

**EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS'
PREPARATION FOR INCLUSION IN ETHIOPIA**

by

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DECLARATION

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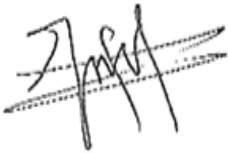
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I declare that the above thesis is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the thesis to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at the University of South Africa (UNISA) for another qualification or at any other higher education institution.



Signature

October, 2023

Date

DEDICATION

I dedicated this thesis to

my devoted wife,

W/ro. Alemnesh Lemma (*Itege*)

and

my precious daughters,

Hana (*Dozu*) and Kalikidan (*Ganfo*) Aschalew.

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ABSTRACT

The agenda of inclusion in education has become increasingly popular both nationally and internationally since the endorsement of Salamanca statement and framework for action in 1994. It motivates for teachers ought to accommodate students with diverse learning needs in inclusive classroom settings. This implies that the implementation of inclusive education highly depends on effective teacher preparation that is tailored towards it. The purpose of this study was, therefore, to investigate the effectiveness of secondary school teachers' preparation for inclusive education in Ethiopia and propose an alternative strategy that enhances its effectiveness. The study was embedded in the theoretical framework of inclusive pedagogy, Vygotsky's sociocultural theory of learning, and Hart's notion of learning without limits. A total of 152 graduates (109 males and 43 females) selected using simple random sampling and seven graduates (four males and three females) selected using purposive sampling participated in the first and second phases of the study, respectively, as the study used a sequential explanatory mixed methods research design. A questionnaire and face-to-face, semi-structured individual interviews were used to collect the data. In the first phase, quantitative data was analysed by exporting it into SPSS version 26 and performing descriptive and inferential statistical analyses. In the second phase, the qualitative data was thematically analysed following the transcription of the audiotaped interviews. Finally, the separate analyses of quantitative and qualitative findings were integrated into the discussion section to provide a better understanding of the research problem.

The findings revealed that the current teacher education programme in Ethiopia is ineffective in providing adequate academic, psychosocial, and emotional support in the sense that it does not ensure the selection of high-performing candidates into the teaching profession, and fails to produce graduates who could use active learning methodologies and child-centered pedagogies to implement inclusive teaching. Additionally, the curriculum of the programme is determined to be ineffective in providing graduates with appropriate pedagogical content knowledge; the pedagogies of the programme do not promote inclusiveness and inclusive pedagogy throughout the training; and the inclusive education course integrated into the programme is ineffective in balancing the theory and practice dimensions of the training. Further, the collaboration among different stakeholders does not allow adequate time and opportunities for collaborative learning

experiences, and the programme is not capable of raising the competence standards of graduates related to inclusive practices. Finally, the programme does not equip the graduates with adequate knowledge of inclusion, was not adequate in positively influencing the attitudes of graduates towards inclusion, and does not adequately expose the graduates to practical and hands-on experience for inclusive teaching. The study concludes that the preparation of secondary school teachers for inclusion is ineffective in Ethiopia. Hence, there is a need for fundamental transformation of policies, practices and alternative strategies that enhances the effectiveness of teachers' preparation for inclusion, as for that proposed herein.

KEY TERMS

Effectiveness, Ethiopia, Inclusion, Inclusive pedagogy, Pre-service teacher education, Secondary level of education, Teachers' preparation for inclusion, Trainee teachers

አብስትራክት

በ1994 የሳልማንካ መግለጫ እና የተግባር ማዕቀፍ ከፀደቀ በኋላ በትምህርት ውስጥ የማካተት አጀንዳ በአገር አቀፍም ሆነ በአለም አቀፍ ደረጃ ተወዳጅ እየሆነ መጥቷል። አስተማሪዎች የተለያዩ የትምህርት ፍላጎት ያላቸውን ተማሪዎች በክፍል ውስጥ ባካተተ መልኩ ማስተናገድ አለባቸው። ይህ የሚያመለክተው የአካታች ትምህርት አተገባበር በከፍተኛ ደረጃ የተመካው ለዚያ በተዘጋጀው ውጤታማ የመምህራን ዝግጅት ላይ ነው። የዚህ ጥናት አላማ የሁለተኛ ደረጃ ትምህርት ቤት መምህራንን የሁለንተናዊ ትምህርት ዝግጅት ውጤታማነት በመመርመር ውጤታማነቱን የሚያጎለብት አማራጭ ስልት ለመጠቀም ነው። ጥናቱ በንድፈ ሃሳባዊ ማዕቀፍ ውስጥ በአካታች ትምህርት ፣ በቪ.ጎትስኪ ማህበራዊ ባህላዊ የመማሪያ ፅንሰ-ሀሳብ እና የሃርት የመማር እሴቤ ውስጥ ያለ ገደብ ተካቷል። በአጠቃላይ 152 ተመራቂዎች (109 ወንድ እና 43 ሴት) በቀላል የዘፈቀደ ናሙና የተመረጡ እና ሰባት ተመራቂዎች (አራት ወንድ እና ሶስት ሴት) በዓላማ ናሙና ተመርጠዋል በጥናቱ የመጀመሪያ እና ሁለተኛ ምዕራፍ ላይ የተሳተፉ ሲሆን ጥናቱ በቅደም ተከተል ገላጭ ድብልቅ ዘዴዎች የምርምር ንድፍ. መረጃውን ለመሰብሰብ መጠይቅ እና ፊት ለፊት፣ ከፊል የተዋቀሩ የግለሰብ ቃለመጠይቆች ጥቅም ላይ ውለዋል። በመጀመሪያው ደረጃ፣ መጠናዊ መረጃ ወደ SPSS ስሪት 26 በመላክ እና ገላጭ እና ተጨባጭ ስታቲስቲካዊ ትንታኔዎችን በማካሄድ ተንትኗል። በሁለተኛው ምዕራፍ፣ በድምጽ የተቀዳ ቃለ-መጠይቆች ከተገለበጡ በኋላ የጥራት መረጃው በቲማቲክ ተንትኗል። በመጨረሻም በቁጥር እና በጥራት ግኝቶች ላይ የተለዩ ትንታኔዎች በውይይት ክፍሉ ውስጥ ተቀናጅተው ስለ የምርምር ችግር የተሻለ ግንዛቤ እንዲኖራቸው ተደርጓል።

ግኝቶቹ እንዲረጋገጡት አሁን በኢትዮጵያ ያለው የመምህራን ትምህርት መርሃ ግብር በቂ የትምህርት፣ ስነ-ልቦናዊ እና ስሜታዊ ድጋፍ በመስጠት ከፍተኛ አፈፃፀም ያላቸውን እጩዎች ወደ መምህርነት መምረጥ ባለመቻሉ እና ሊጠቀሙ የሚችሉ ምሩቃን አለማፍራት ነው። አካታች ትምህርትን ተግባራዊ ለማድረግ ንቁ የመማር ዘዴዎች እና ልጅን ያማከለ ትምህርት። በተጨማሪም የፕሮግራሙ ሥርዓተ-ትምህርት ለተመራቂዎች ተገቢውን ትምህርታዊ ይዘት እውቀት ለመስጠት ውጤታማ እንዳልሆነ ተወስኗል። የፕሮግራሙ አስተምህሮዎች በስልጠናው ውስጥ ሁሉን አቀፍነትን እና አካታች ትምህርትን አያበረታቱም; እና በፕሮግራሙ ውስጥ የተቀናጀው ሁሉን አቀፍ የትምህርት ኮርስ የስልጠናውን ንድፈ ሃሳብ እና የተግባር ልኬቶችን በማመጣጠን ረገድ ውጤታማ አይደለም። በተጨማሪም በተለያዩ ባለድርሻ አካላት መካከል ያለው ትብብር ለትብብር ልምምዶች በቂ ጊዜ እና እድሎች አይፈቅድም, እና መርሃግብሩ የተመራቂዎችን የአካታች ልምዶችን የብቃት ደረጃ ለማሳደግ የሚያስችል አይደለም. በመጨረሻም መርሃ ግብሩ ተመራቂዎችን በማካተት በቂ እውቀት ያላሰለሰ፣ የተመራቂዎችን የመደመር አመለካከት በአዎንታዊ መልኩ ለማሳረፍ በቂ አልነበረም፣ እንዲሁም ተመራቂዎችን በበቂ ሁኔታ ለተግባራዊ እና ለተግባራዊ ትምህርታዊ ልምድ አላጋለጣም። ጥናቱ የ2ኛ ደረጃ ት/ቤት መምህራንን ለማካተት መዘጋጀቱ በኢትዮጵያ ውጤታማ እንዳልሆነ ገልጿል። ስለሆነም የመምህራንን የመደመር ዝግጅት ውጤታማነት የሚያጎለብቱ የፖሊሲዎች፣ ልምዶች እና አማራጭ ስልቶች መሠረታዊ ለውጥ ያስፈልጋል።

