration between professionals in special education and general teachers. They expressed their confidence in practicing inclusive education when in collaboration with the special education teacher. This has been their concern in a situation where a student teacher fails to address the need of the student with disability.

“I will recommend teaching inclusive class when special teacher is around... because I don’t know a lot about disability ...” (ST2)

“[...] for me to be confident to practice inclusion I need to teach with special education teacher by exchanging the roles...” (ST5)

The two statements above illustrate lack of confidence and incompetence level among student teachers when teaching classes that are accommodating students with disability. This expresses the fact that a teacher with special education needs knowledge to be around when general teachers are teaching.

The Need for Professional Development (5/6)

Under this aspect again, five student teachers out of six expressed their needs for further professional development so as to practice inclusive education. To them it seemed that they have had no enough experience to teach inclusive classes, so they see if they can get further professional development, it will be very helpful for them to practice inclusive education:

“[...] to be honest I will need further training if I will have to go and teach inclusive classes...” (ST1)

“I think after I finish my studies I will go for masters in special education so I can be competent...” (ST3)

The need for further professional development has been expressed by five students out of six; this ratio indicates that the majority of student teachers feel unprepared to teach inclusive classes. This can be traced from the curriculum that is currently being used for being inadequate to impart knowledge of teaching students with disabilities included in regular classes. Even the content only enables the student to identify student with special needs but does not show how to attend them.

C-F3: Needs Related to Policies and School Practices

Under this sub-category, student teachers' needs reflected the policies and school practices. Policies related to inclusive education and special education seem not to be clear for them. In school practices, the analysis show that the current syllabuses for teaching in primary and secondary schools are not meant for inclusion since they lack inclusion elements as follows:

The Need for Clear Policy on Inclusive Education (3/6)

Out of the six, three participants mentioned the need for clear inclusive policy on inclusive education since there is no guide for implementation of inclusive education in the country. The analysis shows that in most of the schools where inclusive education practiced, there is no government policy which guides or directs implementation of inclusive education. As a result, student teachers insisted on the favourable policy on inclusive education so as to practice inclusive education:

“[...] I have been in this profession for a long time In special schools there is a guiding government policy for provision of special education but in inclusive schools I haven't seen one so it's the time for the government to issue one...” (ST6)

The Need for Relevant Syllabus in Schools (2/6)

Two out of six student teachers indicated that the syllabus used in schools was one of the obstacles for practicing inclusive education. They stated that most of the syllabuses for primary and secondary education are meant only for students without disability, and even the techniques and methods of teaching and evaluating are meant for normal students.

“The government must change the syllabus the one in place are not meant for inclusion...you know is difficult to engage student with disability with such a syllabus in function” (ST5).

“...to me the only need and difficult I have faced is the syllabus I was using it doesn't show how to teach student with special needs together with non-disabled” (ST3)

It can be said that during their field practical student teachers failed to integrate their inclusive knowledge because of the rigid syllabuses which do not offer flexibility. The nature of the present syllabus is designed for children without disability, from the content to the techniques illustrated. Therefore, the syllabus in place does not allow adoption of individualised education plan or showing how to attend such student with disabilities.

From the analysis of the **category F**, results indicate that pre-service student teachers' need to practice inclusive education has been concentrated into four major issues based on their responses. The majority indicate the need for more inclusive courses in the teacher education curriculum, and the need for professional development has been given a paramount need where 5 out of 6 student teachers have mentioned it. The second need seem to be the need for more time during teaching practice (block teaching practice) where 4 statements out of 6 have mentioned that need. While issues of inclusive policy and need for more resources have been mentioned as well as relevant syllabus and professional collaboration, it can be said that student teachers' perceived needs are much based on the needs related to teacher education curriculum and current practices of inclusive education in Tanzania, such as policies and syllabuses.

Discussion

The investigation of **category F** aimed to understand and examine student teachers' needs in order to practice inclusive education in their future teaching profession. However, before the examination of their needs, student teachers were asked to describe their concerns about the teaching of inclusive classes based on their field practical experiences. As I stated above, student teachers' concerns as in **sub-category F1** were helpful to understand their beliefs concerning the teaching of inclusive classes, which helped to provide a big picture concerning student teachers' educational needs in order to practice inclusive education.

Results have indicated that most of the student teachers consider inclusive teaching as a time demanding teaching which requires a lot of time than normal lesson. This also has been a global concern, and most of international agreements that teaching of inclusive classes requires more time, as more time is required to be devoted to students with special needs in inclusive classes (Florian & Rouse, 2009). The need for more time is in connection with preparation of teaching and learning materials as well as the time for considering individualised curriculum.

However, in this study student teachers cleared the doubt that the time that is allocated for each period in most of the classrooms is not enough for teaching inclusive classes. Eleweke and Rodda (2002) found similar result when he found most of regular schools in Tanzania have included children with disability in their classrooms, but they have not changed the time for lessons. Further to that, student teachers also explained inclusive teaching as resource and

energy intensive teaching which requires a lot of resources in form of teaching and learning materials as well as energy from teachers.

From their experience and views, student teachers also seem to be aware of the fact that most of inclusive schools lack resources for inclusive education, some of whom failed to teach effectively due to the absence of resources. One participant in his explanation also mentioned the fact that they have not even being able to see some of these resources required in inclusive classes neither from their teacher education nor schools of which they did their teaching practice.