ቁልፍ ቃላት

ውጤታማነት፣ ኢትዮጵያ፣ ማካተት፣ አካታች ትምህርት፣ የቅድመ-አገልግሎት መምህራን ትምህርት፣ ሁለተኛ ደረጃ የመምህራን ትምህርት፣ የመምህራን ለማካተት ዝግጅት፣ ሰልጣኞች

KAKARETŠO

Lenaneothero la thuto ya go akaretša bohle le tšwela pele go šomišwa ka mo nageng le maamong a boditšhabatšhaba go tloga mola setatamente sa Salamanca le foreimeweke ya tirišo di amogelwago ka 1994. Le hlohleletša barutiši go ba le bokgoni bja go ruta baithuti bao ba nago le dinyakwa tše di kgethegilego tša go ithuta ka diphaphošing tša go akaretša bohle. Se se laetša gore phethagatšo ya thuto ya go akaretša bohle e laolwa kudu ke tlhahlo ya morutiši ya go ba le bokgoni bja go ruta bohle. Maikemišetšo a nyakišišo ye ke go sekaseka gore barutiši ba sekolo sa sekontari kua Ethiopia ba hweditše tlhahlo ya go ruta thuto ya go akaretša bohle, gomme e tle le maano a mangwe gore e tšwele pele go šoma gabotse. Nyakišišo e theilwe godimo ga foreimeweke ya tsela ya go ruta ye e akaretšago bohle, teori ya Vygotsky ya seabe sa leago thutong le teoring ya Hart ya go ithuta ntle le ditšhitišo. Nyakišišo e šomišitše mokgwa wo o tswakantšwego wa tlhathollo wa go sekaseka go kgetha dikemedi. Mokgwa wa go kgetha dikemedi fela o šomišitšwe go kgetha palomoka ya dialoga tše 152 (banna ba 109 le basadi ba 43) le go kgetha ka maikemišetšo dikemedi tša dialoga tše šupa (banna ba bane le basadi ba bararo) bao ba tšerego karolo kgatong ya pele le ya bobedi ya nyakišišo. Nyakišišo e šomišitše mananeopotšišo le dipoledišano le batšeakarolo ka sebele go kgoboketša datha. Go kgato ya mathomo ya nyakišišo, datha ya khwanthithethifi e lekotšwe ka go romelwa go SPSS bešene ya 26 le ka ditshekatsheko tša go hlaloša datha le dipalopalo tšeo di akantšwego. Go kgato ya bobedi, datha ya khwalithethifi e sekasekilwe ka morago ga go bala le go theeletša dipoledišano tša odiyo tše di rekhotalwego. Mafelelong, ditshekatsheko tša dikhwetšo tša khwanthithethifi le khwalithethifi di kopantšhitšwe go karolo ya kahlaahlo ya nyakišišo go hwetša dikarabo tša bothata bja nyakišišo. Diphihlelelo tša nyakišišo di utollotše gore lenaneo la go ruta la bjale la barutiši ka Ethiopia ga le šome gabotse go fa thekgo ya maleba ya thuto, kgokagano ya dikgopolo le maikutlo, ka ge le sa netefatše gore go kgethwa batho ba go ba le maswanedi profesešeneng ya borutiši gomme le palelwa ke go tšweletša dialoga tšeo di kgonago go šomiša mekgwa ya go ruta dithuto tšeo di lebanego bana go thuto ya go akaretša bohle.

Go tlaleletša se, lenaneo la kharikhulamo ye ga le fe baithuti botsebi bja maleba mabapi le thuto ya go akaretša bohle ka ge lenaneo la thuto le sa hlohleletše thuto ya go akaretša bohle; gomme khoso ya lenaneo la thuto leo le akaretšago bohle ga e laetše palantshe ya teori le tsela ya go ruta bohle. Go feta moo, tšhomišano mmogo ya batšeakarolo ba go fapanafapana ga e fe nako le

menyetla ya maitemogelo a go ithuta mmogo, gomme le lenaneo ga le hlatloše maemo go fa dialoga bokgoni mabapi le tsela ya go ruta bohle.

Diphihlelelo di laeditše gape gore lenaneo ga le fe dialoga tsebo ye e tseneletšego mabapi le thuto ya go akaretša bohle, ga le hlohleletše tšhomišo ya mokgwa wo wa go ruta ebile ga le rute goba go fa baithuti bokgoni le maitemogelo a go ruta thuto ya go akaretša bohle. Dipelo tša nyakišišo di tšweleditše gore tlhahlo ya barutiši ba sekolo sa sekontari go thuto ya go akaretša bohle ga e šome gabotse ka Ethiopia. Nyakišišo ye e šišinya go fetolwa ga dipholisi, tšhomišo le maano a mangwe a go fa barutiši tšhupatsela gore ba be le bokgoni bja go ruta thuto ya go akaretša bohle.

OPSOMMING

Sedert die onderskrywing van die Salamanca-verklaring en -raamwerk vir optrede in 1994, het die agenda van insluiting in onderwys op nasionale sowel as internasionale vlak toenemend in gewildheid toegeneem. Dit dien as motivering vir onderwysers om studente met uiteenlopende leerbehoefte in inklusiewe klaskameromgewings te akkommodeer. Dit impliseer dat die implementering van inklusiewe onderwys in 'n groot mate staatmaak op die doeltreffende voorbereiding van onderwysers wat hierdie uitkoms spesifiek ten doel het. Die oogmerk van hierdie studie was derhalwe om die doeltreffendheid van sekondêreskoolonderwysers in Ethiopië se voorbereiding vir inklusiewe onderwys te ondersoek en 'n alternatiewe strategie wat die doeltreffendheid sal verhoog, voor te stel. Die studie is veranker in die teoretiese raamwerk van inklusiewe pedagogie, Vygotsky se sosiokulturele leerteorie en Hart se opvatting van leer sonder perke. Altesaam 152 gradueerdes (109 mans en 43 vroue) het gekies om eenvoudige- ewekansige steekproefneming te gebruik en sewe gegradueerdes (vier mans en drie vroue) het doelbewuste steekproefneming gekies om onderskeidelik aan die eerste en tweede fases van die studie deel te neem, omdat die studie 'n opeenvolgendverklarende- gemengdemetodenavorsingsontwerp gebruik het. 'n Vraelys en persoonlike semigestruktureerde, individuele onderhoude is gebruik om die data in te samel. In die eerste fase is kwantitatiewe data ontleed deur dit in die SPSS-weergawe 26 in te voer en beskrywende en afleibare statistiese ontleding te doen. In die tweede fase is die kwalitatiewe data tematies ontleed deur die oorskrywing van die oudio-opgeneemde onderhoude. Ten slotte is die aparte ontledings van die kwantitatiewe en kwalitatiewe bevindings in die besprekingsgedeelte geïntegreer om beter begrip vir die navorsingsprobleem te verseker.