It can be said that, as advocated by Rose (2007), teaching and learning resources have to be given a priority when considering placement of children with disabilities in regular classes. The last concern was inclusive teaching as collaborative endeavour which requires professional engagements between special education teachers and general teachers during the teaching of inclusive classes. Stayton and McCollum (2002) had similar conclusion that collaboration between special needs and general education will help in developing inclusive practices among practicing teachers.

Results from the second sub-category **C-F2** indicated that student teachers differ in their perceived needs to practice inclusive education. However, from the above observation, it clearly indicates that most of the student teachers have positive attitudes toward teaching of students with special needs included in general classes. It is therefore from this point of departure that student teachers expressed their needs in order for them to practice inclusive education.

Two among eight needs mentioned by student teachers were given priority: the need for more inclusive courses and the need for more professional development in areas of special education after their studies. The responses indicated that the current curriculum for teacher education does not equip well student teachers with better knowledge to practice inclusive education since 5 out of 6 students mentioned that the curriculum should contain more courses in relation to inclusive education and special education.

Since the courses that are offered in the current teacher education programme are insufficient to impart relevant knowledge for inclusion, most of the student teachers feel unprepared to teach inclusive classes. Similar studies have reached the same conclusion concerning teachers

training for inclusion in Tanzania, that teacher trainings are not well programmed for inclusive education (Kapinga, 2012; Mmbaga, 2002; MoEVT, 2009).

Previous literatures have documented the positive impact of inclusive related courses in relation to student teachers' increasing awareness, confidence, and ability to implement inclusion (Forlin, 2010; Kapinga, 2014; Wade, 2000). Since the present teacher education lacks element of inclusion and special education, and this makes student teachers to think of further development in the areas of special needs education. So, it can be said that introduction of the new course related to inclusion and special education will make changes to the current teacher education status to be able to address inclusion. Shade and Stewart (2001) examined the introductory course of special education in general teacher education and found positive change of attitude among student teachers when exposed to such special education and inclusive courses in their general teacher education curriculum.

Results also have indicated student teachers need more experience in inclusive school since the current field placements have proven to be less relevant because of the time and irrelevant allocations. From the results, most of the student teachers interviewed have had field experience in inclusive schools; about 4 out of 6 students mentioned the need for relevant teaching practice. The importance of field practical has been mentioned by number of studies apart from providing student teachers with practical experience, it also strengthens their attitudes toward inclusion (Hammerness et al., 2005). Reber (1995) commented that when student teachers are engaged in a relevant and guided teaching practice, they do exhibit more positive attitude toward students with special needs. However, in the current teacher education curriculum, field experience has been given minimal stress in spite of the importance it has.

Student teachers also mentioned the need for teaching and learning materials for inclusive classes, both during their initial teacher education and in schools where students with disabilities are accommodated. Pre- service teachers consider the absence of teaching and learning materials to be an obstacle toward implementation of inclusion. Student teachers in this study stressed on the interaction between their knowledge and available resources which to them they consider to be important.

During the interview session for several times, there was an agreement between student teachers and teacher educator's opinion concerning the absence of teaching and learning

resources, and the difficulty in implementing inclusion. It was also evident that student teachers during their practice they happened to understand what a certain child with disability needs, but they failed to assist them because they did not have enough resources to do so.

That being the case, the investigation on the current curriculum for teacher education theoretically addresses on how to use assistive technology to students with special needs, but it fails to apply such tools practically due to their absence. It can be said that student teachers require daily interaction with teaching and learning resources for inclusive education, not only in the school but also during initial teacher education too (O'Donoghue & Chalmers, 2000).

Student teachers also considered the need for the inclusive policy which will guide implementation of inclusive education to be in place. In Tanzania there is the guiding policy for implementation of special education, but there have been no policy for inclusive education. Implementations of inclusive education in Tanzania have been hampered by absence of the policy, among others, which could act as a guiding policy for implementation (Meena, 2014; Mmbaga, 2002). In his study, Kapinga (2012) also found that teachers are unaware of neither the policy nor document in place which guides implementation of inclusion in Tanzania. This leads to the last needs that student teachers mentioned; that is, the need for relevant syllabus in schools. The current syllabus in Tanzania primary and secondary education is being used in both special and general education as well as inclusive and special unit schools (Meena, 2014).

This implies that the current syllabus lack inclusive element as it was aimed only for children with no disability. To student teachers, this was difficult for them even to structure their lesson and prepare teaching and learning materials and even to adopt the curriculum to the needs of the children. The inflexibility nature of syllabuses used in primary and secondary education has been a centre of discussion among many scholars in Tanzania. For example, Meena (2014) stressed on the need for the change of the current syllabuses in place in order to embrace inclusive education.

Further to that, Meena (2014) and Mkumbo (2008) both criticised the nature of the primary and secondary education syllabuses do not give a chance for flexible assessment system and evaluation methods which is very difficult to operate in inclusive settings. Last but not least, student teachers called for professional collaboration between special needs specialists and general teacher education graduates. Studies have indicated that there should be collaboration

between special needs educator and general education educator so as to provide a big picture to address inclusion. Forlin (2010) believe that general pre- service teachers can learn a lot from their counter parts from special education especially when they are practicing together in one setting.