Die bevindings het gewys dat die huidige onderwyseronderrigprogram in Ethiopië ondoeltreffend is wat betref die verskaffing van voldoende akademiese, psigososiale en emosionele ondersteuning omdat dit nie die seleksie van hoogs presterende kandidate vir die onderwysberoep verseker nie en nie daarin slaag om gegradueerdes te lewer wat aktiewe leermetodologieë en kindgesentreerde pedagogieë kan gebruik om inklusiewe onderrig te implementeer nie. Boonop blyk dit dat die kurrikulum van die program ondoeltreffend is om gegradueerdes te lewer met toepaslike pedagogiese inhoudskennis; die pedagogie van die program bevorder nie inklusiwiteit en inklusiewe pedagogie regdeur die opleiding nie; en die inklusiewe onderrigkursus wat by die program geïntegreer is, is ondoeltreffend wat betref die

balansering van die teorie en praktiese dimensies van die opleiding. Oorlegpleging tussen die verskillende belanghebbendes laat verder ook nie voldoende tyd en geleentheid toe vir gesamentlike leerervarings nie en die program is nie in staat om die bevoegdheidsstandaarde van gegradueerdes wat met inklusiewe praktyke verband hou, te verbeter nie. In die laaste plek rus die program nie die gegradueerdes met voldoende kennis van insluiting toe nie. Die program kon ook nie die houdings van die gegradueerdes positief beïnvloed ten opsigte van insluiting nie en het die gegradueerdes nie genoeg blootstelling aan praktiese ervaring ten opsigte van inklusiewe onderrig gegee nie. Die studie kom tot die gevolgtrekking dat die voorbereiding van sekondêreskoolonderwysers vir insluiting ondoeltreffend is in Ethiopië. Daar bestaan dus 'n behoefte aan die fundamentele transformasie van beleide, praktyke en alternatiewe strategieë ten einde die doeltreffendheid van onderwysers se voorbereiding vir insluiting, soos hier aan die hand gedoen word, te verbeter.

ABBREVIATIONS AND ACRONYMS

BA	Bachelor of Arts
BSC	Bachelor of Sciences
CEBS	College of Education and Behavioural Sciences
EASNIE	European Agency For Special Needs And Inclusive Education
EFA	Education For All
EGRA	Early Grade Reading Assessment
EMoE	Ethiopian Ministry of Education
EMoFED	Ethiopian Ministry of Finance and Economic Development
ESDP	Education Sector Development Programme
ETP	Education and Training Policy
FDRE	Federal Democratic Republic of Ethiopia
GTP	Growth and Transformation Plan
HDP	Higher Diploma Programme
HU	Haramaya University
ICT	Information Communication Technology
IE	Inclusive Education
MWU	Madda Walabu University
NCSE	National Council for Special Education
NGOs	Non- Governmental organizations
NLAs	National Learning Assessments
OECD	Organization for Economic Cooperation and Development
PCK	Pedagogical Content Knowledge
REC	Research Ethics Committee

SDGs	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences
TALIS	Teaching and Learning International Survey
TEIs	Teacher Education Institutes
TESO	Teacher Education System Overhaul
TTIs	Teacher Training Institute
UK	United Kingdom
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNISA	University of South Africa
USA	United States of America
ZPD	Zone of Proximal Development
ZPTD	Zone of Proximal Teacher Development

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CHAPTER ONE: THE PROBLEM AND ITS SETTING

1.1. Introduction

Achieving an inclusive education system that creates equitable learning opportunities for all learners is currently a priority agenda item for all countries across the globe, including Ethiopia. The key role-players in this regard are the teachers, who hold the major responsibility for implementing it. Countries working towards this vision give strong emphasis to teacher education programmes that equip teachers with the necessary knowledge, attitude, and practical skills needed to support diverse learners in an inclusive setting. The question remains, however, as to how teachers are being prepared for inclusive teaching in various parts of the world. This study investigates the effectiveness of secondary school teachers' preparation for inclusive education in Ethiopia and proposes a model (an alternative strategy) that would be in place to enhance its effectiveness. To this end, this chapter presents the problem and its setting. The chapter starts by discussing the background, statement of the problem, research questions, objectives, and rationale of the study. It also presents the significance, theoretical framework, research design and methodology, ethical considerations, and definitions of key terms. The chapter then culminates in a presentation of the structures of the chapters of the study.

1.2. Background

Inclusive education (IE) has been internationally recognised as a strategy that addresses and responds to the diverse learning needs of all children, irrespective of disability, gender, ethnicity, or other disadvantages (Malak, 2013). It is a continuous process of identifying and removing obstacles that hinder all children from being present, participating, and succeeding (Berlach & Chambers, 2011). Further, inclusive education involves developing an education system embracing educational values of equity, diversity, and social justice (Forlin, 2010a), reflecting a major shift in the beliefs and practices of educational communities regarding the provision of services for all learners in inclusive settings (European Commission, 2007). This requires the provision of an equitable, quality education that can meet the needs and abilities of diverse learners in their local schools (Moriña, 2020). This implies that the development of inclusive education systems and schools in which the presence, participation, and achievement of all learners are valued is an essential task for all countries across the globe, including in Ethiopia.

Inclusive education represents a philosophical shift away from the accommodation of learners with disabilities into an already existing system, towards a model where all individuals have the right to a quality education that meets their needs (European Agency, 2014). As a result, inclusion in education calls for fundamental changes in educational thinking about learners, curriculum and pedagogy, teacher training and professional development, school organization and reform, stakeholders' involvement and collaborations, etc. (Coates, 2012). Above all, inclusive education requires the readiness and commitment of those directly involved, particularly teachers if it is to be successful. Teachers are considered the central character and the most valuable human resource in the process of inclusion, because they are expected to play a key role in educating learners with a diverse range of needs and abilities (Florian & Spratt, 2013). This means that teachers facilitate and implement any innovation resulting from inclusive practices. As a result, the practicality of adapting inclusive classroom to accommodate the learning needs of all children falls on them (Zulu, 2014; Shellie & Hlalele, 2014).

This implies that inclusive teachers are required to deal with the process of teaching children in a way that is relevant to their needs (Abu-Heran et al., 2014); be sensitive to the styles of learning and levels of motivation of learners (Kurniawati et al., 2014); design appropriate learning materials and adapt instruction (Florian & Spratt, 2013); create situations in which active student learning is maximised (Ahsan et al., 2013); respond to the complexity of inclusive classrooms (Spratt & Florian, 2015); and manage the diversity of learners in today's schools (Mintz & Wyse, 2015). Additionally, inclusive teachers need to acquire the knowledge, skills, and attitudes necessary for inclusive education; if not, they become a major barrier to the successful implementation of inclusive education (Allan, 2014). This necessitates the preparation of teachers who can work with and meet the challenges of diversity in inclusive school settings (Florian & Panti, 2017). As a result, fostering inclusion through and within teacher education programmes is a common agenda throughout the world, including in Ethiopia (Ball & Tyson, 2011; UNICEF, 2013).

To this end, teacher training programmes are increasingly called on to produce graduates who can respond to diverse learners and face the challenges of inclusive education in the twenty-first century (Zulu, 2014). In support of this, Malak (2013) states that with the advent of increased

inclusion of learners with diverse educational needs into regular classrooms, it has become essential to create 'pathways' for teachers to enhance their teaching skills for these learners. Similarly, Ainscow et al. (2019) state that teachers tasked with inclusive teaching ought to be equipped with the necessary skills, dispositions, and knowledge to enact inclusive practices in the classroom. Therefore, preparing teachers who are ready to practice the philosophy of inclusion and develop a more inclusive education system is crucial. It has been argued that when teachers gain the necessary knowledge and practical skills needed to implement inclusion, they can highly support students with diverse educational needs, and this can be best addressed through socially just and diversity-oriented teacher education programmes (Sharma et al., 2013). In this regard, teacher education programmes that prepare teachers for the successful implementation of inclusive education play an important role (Forlin, 2012; Abu-Heran et al., 2014).