In summary, student teachers' perceived needs have provided a great picture about the current teacher education program and its weakness in addressing inclusion to student teachers. Student teachers needs have been classified into three categories; however, much stress was given to the need of relevant disability and inclusive related courses in the current curriculum, the need for more relevant field practical, as well as other needs such as knowledge on the interaction with teaching and learning materials during their studies and professional collaboration.

4.4 Summary of the Findings

4.4.1 Pre Service Student Teachers Knowledge of Inclusive Education

Based on the definition provided by MoEVT (2009) and UNESCO (1994b) concerning inclusive education, it can therefore be concluded that student teachers in this study have insufficient knowledge concerning inclusive education. From the findings, student teachers explained inclusive education based on what they observed and experienced during their teaching practice. It was expected student teachers would have associated their knowledge as a result of studying teacher education and their field experience to have a convenient knowledge of inclusive education.

Top on that, results have indicated that student teachers' knowledge has not influenced their practice in inclusive setting since always there is a connection between knowledge and practice. In this regard, the findings have revealed that the majority of student teachers have little knowledge of inclusion itself and how to attend children with diverse needs included in general classes.

4.4.2 How Pre- Service Student Teachers are Trained for Inclusive Education

Concerning this theme, teacher educators were involved during the interview as well as the curriculum for teacher education was used as a reference material to examine how student teachers are trained toward inclusive education. From the results, in the first place, teacher educators were asked to describe strategies and approaches used to train general teachers for inclusive education. Results indicated that variety of strategies and approaches were used where curriculum was commonly used as a teaching guide, but also the use of whole faculty approach through cross curricular issues, and lastly the use of personal strategies.

However, results also indicated that teacher educators face a lot of challenges in imparting inclusive knowledge to student teachers; these includes, irrelevant inclusive package in the current curriculum, negative attitude among student teachers, irrelevant field practical, and absence of teaching and learning materials for inclusive settings . It can be said, from the findings concerning student teachers preparation for inclusion, that student teachers are not well prepared to teach inclusive classes.

4.4.3 Pre Service Student Teachers Perceived Needs in Order to Practice Inclusive Education

In this regard, student teachers' perceived needs in order to practice inclusive education were found in relation to their concern regarding teaching of inclusive education. In the first place, findings have indicated that student teachers have different concerns about teaching of inclusive education.

Their concern shows that inclusive teaching is time demanding teaching which requires a lot of time in preparation of teaching and learning materials as well as in attending the needs of learners with disabilities. And also to them, inclusive teaching is resource and energy intensive teaching which also concerns about self-dedication and placement of resources in inclusive classes. Student teachers also viewed inclusive education teaching as solely collaborative teaching which requires cooperation between special education profession and general teachers.

Findings have also indicated that student teachers' needs in order to practice inclusive education have concentrated much on the need for more inclusive and special education

courses in their current general teacher education curriculum. However, more needs were mentioned such as need for further professional development in areas of special needs so as to be competent in teaching inclusive classes.

But also issues concerning current policy and syllabuses guiding implementation of inclusive education have been discussed by student teachers among the needs so as to practice inclusive education. But, finally, student teachers have mentioned the need for professional collaboration among special education student teachers and general education special teachers during the training and during teaching practice so as to share experiences.

5 Conclusion and Recommendations

This chapter provides concluding remarks of the current study based on the findings from the data collected in relation to the aims and objectives of the study. It further provides recommendations in regard to the findings from this study for action and further studies.

5.1 Conclusion

This study aimed to find out how pre-service student teachers are trained toward inclusive education in Tanzania regular teacher education. It further aimed to find out what are the pre-service student teachers' perceived needs to practice inclusive education in their future career as professional teachers. This study was built upon three objectives as follows:

The first objective was to find out pre-service student teachers knowledge of inclusive education and how such knowledge has influenced their practices so far. From the findings it is clearly that student teachers have little or no knowledge of inclusive education if compared to UNESCO (1994b) definition of inclusive education. According to their understanding, it seems student teachers discuss inclusive education from contextual point of view meaning based to what they have observed during their practices.

To this end, therefore, the current curriculum provided student teachers with a tinny reflective of inclusive education in Tanzania, and on top of that, their knowledge has not influenced their practices. According to Kapinga (2014), the current teacher education curriculum does not address fully inclusion as the courses that are in the curriculum are irrelevant to inclusion. So, it can be concluded from this study that student teachers have little knowledge of inclusive education

Again, another objective was to find out how student teachers are trained for inclusion, and in this objective teacher educators and teacher education curriculum were used to find the answers. Findings have indicated variety of strategies and techniques that have been used to train student teachers for inclusion. These include course based training from the curriculum, cross curricular training, and the use of personal strategies. However, both strategies that have been used by teacher educators to address inclusion in teacher education have been addressed by some scholars and have proved to be ineffective (Pugach & Blanton, 2009).

For example, the use of course based training has failed to change pre- service student teachers attitude and orientation toward students with diverse needs and most of the student teachers feel unprepared to address inclusive education (Jelas, 2010). Again, teacher educators have sometimes used their personalized strategies such as field trips to special schools, mediated technology for disabled children, but they agreed that these strategies are personal and not compulsory.

To this end, it can be concluded that student teachers involved in this study are not well trained for inclusion as teacher educators face a lot of challenges. Kapinga (2014) also reached a similar conclusion that the curriculum for teacher education and the preparedness of student teachers for inclusive education have not reached the standard required by inclusive settings. Furthermore, another objective was to find out student teachers' perceived needs to practice inclusive education in Tanzania. Results have indicated that student teachers have great concern about the teaching of inclusive classes, and they are positive to it since they do understand what it takes to teach inclusive classes as it needs time, resources, self-dedication, and collaboration.

To them, their needs are centered in the need for more courses in the curriculum and the need for clear policy concerning what actually address issues of inclusion. Their needs have been a result of current curriculum for teacher education which has offered to them a little knowledge about inclusion. Studies in Tanzania have shown a great concern about current move to inclusive education and the way that teachers are prepared for this journey to be irrelevant (Mboya et al., 2008; Mmbaga, 2002). Considering the findings, it can be said that the current needs of student teachers can be catered for by innovating the current teacher education curriculum as well as improving the policy that guide implementation of inclusive education in Tanzania.

5.2 Recommendations

5.2.1 Recommendations for Action

From this study, it was found that pre- service student teachers are not well prepared to practice inclusive education and that they lack knowledge about inclusive education. It is recommended that more innovations have to be done in teacher education where courses

concerning special needs and inclusion should be expanded in content and to be added in the current teacher education curriculum. To teacher education training institutes, since the curriculum used has little emphasis on practical knowledge, more time is need to be devoted in teaching practice to make student teachers to have a meaningful interaction with inclusive classes. But also curriculum developers should change the current syllabuses used for primary and secondary education to be flexible and adaptive in teaching methods, assessment, and content so as to be easily adopted for individualized curriculum.

5.2.2 Recommendations for Further Studies

This study focused on pre- service student teachers preparation for inclusive education and their perceived needs to practice inclusive education. Further studies can be conducted in a wider context to cover both levels of teacher education, meaning diploma level and degree level. But also studies can be conducted to investigate how policy and current syllabuses used in Tanzania can be adjusted to cope with the current move to inclusive education.

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Appendix

Appendix I: Interview Guide for Teacher Trainers

Interview Guide for Teacher Trainers

Background information

Age_____

Gender_____

Teaching subject_____

Teaching experience_____

Level of education_____

Interview questions;

1. How do you understand inclusive education?
2. Describe how inclusive education and related courses have been presented across the teacher education curriculum in this University?
3. What do the student teachers learn or taught concerning inclusive education?
4. Describe how is training about inclusion is conducted with reflection to teaching methods, teaching materials, reflection activities and evaluation?
5. How do student teachers helped to reflect their knowledge concerning inclusive education practices into the class during teaching practices?
6. What are the factors that hinder developing inclusive practices among student teachers?
7. What do you think should be done to improve pre-service student teachers training toward inclusive education?