Extant research supports the need to move towards teacher education programmes that prepare teachers to work in an increasingly inclusive setting for the last three decades. This is because teacher training programmes oriented towards inclusion play a significant role in changing teachers' attitudes towards inclusive education and students with disabilities (Kim, 2013), enhancing teachers' self-efficacy and confidence related to teaching learners students with special educational needs (Chamber & Forlin, 2010), and relieving concerns about their knowledge related to inclusion and stress levels that have a direct impact on what teachers do in an inclusive classroom (World Bank, 2013). Similarly, Florian and Rouse (2009) are of the opinion that teacher education for inclusion helps to prepare graduates to enter a profession that accepts individual and collective responsibility for improving the learning and participation of all children. Further to this, Cardona (2009) notes that teacher preparation for inclusion proves vital in providing the best platform to develop new teachers with the prerequisite skills and attitudes for the successful integration of diversity in the classroom. Moreover, Coates (2012) revealed that teacher education for inclusion helps to boost confidence in trainee teachers' ability, knowledge, and practical skills, so that they meet the challenges that will be encountered in an inclusive school climate. Furthermore, teacher education programmes motivated towards inclusionary practices and providing high-quality training are the most effective in nurturing favourable attitudes and building confidence towards inclusive teaching (Symeonidou, 2017).

Thus, it is possible to conclude that the successful implementation of policy reform for inclusive education primarily depends on teachers' preparation. For inclusion to be effective, teachers need to be cognisant of and committed to the philosophy of inclusion, and to have the necessary skills to be able to support a diverse range of learners. The preparation of teachers for inclusion therefore requires appropriate and dependable training, and teacher preparation for inclusion ought to be at the centre of inclusive education reform since it paves the way for the successful implementation of inclusion in education (Watkins & Donnelly, 2014; Kurniawati et al., 2014; Symeonidou & Phtiaka, 2014). This implies that countries working towards this vision are expected to have teacher education programmes that enable teachers to engage in inclusive practices and provide equitable, quality education for all learners by considering learners' individual differences (Florian, 2015a; Symeonidou, 2017).

Even though promoting inclusion constitutes a core aim of many teacher education programmes across the globe, studies demonstrate that teachers continue to feel unprepared to address issues of diversity in an inclusive setting. This has been commonly found during the implementation of inclusive education in many countries, including Cyprus (Symeonidou & Phtiaka, 2014), Alberta (Loreman, 2010), Australia (Woodcock et al., 2012), Bangladesh (Malak, 2013), Botswana (Mukhopadhyay et al., 2009), Egypt (Ashry, 2009), South Africa (Nel et al., 2014), Zimbabwe (Jenjekwa, 2013), the US (Cornelius & Nagro, 2014), Ghana (Nketsia, 2016), and Europe (EADSNE, 2010). Studies from the above nations reveal that the inadequate training of teachers is the primary challenge in meeting the needs of learners' with different abilities in an inclusive setting. This implies that teachers struggle to work with the diversity of today's classroom, due to not having been exposed to the broader conceptualisation of inclusive teaching in the teacher education programmes they went through (Florian, 2014; Spratt & Florian, 2015). This is highly significant, where Kruschler et al. (2019) found that teachers with a more in-depth understanding of inclusive teaching reported more positive attitudes and felt better prepared to implement inclusion in education.

As a result, teacher education programmes are under increasing pressure to provide evidence that they are producing effective graduates for inclusive teaching (Forlin, 2010d). In response to

these pressures, international reforms of teacher education are being conducted to explore how teachers are best prepared for inclusion, which in turn enhances learning and achievement in an inclusive, setting (Loreman, 2017). Even if many studies have been conducted concerning teachers' preparation for inclusion over the past three decades, little is known about their effectiveness in producing graduates ready for the challenges of 21st-century inclusive teaching (Kurniawati et al., 2014; Shevlin et al., 2013). This is because providing evidence of the effectiveness of teacher education programmes in terms of producing competent graduates for inclusive education is a complex task, requiring negotiation of different methodological issues (Cochran-Smith et al., 2009). There is also strong debate among the scholars on what ought to constitute effective teacher education for inclusion, what should be addressed during the training to equip teachers with the necessary competencies, and how this balance should be achieved among the competencies so that the graduates are ready for the challenges of 21st century inclusive teaching (Florian, 2012).

In this regard, Cochran-Smith et al. (2009) identify two pathways that we can follow in addressing the effectiveness of teacher education programmes for inclusion, namely the impact of teacher education training on trainee teachers and the link between the competencies acquired by the graduates and the achievement of the learners' they are going to teach after graduation. In addition to this, the debate on the effectiveness of teacher education for inclusion is rooted in contrasting views on the aims and purposes of education. While there is pressure on teachers to raise student attainment, there is also increased attention being paid to the challenges of access, equity, participation, and achievement in education (Black-Hawkins, 2017). The above discussions and debate call for broader measures of the effectiveness of teacher education for inclusion that cover all the domains of the education systems of a nation in general and the teacher education systems in particular (Alexander, 2004; Deppeler et al., 2015; Florian, 2010).

Further to this, Forlin (2012) suggests that teachers need not only the skills and knowledge base to be successful in inclusive education environments, but also need to develop positive attitudes and sentiments towards their work to ensure an inclusive future in their classrooms. Furthermore, teachers are required to develop positive values, supportive ideas, high moral principles, and strong ethical understandings regarding accepting responsibility for the education of all learners

in an inclusive setting (Symeonidou & Phtiaka, 2014). To do so, topics like differentiation and individualisation, adapted education, and special needs education must be included in the curricula of all teachers, and awareness about factors that affect the quality of learning for people with disabilities ought to be created (Sharma et al., 2013; Florian, 2018). Hence, teacher training institutions are expected to provide trainee teachers with balanced content, as well as theory and practices and facilitate the development of the core competencies necessary to enact inclusion, namely: knowledge, practical skills and abilities, and positive attitudes towards inclusive education and students with disabilities.

In addition, Darling-Hammond (2017), and Forlin and Chambers (2011) suggest that teacher education that prepares teachers for inclusive education needs to be re-evaluated so as to ensure teachers' efficacy in *knowing* (knowledge), *being* (attitudes and values), and *doing* (practical skills), since there is insufficient evidence to judge the effectiveness of teacher education programmes in preparing graduates for inclusive education implementation, what these programmes consist of, and in what ways they can be considered effective in preparing trainee teachers for the challenges of 21st century inclusive teaching. Additionally, Hemmings and Woodcock (2011) and Young et al. (2018) suggested that negative attitudes, ambiguous beliefs, fragmented or unclear concepts of inclusive education, concerns about a lack of resources, a lack of confidence, and inappropriate use of curriculum structure and instructional strategies among teacher educators are challenges in preparing confident graduates for the successful implementation of inclusive education.

Furthermore, Harvey et al. (2010) discovered that the practicum experiences provided to trainee teachers were insufficient, and that poorly integrated inclusive education courses posed a challenge in preparing graduates for enacting inclusion in education. Similarly, Walton and Ruznyak (2019), as well as Mukelabai et al. (2020) propose that individual teachers are affected by the culture of teacher training institutions, as well as by the pedagogical approaches that the teacher educators follow during the training, noting that these should be noticed and examined. This is because trainee teachers invariably tend to adopt and transport their training institutions' practices, culture, values, attitudes, and thinking to their classrooms after graduation. This implies that the effective implementation of inclusive education requires a careful and complex

pedagogic design that deals with what teachers do and how and why to respond to learners' differences to avoid the exclusion of some learners in the regular classrooms (Robinson, 2017).