Thank you very much for your Cooperation

Appendix II: Interview Guide for Pre-service Student Teachers

Background information

Age_____

Gender_____

Teaching subject majors_____

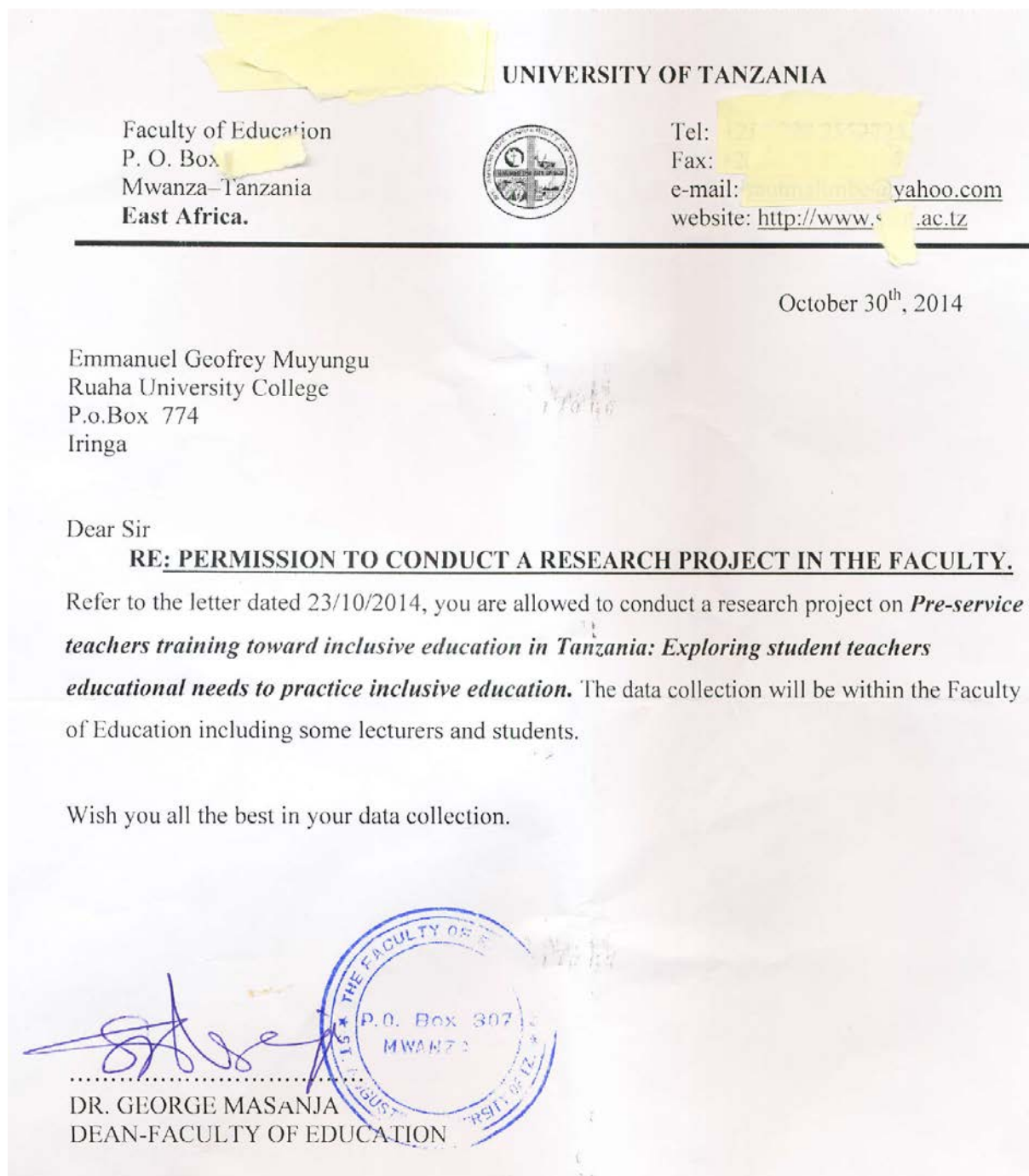
Year of study_____

Interview questions;

1. How do you understand inclusive education?
2. What are the courses and experiences you have received so far concerning inclusive education?
3. What concern do you have regarding teaching of inclusive classroom?
4. How your experience so far concerning inclusive education has influenced your practices toward inclusive education?
5. Describe how inclusive education related training have helped you during your teaching practices in the following areas:
 - (a) Lesson planning,
 - (b) Classroom management,
 - (c) Preparation of teaching and Learning materials and
 - (d) Student's evaluation methods?
6. Do you think you have received appropriate and sufficient training preparation to teach inclusive classes?
7. In your own opinion what kind of support do you think you need in your training so that you can practice and implement inclusive education
8. What do you think should be done to improve teachers training programmes toward inclusive education?

Thank you very much for your Cooperation

Appendix III: Permission for Data Collection from Study Site



APPENDIX IV: Student Teachers Guide to Teaching Practice

UNIVERSITY COLLEGE OF EDUCATION
FACULTY OF EDUCATION

INTRODUCTION TO TEACHING PRACTICE

PAPER 1

CHARACTERISTICS OF YOUNG LEARNERS: Implications in teaching and learning

The young learner is involved in a period of rapid and significant change with respect to physical, emotional, social, intellectual, spiritual and moral development. Young learners need educational programs that are designed specifically for their age group because of their uniqueness in terms of intellectual, social, emotional and physical development. This period is described as "The wonder Years"

- Parents wonder if they will survive their child's journey through puberty.
- Teachers wonder how to keep their students focused on learning.
- Young learners themselves wonder if they are normal.

Key generalizations about young learners

- The general public has limited understanding of these years.
- Young learners are by nature explorers, curious and adventuresome.
- These are the years during which each individual forms his/her adult personality, basic values and attitudes.
- They are inquisitive about adults, often challenging their authority, always observing them.

- They are physically vulnerable because they may adopt poor health habits or engage in risky experiments with drugs and sex.
- They are unaware of the consequences of risk taking behaviour.
- This group is extremely sensitive to criticisms of any kind.
- They seek autonomy and independence
- They are sensitive, vulnerable and emotional.
- They learn best through interaction and activity rather than by listening.
- They are open to influence by the significant others in their lives.

Implications for teaching and learning:

- Teachers should not over react when extremes in those areas are displayed.
- Teachers of young learners need to be knowledgeable of the varied developmental characteristics of young learners so that they can design instruction and classroom management strategies that address these ongoing changes, and support and capitalize on these changes.
- Teachers need to design lessons that include a full range of sensory motor experiences including music, smell, touch, and emotion. These will increase student attention span and heighten memory.

PAPER 2:

IDENTIFICATION OF STUDENTS WITH SPECIAL EDUCATIONAL NEEDS:

Article 3.2.3 of the Education and Training Policy (1995) stipulates that the government shall promote and facilitate access to education to disadvantaged social and cultural groups. Article 26 (1) of the Universal Declaration of Human Rights

(1948) states that "everyone has the right to education". Article 2 of the same document stipulates that everyone is entitled to all the rights and freedoms without distinction of any kind, such as race, colour, sex, language, religion, social origin or other status.

A precise definition of special educational needs is difficult. Different sources use different descriptions and different categorizations. **Experts believe that all students may, at some time in their lives, have some form of special educational needs.**

However, the general understanding of students who have special educational needs is that they encounter barriers to learning.