While many countries have made progress in preparing teachers to support all their students in an inclusive classroom, studying whether graduates feel adequately prepared to provide effective and appropriate instruction for diverse students and conditions that promote or challenge inclusive education within the teacher education system remain a persistent and pressing issue facing teacher education programmes of today, particularly in developing nations (Woodcock et al., 2012; Ashman, 2009; Hemmings & Woodcock, 2011; Malak, 2013; Moraña, 2020; Slee, 2011; Florian & Spratt, 2013; World Bank, 2013; Young et al., 2018; Symeonidou & Phtiaka, 2014; Florian, 2014; Rouse, 2010). Taken together, the above issues foreground the need to investigate the effectiveness of teacher education programmes in preparing competent graduates ready for the successful implementation of inclusive education and propose a model (an alternative strategy) that would enhance their effectiveness.

In the context of this particular study, the Ethiopian government has accepted and ratified many international declarations and conventions, as well as legal and policy issues that support the move towards inclusive education since 1994. The constitution of the Federal Democratic Republic of Ethiopia (FDRE) states that all international agreements ratified by the country are integral parts of the law of the land. It further states that education is a fundamental human right and a key to sustaining economic growth and reducing poverty (Ayalew, 2009; Semela, 2014; World Bank, 2013). Accordingly, the government is committed to achieving the Millennium Development Goals (MDGs) and Education For All (EFA), as well as the Sustainable Development Goals (SDGs), by providing an equitable and quality education for all its citizens (UNESCO, 2015). Those policies to which the government is committed intersect at the point of promoting the holistic development of the child by protecting the child from any form of disabling disease, physical and psychological abuse, and creating an environment conducive to the child's optimal development (Tirussew, 2006). It is important to note that the inclusiveness of the policies in terms of their desire and commitment to address the needs of all children, including children with disabilities, orphans, and homeless and working children, is clearly

indicated in those policy documents, which was discussed in a section of this study reviewing Ethiopian literature (EMoE, 2015b).

Following the introduction of the Education and Training Policy (ETP) in 1994, the country has experienced remarkable educational reforms. The reforms include the following: expansion and equitable access to general education and vocational training; improvement of the quality of education throughout the system; special focus on girls' and women's education; learners with disabilities; change in the curriculum to increase the relevance of education to local communities and the disadvantaged; and decentralisation of school administration with strong community participation by focusing on the major goals of the policy, namely access, equity, quality, and relevance to transform the Ethiopian society through education (EMoE, 2012; World Bank, 2013). In terms of educational participation, secondary school enrolment as a whole (grades 9–12) expanded rapidly, roughly tripling since 1994. During this period, Ethiopia went from having one of the lowest education participation rates in the world, to enrolling 85% of young people aged 7–14 (EMoE, 2011). This was judged to be on the right track to achieving the Millennium Development Goals (MoFED, 2012).

However, the greater push given to increase enrolment seems to have offset the efforts made to improve the quality of education (EMoE, 2006). As a result, the government of Ethiopia expressed concern over the deterioration of quality schooling, as evidenced by an overall decline in grades 10 and 12 attainments in the National Learning Assessments (NLAs) of the country. Further to this, more than 93% of children with disabilities in Ethiopia remain without any form of education (EMoE, 2012). The above figure indicates that the coverage of learners with disabilities is still around 7% of the total population of the group (EMoE, 2012b); and of those children with disabilities attending secondary schools, majority frequently drop out within a few months, and only a few complete their secondary education (Dagnew, 2013). In order to solve these issues, the Ethiopian government has implemented teacher development programmes that place a strong emphasis on teachers' credentials, particularly at the secondary school level (World Bank, 2013). The Education Sector Development Programme (ESDP IV) cites teacher professional development as one of its top priorities for raising the standard of secondary school education in response to this. This objective is in line with evidence from other countries and

experience indicating teacher effectiveness is one of the key factors affecting students' ability to learn (World Bank, 2013).

In many global studies, it is made clear that we need teachers of the highest calibre who are prepared to meet the needs of all learners if we are to provide not only equal opportunities for all but also education for an inclusive society (World Bank, 2013; UNESCO, 2013; UNICEF, 2013). According to the Education for All Monitoring Report from 2005, relevant, high-quality education is seen as a tool for creating an inclusive, participatory society. In a similar vein, the European Agency for Special Needs and Inclusive Education (EASNIE, 2010) claims that fostering an inclusive environment benefits all learners, not only those with disabilities. Thus, it is possible to conclude that the development of an inclusive school system, as well as an inclusive society in general, depends on the knowledge, attitudes, practical skills, and abilities of teachers that are applied to creating an effective learning environment for all learners (UNESCO, 2018; Semela, 2014).

Cognisant of this fact, the Ethiopian Ministry of Education (EMoE) released Special Needs Education (2006) and Inclusive Education (2012) strategies, respectively, in line with the Education and Training Policy of 1994. The Education and Training Policy of 1994 states that all children need to learn in accordance with their full potential and interests. These strategies propose that teachers are critical to the successful implementation of inclusive education in Ethiopia, and that they should be equipped with appropriate knowledge, attitudes, and practical skills and abilities to teach diverse populations in today's inclusive secondary schools in the country (Tirussew, 2010). As a result, an introductory course called special needs education has been offered in all teacher education institutions in the country since 2006. Before that, the movement towards inclusive education assumed that teachers were willing to admit learners with disabilities into inclusive classrooms and would be responsible for meeting their needs (Gezahegne & Yinebeb, 2010; Tirussew, 2010; Ayalew, 2009).

In Ethiopia, secondary school teachers are trained in all public universities of the country in a four-year degree programme that combines educational coursework and practicum experiences with various academic disciplines before 2011 (EMoE, 2011). After 2011, however, the training

of secondary school teachers has changed from a four-year integrated bachelor's degree to a three-year degree in a major field plus an additional one-year professional training to obtain a Postgraduate Diploma in Secondary School Teaching (PGDT). The PGDT programme is designed to confront several problems of previous teacher education programmes, including inadequate subject-matter competence on the part of teachers, insufficient and improper active learning methods in the classroom, insufficient professional commitment and work ethic among teachers, a lack of teacher interest in following up and assisting students, and poor school-community relationships (EMoE, 2012b; World Bank, 2013; Tirussew, 2010; UNESCO, 2013).

Further to this, the PGDT programme is designed to prepare secondary school teachers for today's inclusive schools and aims to become the forerunner of pedagogical approaches to teaching that impart the scientific method, creativity, and higher-order meta-cognitive skills (EMoE, 2011). It also emphasises teacher training strategies that deal with variations in students' learning styles and accompany the philosophy of inclusive education. In addition to that teachers-in-training are supposed to learn to identify their own learning needs, manage their professional development, and continuously update their subject-matter knowledge and pedagogical practices (EMoE, 2011). Above all, the one-year PGDT programme consists of foundations courses, pedagogical courses, subject area methodology courses, language courses, action research, and practicum courses with a total of 40 credit hours (EMoE, 2011). The duration of the training is ten months, divided into three terms of three months each. The terms are designed to maintain the sequence and integration of the courses in the programme in such a way that the foundation courses will be taken ahead of those that deal with the specifics of teaching. In addition, those courses that complement each other are offered during the same term to minimise the interruptions caused by practicum (EMoE, 2011).

Further, the PGDT programme consists of a course entitled *Inclusive Education for Secondary School Teachers*, which focuses on assisting teachers to better understand diversity and, thus, teach children with special educational needs effectively in an inclusive classroom. Learners who require special schooling are meant to include all those whose educational needs are not effectively met with the usual or standard curriculum (EMoE, 2011). It considers principles, ideas, and techniques that promote more effective instruction for diverse learners, regardless of

exceptionality (EMoE, 2011). It is a foundational and compulsory course that is delivered to all secondary school teachers admitted to the PGDT programme. The course has a practical attachment component (30% of the credit hours) that helps link the candidates with the surrounding secondary school community and culture in addition to the practicum course (EMoE, 2011; World Bank, 2013; UNESCO, 2009).

From the above discussion, one can understand that the Ethiopian government has been promoting inclusion and education for all for nearly three decades, since 1994. It is however a question as to whether secondary school teachers' preparation has kept up with this change. Is it possible to claim that teacher education programmes are meeting the needs of adequately preparing teachers for inclusion? And how should teachers be trained for the implementation of inclusive education successfully in Ethiopia? It is such critical questions that form the backdrop to this study. To the best of the researcher's knowledge, no Ethiopian studies have been conducted to investigate the effectiveness of secondary school teachers' preparation for inclusion. Thus, the study investigated the effectiveness of secondary school teachers' preparation for inclusion at one purposefully selected university in eastern Ethiopia that has been running a PGDT programme since 2011 and, then, proposed a model as an alternative strategy that would enhance its effectiveness in order to successfully implement inclusive education in Ethiopian secondary school contexts.

1.3. Statement of the Problem

From the background of the study, it has been increasingly recognised that teachers need to be better prepared to recognise, value, and deal with learners from diverse backgrounds (Arthur-Kelly et al., 2013; Kurniawati et al., 2014; Allday et al., 2012). In this regard, teacher education programmes oriented towards inclusion play an important role in empowering and preparing teachers for its successful implementation (Salend, 2010; Rouse, 2010). In support of this, Shellie and Hlalele (2014) and Abu-Heran et al. (2014) added that the method used in the teacher education training programme plays a critical role in how they employ inclusive education strategies when teaching full-time in schools. Similarly, Miskolci (2016) argues that if teachers have developed inclusive practices during their training, then these practices will be maintained throughout their teaching careers.

In the Ethiopian context, the government, through the Ministry of Education, has since 1994 been promoting inclusion and quality education for all its citizens. To ensure this happens, teacher education programmes are responsible for producing quality teachers to carry out this important task of educating the nation (EMoE, 2012b; World Bank, 2013). Teachers are expected to have acquired the necessary knowledge and skills, as well as a strong belief in their role as inclusive practitioners (EMoE, 2006), and to have the appropriate dispositions, values, and performances required for the implementation of inclusive education successfully in the Ethiopian secondary school context by the end of the training (EMoE, 2011; World Bank, 2013; Tirussew, 2010; UNESCO, 2015). This being the case, however, to the best of the researcher's knowledge, no studies have investigated the views of graduates on whether they feel adequately prepared and capable of meeting the challenges of 21st-century inclusive teaching, and how the teacher education system assisted them to become agents of inclusion in Ethiopia. This study is critical considering that teacher education programmes are one of the most influential variables in building the knowledge, attitudes, and practical skills that facilitate effective inclusion; the short time frame of the PGDT programme; and the scarcity of research into investigating the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia.

Hence, the study addresses the following key questions concerning the secondary school teachers' preparation for inclusion in one purposefully selected university in eastern Ethiopia: (1) the extent to which the programme and its components meet their obligations in preparing graduates for the successful implementation of inclusion; (2) the extent to which the graduates feel adequately prepared in developing the essential skills required for the effective implementation of inclusion; and (3) what model (an alternative strategy) might be proposed to enhance its effectiveness underpinned by the theoretical framework of inclusive pedagogy.

To this end, the current study answered the following main research question:

How effective is the teachers' preparation for inclusion in Ethiopian universities?

1.4. Research Questions

The current study is intended to address the following sub-research questions, which are derived from the main research question guiding the study:

1. How are teachers prepared for inclusion in Ethiopian universities?
2. How does the preparation support the development of core competencies necessary for inclusion in Ethiopian universities?
3. What model (alternative strategy) can be proposed to enhance the effectiveness of teachers' preparation for inclusive education in Ethiopian universities?

1.5. Objectives of the Study

The current study is intended to:

1. Examine how teachers are prepared for inclusion in Ethiopian universities,
2. Investigate how the preparation is supportive in developing the core competencies necessary for inclusion in Ethiopian universities, and
3. Propose model (alternative strategy) that enhances the effectiveness of teachers' preparation for inclusive education in Ethiopian universities.

1.6. Motivation for the Study

Several factors have prompted the researcher to conduct the current study. Firstly, the inclusion of learners into regular schools needs diversified support and has become one of the biggest problems the modern educational system is dealing with (Florian & Spratt, 2013). To address this issue, teacher education institutions are urged to ensure that teachers are sufficiently equipped with the requisite skills to teach effectively in an inclusive setting. Even though promoting inclusivity is the primary goal of many teacher education institutions across the globe, studies still reveal that graduates continue to feel unprepared to meet the challenges of inclusive education (Sharma & Sokal, 2015; Graham & Scott, 2016). Therefore, establishing whether graduates feel adequately prepared to provide effective and appropriate instruction for diverse students in an inclusive setting and investigating conditions that promote inclusion in teacher

education institutions remains a persistent and pressing issue facing teacher education systems today. This motivated the researcher to conduct the study in Ethiopia.

Secondly, the researcher is interested in the topic as a senior lecturer of inclusive education and teacher educator at an education university that trains Ethiopian teachers. The motivation to study the problem under consideration was initiated during the supervisory visits of surrounding secondary schools by the research where graduates of the PGDT programme were assigned. During the discussion, the teachers reflected on being seriously challenged by the inclusion of students with disabilities. This might be due to the inadequacy of the preparation in supporting the graduates to acquire the competencies necessary to implement inclusive education successfully in the Ethiopian secondary school context. The researcher feels that the teachers' needs are urgent, and, thus, the researcher intended to investigate the effectiveness of secondary teachers' preparation for inclusion in Ethiopia and then propose a model (an alternative strategy) that could enhance its effectiveness in preparing graduates ready for inclusive teaching.

Thirdly, the Ethiopian Ministry of Education has reported (EMoE, 2015; Word Bank, 2013; UNESCO, 2015) that secondary school teachers harbour serious reservations about including students with disabilities in their classrooms. Despite this, there is limited evidence showing that the PGDT programme falls short in securing sufficient confidence, skills, and preparedness to address the learning needs of diverse students in the Ethiopian secondary school context (World Bank, 2013; Tirussew, 2010; UNESCO, 2015). The limited research that is available in Ethiopia is primarily concerned with teachers' attitudes towards inclusion and the inclusion of learners with disabilities into inclusive schools. The attitudes of teachers towards inclusive education in Ethiopia (Gezahegne & Yinebeb, 2010), the attitudes of teachers towards including children with disabilities in inclusive schools (Abate, 2001), the challenges and opportunities of including children with disabilities in inclusive schools (Tirussew, 2005), and the attitudes of special and regular class teachers towards including students with mental retardation are a few of those studies (Tesfaye, 2005). This is a good opportunity for the researcher to fill the gap by investigating the extent to which the PGDT programme conducted in Ethiopian teacher education universities is effective in terms of preparing graduates ready for the challenges of

21st-century inclusive teaching and proposing a model (an alternative strategy) that will enhance its effectiveness, which may also be utilised in other countries with similar contexts.

1.7. Significance of the Study

This study investigates the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia. As such, the results of the study will benefit trainee teachers, secondary school learners, teacher educators, university management, researchers and policymakers, among other stakeholders in Ethiopia and other countries with similar contexts. This study is expected to contribute to the existing body of literature on the professional preparation of teachers for inclusion in Ethiopia and across the globe. Beyond this, it will offer insightful perspectives regarding the core competencies teachers should develop for the successful implementation of inclusive education and how this will happen in teachers' preparation programmes both nationally and internationally. The study's findings will have a significant impact on teacher educators and universities by providing theoretical and practical knowledge that will aid in the production of competent graduates ready to face the challenges of 21st-century inclusive teaching in Ethiopia. If teachers are professionally prepared, they will support all children in their learning to realize their potential and to benefit from inclusion in general. It also has potential benefit for policymakers and leaders of EMOE in identifying the strengths and gaps of the current teachers' preparation programmes for inclusion in Ethiopian teacher education universities. Furthermore, the study examines the gaps in teachers' preparation for inclusion and hence proposes a model (an alternative strategy) that can be put in place to enhance its effectiveness in Ethiopia and other countries with similar contexts. Finally, the current study will provide first-hand information that could be useful for future large-scale studies related to inclusive education and teachers' preparation for inclusion in Ethiopia and other countries with similar contexts.