All students, regardless of their personal circumstances, have a right to access to and participation in the education system, according to their potential and ability.

As teachers we often lack understanding of how disabilities can impair children's work in classrooms. Teachers must have practical knowledge to deal with students with diverse educational needs.

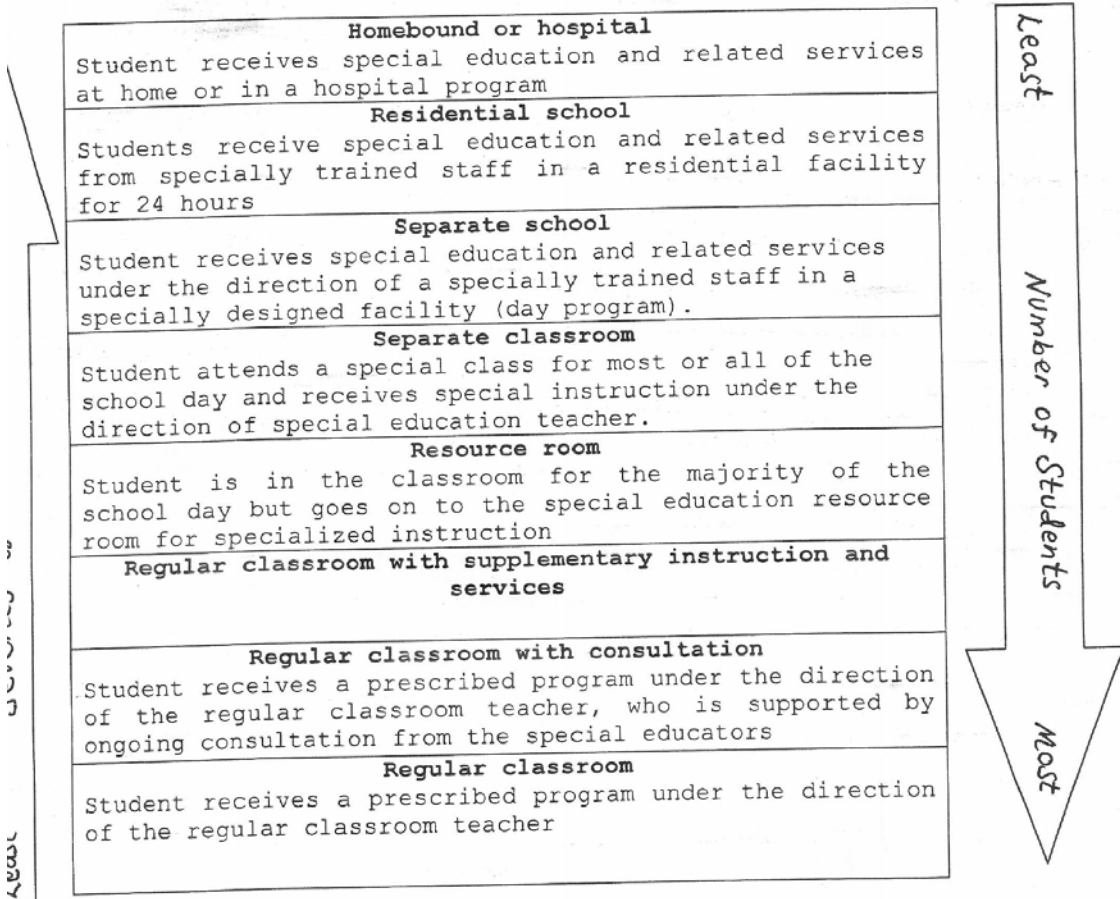
Therefore, students with special educational needs have the right to education and the right to enjoy social benefits. The regular school option for them is the best option where diversity can be tolerated.

In the classes that you are going to interact with, expect to meet the following categories of students:

- Students with hearing impairment.
- Students with visual impairment/blindness or low vision.
- Students with learning disabilities.
- Students with emotional and behavioural disorders.

- Students with physical disabilities.
- Students with communication disorders.
- Students with health impairments.
- Talented and gifted students.

Continuum of education provision



How can we identify students with special educational needs?

The identification of students with special educational needs depends on the nature and severity of the disability. However the following are general hints which may assist a beginning teacher in identifying such students:

- Observe social interaction skills among students.
- Observe use of language/speech
- Observe sitting position and posture
- Observe communication skills - eye contact, speaking, reading and writing.
- Observe personal and social skills- basic personal hygiene, self-help skills, dressing, and social interaction with others.

Tips for beginning teachers:

- Be aware of and appreciate your own culture.
- Learn about your students' culture, language, and their living arrangements
- Listen to the parents and care givers of your students- they know their students well and want what is best for them.
- Communicate effectively, frequently, and positively with the parents/teachers.
- Be prepared to buy extra classroom supplies.
- Enjoy the students - they are so much fun!
- Establish a health working relationship with each student.
- Aim high, start small, and celebrate.
- Don't forget to get fun.
- Provide longer wait time.
- Communicate with clarity and respect.
- Focus on the positive.
- Accept challenges.
- Be a good listener.
- Exhibit and teach good character.
- Persistence pays off.
- Remember to say thank you.