1.8. An Overview of the Theoretical Framework for the Study

The theoretical framework of inclusive pedagogy used here delivers insight into how teachers might be prepared for inclusive education implementation. Inclusive pedagogy can be conceptualised as an instructional strategy that aims to educate all children in an inclusive classroom setting by respecting their differences and responding to their individual learning needs (Florian, 2016; Loughran, 2015); a philosophy that believes that all children can learn,

make progress, and achieve (Florian & Linklater, 2010); and a theory that understands that every learner is different and this difference cannot be a problem (Loreman, 2017; Pantic & Florian, 2015). It was created as a result of research on the skill sets of teachers who successfully aided all students' learning in their inclusive classrooms (Brennan et al., 2021). It was further developed through a project that embedded inclusive pedagogy in a postgraduate initial teacher education programme in Scotland, and was suggested as a framework for researchers in the field of inclusive education, so as to examine how teachers are supported during their initial training to enact inclusive pedagogy (Spratt & Florian, 2015).

Florian and Black-Hawkins (2017), Florian and Spratt (2013), and Spratt and Florian (2015) identified three key assumptions that teachers must hold in order to enact inclusive pedagogy. First, teachers must believe in the concept of transformability, which refers to the belief that a child's capacity to learn is neither static nor predetermined, but that these can be transformed by the actions undertaken by the teacher in developing teaching and learning. The second assumption refers to fostering teachers' beliefs in their ability to teach students with special educational needs. Associated with the second assumption is the view that difficulties in learning are not within the learner but are problems for the teacher to solve. In this context, teachers must be prepared to commit to supporting the learning of all. The third assumption relates to teachers' willingness to work with others, which aligns with the literature that deems teacher collaboration central to the implementation of inclusive education. The interaction of teachers' knowing, doing, and believing can be used to illustrate realistically how the three aforementioned premises are related (Ainscow et al., 2019).

In the Ethiopian context, the diversity of learners attending inclusive classrooms has increased since 1994 (EMoE, 2016; World Bank, 2013; Gezahegne & Yinebeb, 2010; Tirussew, 2010). This implies that teachers must consider children's diversity as a crucial aspect of child development in any conceptualization of learning (knowing); believe and be convinced that they are qualified and capable of teaching all children (believing); and adopt creative strategies for collaborating with other stakeholders (doing) (Florian & Black Hawkins, 2011; Loughran, 2015). Teacher education programmes for inclusion have the potential to influence teachers' knowing, being, and becoming inclusive teachers in this regard, and the teachers' doing, knowing, and believing are interrelated, in terms of enacting inclusive pedagogy (Forlin et al., 2014; Pantic &

Florian, 2015). Consequently, teachers should be prepared to learn how to teach inclusively in diverse environments, which will be enabled through their initial teacher education programmes oriented towards inclusive teaching.

Further, Loreman (2017), Ainscow (2014), and Brennan et al. (2021) argue that the principles of inclusive pedagogy ought to inform the theoretical foundation of teacher education programmes for inclusion in exposing trainee teachers to a variety of curricular, assessment, and instructional approaches known to be more inclusive. However, the question remains as to how effective the public universities in Ethiopia running teacher education programmes (PGDT) are supporting the graduates in developing their understanding of inclusive pedagogy in order to challenge hegemonic assumptions about individual difference and welcome all learners into inclusive classrooms. Hence, the way in which teachers are trained for inclusion in Ethiopian universities, how supportive the training is in transforming the teachers' knowledge, attitudes, and practical skills to enact inclusive pedagogy, and what model (an alternative strategy) can be put in place to enhance its effectiveness were conceptualised within the theoretical framework of inclusive pedagogy in this particular study. The detail of inclusive pedagogy as a theoretical framework of the study is discussed in chapter two of this study.

1.9. A Brief Description of Research Methodology and Design

A full description of the research methodology and design employed in this study is presented in Chapter Five. This section briefly explains the research paradigm, research approach, research design, data collection methods, population, sample and sampling techniques, and data analysis methods.

1.9.1. Research Paradigm

A paradigm is defined as an assumption, beliefs, models of doing research, and techniques of data gathering and analysis; hence, there are different paradigms to be followed in doing research, which may include positivism, interpretivism, constructivism, and others (Creswell, 2014). Since the current study used a mixed-methods research approach, the research paradigm appropriate for this study is pragmatism. That is- a philosophical position that understands qualitative and quantitative data as more useful in conjunction than the competing ontological,

epistemological, and methodological dimensions of one true reality versus multiple socially constructed realities (Creswell, 2012). Creswell and Plano Clark (2011) define pragmatism as a philosophy that permits mixing paradigms, assumptions, approaches, and methods of data collection and analysis. Pragmatism as a research paradigm is oriented towards solving practical problems in the real world, rather than being built on assumptions about the nature of knowledge (Teddlie & Tashakkori, 2009). This study is pragmatist and leads an action-oriented research procedure that involves proposing a model as an alternative strategy that enhances the effectiveness of training secondary school teachers for inclusion in Ethiopian universities. A pragmatic framework permits the researcher to employ a multitude of empirical research tools to best answer the research questions stated above.

1.9.2. Research Approach

A research approach is a strategy for conducting research that includes both general hypotheses and specific techniques for gathering, analysing, and interpreting data (Creswell, 2014). In line with a pragmatist paradigm, the current study adheres to a mixed-method research approach, which involves collecting, analysing, and mixing both quantitative and qualitative research and methods in a single study (Tashakkori & Creswell, 2007). Its central premise is that the use of quantitative and qualitative approaches in combination, in doing so providing a better understanding of the research problem than either approach alone (Creswell & Plano Clark, 2011). Further to this, mixed-method research refers to an approach to research that combines quantitative and qualitative strategies within one study, collecting both text and numeric data concurrently or in sequence, and selecting variables and units of analysis that are most appropriate for addressing the purpose of the study and finding answers to the research questions by utilising the strengths of each (Creswell, 2012). The rationale behind using a mixed research approach in this study was that one research approach might not be sufficient to understanding how teachers are trained for inclusion in Ethiopian universities and how effective the training is in supporting the teachers to develop the core competencies necessary for successful inclusion. As a result, the data collected through a questionnaire as a quantitative approach was justified by the data collected through the semi-structured interview as a qualitative approach, so as to better conceptualise the research problem under scrutiny.

1.9.3. Research Design

Research design refers to how a research idea is transformed into a research plan that can then be carried out in practice by a researcher (McMillan & Schumacher, 2010). The study employed a mixed-methods research approach with the particular application of a sequential explanatory design. It is a type of mixed-methods research design known for collecting and analysing first quantitative and then qualitative data in two consecutive phases within one study (Creswell & Plano Clark, 2011). According to this design, a researcher first collected and analysed the quantitative (numeric) data. The qualitative (text) data was gathered and examined second in the sequence, and it provided further context for or explanation of the first phase's quantitative findings. In this way, the quantitative data and the analysis that followed gave a broad overview of the study problem, while the qualitative data and analysis that followed clarified and explained those statistical findings by delving deeper into the perspectives of the participants (Creswell, 2014). The rationale behind choosing this design was to obtain a general understanding of trainee teachers' sense of preparedness to successfully implement inclusion by using questionnaires first. Then, their experiences during the training and the components that contributed to their preparedness as well as gaps observed were explored in more depth using the semi-structured individual interview to explain the quantitative results.