Implications for teaching and learning:

- Teaching should be individualized to meet students' needs (where possible).
- The teacher of young learners has to understand the interdisciplinary nature of the school curriculum and relate his/her subject matter to foster well-rounded student learning.

Appendix V: A Course Outline Related to Inclusion and Special Education

COURSE TITLE: INTRODUCTION TO EDUCATIONAL PSYCHOLOGY

COURSE CODE : RED 101

Course Description

This course aims at analyzing learning as well as teaching and developmental processes from psychological perspective. It also analyses psychological factors influencing human development and learning as well as teaching behaviors. It is intended to equip students with basic skills necessary for analysis and application of psychological principles related to learning and teaching in classrooms and as experienced in every day school life.

Objectives

After studying this course, students should be able to:

- a) List and describe fundamental theories of human development and learning and their application in school and classroom situations.
- b) Explain various types of learning approaches.
- c) Describe various aspects of child development.
- d) Examine the development of language and its function in concept formation and school learning.
- e) Identify and explain educational needs of special children.

MODULE 1: EDUCATION AND PSYCHOLOGY

Learning units

- a) Definition of psychology and educational psychology
 - Role and function of Educational Psychology
 - Psychology versus common sense.

- b) Understanding individual/learners
 - Learners' background factors
 - Learning Strategies
 - Cognitive strategies
 - Developmental determinants

MODULE 2 : THE NATURE AND FUNCTIONS OF LEARNING THEORIES

- a) Behavioural learning theories
 - Classical conditioning
 - Operant conditioning
 - Social learning theory

- b) Humanistic theories
 - Learning and Teaching
 - The challenge of humanism

- c) Motivation theories
 - Motivation theories
 - Motivation and schooling.

- c) Cognitive learning theories
 - Cognitive Psychology
 - Cognitive Development and learning
 - Structure of the subject and learning

MODULE 3: HUMAN DEVELOPMENT

- a) Heredity and environment (Nature – Nurture)
- b) Maturation, growth and development
- c) An overview of the domains of development
 - Physical development
 - Cognitive development
 - Social development
 - Emotional development
 - Moral development

- d) Language Development
- stages and characteristics of language acquisition and language learning
 - concept formation

MODULE 4: EDUCATIONAL PSYCHOLOGY AND SCHOOL LEARNING.

- a) Application of reinforcement contingencies in the classroom for normal and exceptional children.
- b) Learning theories and learning of school subjects
- c) Punishment and school learning.
- Discipline and punishment: school values and discipline
 - Punishment and children's rights.
- d) Learning theories vis-à-vis memory
- d) Transfer of learning/knowledge
- Generalization issues
 - Learning general strategies for transfer

MODULE 5 : INDIVIDUAL DIFFERENCES

- a) The exceptional child
- Consequences of labeling learners-into special, talented, disabled
 - Inclusion
- b) Categories of exceptional children (Definition, Identification, Characteristics and educational implications)
- Mental exceptionalities: Mental retardation, gifted and talented.
 - Learning disabilities
 - Communication disorders
 - Behavioral disorders

- Sensory Impairments: Hearing and visual impairments.
- Physical (motor) and health impairment.

DELIVERY

- 30 lecture hours
- 15 seminar hours

EVALUATION

1. Coursework (40 marks)
2. Final exams (60 marks)

Appendix VI: Permission from NSD

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES



Harald Hårleges gate 29
N-5007 Bergen
Norway
Tel: +47-55 58 21 17
Fax: +47-55 58 96 50
nsd@nsd.uib.no
www.nsd.uib.no
Org.nr. 985 321 884

Sven Nilsen
Institutt for spesialpedagogikk Universitetet i Oslo
Postboks 1140 Blindern
0318 OSLO

Vår dato: 28.08.2014

Vår ref: 39289 / 3 / KH

Deres dato:

Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 11.07.2014. Meldingen gjelder prosjektet:

39289	<i>Pre-service Teachers Training Toward Inclusive Education in Tanzania: Exploring Student Teachers educational needs to practice inclusive education</i>
Behandlingsansvarlig	<i>Universitetet i Oslo, ved institusjonens øverste leder</i>
Daglig ansvarlig	<i>Sven Nilsen</i>
Student	<i>EMMANUEL GEOFFREY MUYUNGU</i>

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, <http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://pvo.nsd.no/prosjekt>.

Personvernombudet vil ved prosjektets avslutning, 31.05.2015, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Katrine Utaaker Segadal

Kjersti Haugstvedt

Kontaktperson: Juni Skjold Lexau tlf: 55 58 36 01

Vedlegg: Prosjektvurdering

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Avdelingskontorer / District Offices

OSLO: NSD, Universitetet i Oslo, Postboks 1055 Blindern, 0316 Oslo. Tel: +47-22 85 52 11. nsd@uia.no
TROMSØ: NSD, Norges teknisk-naturvitenskapelige universitet, 7491 Trondheim. Tel: +47-73 59 19 07. kyrre.svarva@svt.ntnu.no
TROMSØ: NSD, SVT, Universitetet i Tromsø, 9037 Tromsø. Tel: +47-77 64 43 36. nsdmaa@svt.uib.no

Personvernombudet for forskning



Prosjektvurdering - Kommentar

Prosjektnr: 39289

We have not received further information about the "registerdata" part of the study. We therefore presuppose that there will not be registered any personal data in this part of the study. This letter of confirmation therefore only concerns the "personlig intervju" part of the study.

The sample will receive written and oral information about the project, and give their consent to participate. The letter of information and consent form are somewhat incomplete, and we ask that the following is changed/added:

- Name and contact information for your supervisor at UiO.
- Erase the sentence from the consent form: "I don't want to participate in this study" (Personal data should not be collected from people that do not want to participate).

We ask that the revised letter of information is sent to personvernombudet@nsd.uib.no before contact with the sample is established.

The Data Protection Official presupposes that the researcher follows internal routines of Universitetet i Oslo regarding data security. If personal data is to be stored on portable storage devices, the information should be adequately encrypted.

Estimated end date of the project is 31.05.2015. According to the notification form all collected data will be made anonymous by this date. Making the data anonymous entails processing it in such a way that no individuals can be recognized. This is done by:

- deleting all direct personal data (such as names/lists of reference numbers)
- deleting/rewriting indirectly identifiable data (i.e. an identifying combination of background variables, such as residence/work place, age and gender)
- deleting audio recordings

Appendix VII: A Consent Letter to Participants

A CONSENT LETTER

Dear participant;

I am a student from the University Of Oslo, Norway, pursuing Master of philosophy in special needs education. I am currently conducting my research project on *Towards Inclusive Education in Tanzania: A study of pre service student teachers training and perceived needs to practice inclusive education*. This study aims to explore the curriculum for regular bachelor of education with the focus in preparing teachers to practice inclusive education in Tanzania.

So these issues among other will be investigated so as to know how the current curriculum suits the needs of pre-service student teachers to practice and implement inclusive education in Tanzania. As the country is moving toward implementation of inclusive education and practices, in secondary and primary schools this study will be of significant for improving teacher education.

The information that will be collected firstly will be about how are pre-service student teachers are trained to practice inclusive education, as well as the information concerning various course and experience in the current teacher education curriculum that address inclusive education. The second information will be concerned with the strategies that teacher trainers use to address issues of inclusive education across the curriculum when training teachers and how these experience are reflected by students during teaching practices.

Finally the study will correct information concerning opinions and needs concerning what actually do student teachers have and what support do they need so as they can practice inclusive education. Again last but not least the study will seek to address the opinions from both teacher trainers and student teachers concerning further development of the bachelor of education programme training toward inclusive education so your opinions and suggestion will be needed so as to improve inclusive practices across the curriculum.

The interview conversation will be recorded through tapes and note taking in order to acquire important information provided. Nobody will have access to your data except me and you will not be recognized by any one as soon as the thesis is submitted by June 2015 all information concerning this interview will be erased.

I consider your opinion as very important and I will appreciate your participation very much however the participation is voluntary and you have the right to withdraw from this participation any time you wish to do so.

If you wish to participate in this interview please complete the attached letter of consent faculty of education reception office. If you have any question regarding this study at any time please contact

MUYUNGU, Emmanuel Geoffrey (Researcher)
Ruaha University College
P.O Box 774,
Iringa,
Tanzania.
+255 717 384 961

OR

Sven Nilsen (Research Supervisor)
Institutt for spesialpedagogikk Universitetet i Oslo
Postboks 1140 Blindern
0318 OSLO.

A CONSENT FORM

I have received oral and written information concerning the study I would like to participate in this study

Full name of participant _____

Date _____

Signature _____

Phone number _____

Appendix VIII: Permission Letter From the University Of Oslo

UiO : Faculty of Educational Sciences
University of Oslo

MUYUNGU, Emmanuel Geoffrey

Date: 25 June 2014
Your ref.:
Our ref.: int./2014 JBH/db

TO WHOM IT MAY CONCERN:

This is to certify that **MUYUNGU, Emmanuel Geoffrey**, date of birth 28.08.1985, is a full-time student pursuing a course of study at the Department of Special Needs Education at the University of Oslo, Norway, leading to the degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

This is a continuous two-year programme run on the "sandwich" principle, which involves periods of study and field work/research in both Norway and the home country. The student has successfully completed both the first and second semester of the initial study period in Norway and is now working on the collection of data and the writing of a thesis during the autumn semester 2014. This involves a period of field work in Tanzania. The student will return to Norway at the beginning of January 2015 and the period of study will be completed at the end of May 2015 in Norway.

The main responsibility for supervising the research, developmental work and thesis remains with the Department of Special Needs Education, University of Oslo, Norway. However, we would kindly request that the relevant authorities give the student the access required to the schools and educational establishments necessary in order to undertake field work and research. We would also be most grateful for any assistance that is afforded to the student which enables him to carry out this work, particularly the use of facilities such as access to telephone, fax, e-mail, computer services and libraries at the various educational establishments.

Yours sincerely

Associate Professor Jorun Buli-Holmberg
Joint Academic Head of International Master's Programme
Department of Special Needs Education

Officer in charge:
Denese Brittain (+ 47) 22 85 80 75, d.a.brittain@isp.uio.no



The Department of Special Needs Education (DSNE)
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