1.9.4. Population, Sample, and Sampling Procedures

To best attain the major objectives and achieve the best results, the researcher considered a rationale for identifying the appropriate population, sample, and sampling procedures for the study. A population is a group of individuals who possess one characteristic that distinguishes them from other groups (Creswell, 2012). The population is, therefore, the group of individuals who are the focus of the study and to whom the research results would be generalised. All student teachers who attended and completed the PGDT programme at one specifically chosen university in Eastern Ethiopia comprised the population for this study. A sample refers to a group of participants in a study selected from the target population from which the researcher generalizes to the target population (Kothari, 2004). The researcher selected one university running a PGDT programme purposefully as a research site based on his personal experience, and 152 graduates (109 males and 43 females) were selected from the total of 232 trainee teachers using a simple random sampling technique for the first phase of the study. Seven other

graduates (three females and four males) were also selected purposively to participate in the second phase of the study since the study is guided by a sequential explanatory mixed methods research design.

1.9.5. Data Collection Methods

The sequential explanatory mixed methods design collected data from two separate and sequential research phases. The first phase of the study collected quantitative data from the participants using a questionnaire developed from extant literature to answer the research questions stated above. The self-administered questionnaire was employed to solicit the necessary quantitative data concerning the effectiveness of secondary school teachers' preparation for inclusion in Ethiopian universities. The questionnaire is a popular and practical tool for gathering numerical data, and it is relatively simple to assess (Creswell, 2012). In order to explain the quantitative findings, the second stage of the study involved gathering qualitative information from the seven respondents who had been carefully chosen. A face-to-face interview is a data collection process in which the researcher asks questions and records answers from only one participant in the study at a time (Creswell & Plano Clark, 2011). The semi-structured nature of the interview afforded flexibility to explore trends, unexpected results, as well as significant findings that were raised during the first phase of data analysis. The interview guide was adapted to include questions that explain the findings of the questionnaire in the first phase of the study.

1.9.6. Data Analysis Method

After the collection, the data has to be processed, analysed, and interpreted carefully to answer the research questions stated (Kothari, 2004). For this study, data processing and analysis included two phases, viz.: quantitative analysis in the first phase and qualitative analysis in the second phase. In the first phase, quantitative data collected using questionnaires was exported to the Statistical Package for Social Sciences (SPSS) version 26, where basic descriptive and inferential statistical analyses were undertaken and a demographic profile was compiled. This allowed the researcher to summarise and display all research results in an easy-to-read format. Thereafter, frequency, percentage, means, standard deviations, and multiple regression analysis were used to report the findings. In the second phase, qualitative data collected through an in-depth, semi-structured face-to-face interview was analysed separately using procedures for theme development in a way that aligns with the research questions of the study. This made it

possible for the researcher to make sense of a tonne of data and to keep the analysis's attention on responding to the research questions in a way that explains the results of the study's first phase. The qualitative data provide a greater grasp of the research problem than just the quantitative result, according to the study design, which integrates the separate analyses of quantitative and qualitative data into the discussion part (Creswell & Plano Clark, 2011). This helped the researcher to propose a model (an alternative strategy) that can enhance the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia and to forward recommendations and suggestions for future study.

1.10. Ensuring Validity, Reliability and Trustworthiness of the Study

According to Creswell (2014), mixed-methods research allows for a more comprehensive understanding of the phenomenon being studied than is feasible with a single methodological technique. It also increases the validity, dependability, and trustworthiness of theoretical claims. The appropriateness, significance, and utility of the inferences a researcher draws are referred to as validity. It is the extent to which data and theory support how test results are interpreted in light of suggested test uses (Cohen et al., 2007). By using cautious sampling, the right instruments, and the right statistical processing of the data gathered, the validity of the questionnaire in the study's initial phase was increased. Beyond this, the content validity of the items in the questionnaire, as well as the face validity of the questionnaire, was addressed by the supervisor of the study. Reliability in quantitative research is representative of dependability, consistency, and replicability over time, across instruments, and across groups of respondents. Reliability refers to the extent to which research results are consistent over various forms of the same research instrument or occasions of data collection (Creswell, 2012). In this study, the reliability of the instrument (questionnaires) for the first phase was checked and enhanced through a measure of consistency (test-retest) over time and across similar groups during the pilot study. Finally, the necessary modifications were made before the questionnaire was presented to the main sample of the study.

Trustworthiness is a method of ensuring rigour in the second phase of qualitative data collection and analysis without sacrificing relevance in the study (Creswell, 2012). In qualitative research, trustworthiness can be established by ensuring credibility, transferability, dependability, and

conformability of the study's findings (Creswell, 2014). The second phase of the study used all these techniques to ensure trustworthiness. Face-to-face, semi-structured interviews were used to gather in-depth and sufficient information from the participants, as well as spending a considerable amount of time with them, in order to assure the study's credibility. To meet the criterion of transferability in the current study, the researcher provided a detailed description of the population, sample, sampling procedures, and methods that applied to the second phase of the study. In an attempt to achieve dependability in the current study, data and method triangulation were used. Conformability refers to the extent to which the findings are free from bias (Cohen et al., 2007). To reduce bias in the second phase of the study, the researcher recorded personal field notes about his attitudes, feelings, and reactions during the face-to-face semi-structured individual interview. The meaning of body language, non-verbal communication, feelings, and emotions of the participant were also taken into consideration.

1.11. Ethical Considerations

Research ethics involves the application of fundamental ethical principles to a variety of topics involving scientific research concerned with right and wrong, good and bad, as well as procedural issues to be considered in doing research (Creswell, 2012). Conducting research would not be possible without the help and cooperation of those directly or indirectly involved. If researchers expect others to help them, they should treat them with honesty and respect (Cohen et al., 2007). In this study, ethical clearance, confidentiality, anonymity, informed consent, and honesty as a principle of research ethics were considered necessary in order to conduct the research in the best interest of the participants.

Permission: In order to do research in the target community, one must first obtain authorization (Cohen et al., 2007). The Ethiopian Ministry of Education (EMoE), the chosen university offering a PGDT programme, and trainee teachers (graduates) who participated in the study all gave their consent to the study after first obtaining ethical clearance from the University of South Africa (UNISA).

Confidentiality: Researchers ought to respect the right to confidentiality of the research participants (Cohen et al., 2007). In this study, the participants were assured that the information

they provided would not be made available to anyone, and they were not required to write their names on the questionnaire.

Anonymity: refers to the principle that any information provided by participants should in no way reveal their identity (Cohen et al., 2007). In this study, the anonymity of the participants was assured by not using their names or any other means of personal identification. Research participants were identified by serial numbers rather than by names. In addition, group data rather than individual responses were used for analysis.

Informed consent: According to Cohen et al. (2007), informed consent is a technique in which subjects decide whether to participate in a specific study after being given information that might affect their choice. Participants in this study had the option of participating or not; they were also advised that if they chose to participate, they had the right to leave the study at any time after being informed of its goals and significance.

Honesty: in this study, under no circumstances is the researcher fabricating data or information to support a particular conclusion. Further, the researcher fully acknowledges any use of ideas or words of any participants (Creswell, 2012).

1.12. Delimitation of the Study

This study investigates the effectiveness of secondary school teachers' preparation for inclusion in one purposefully selected university running a PGDT programme since 2011 and located in the eastern part of Ethiopia, 512km from the capital Addis Ababa. The reason why the study limited itself to secondary school teachers' preparation is that the researcher has been directly involved in the training and supervision of trainee teachers attending the PGDT programme in particular and has a better understanding of the settings of the eastern Ethiopian communities in general. The study focused on three major issues, namely: (1) how secondary school teachers are prepared for inclusion, which was addressed by framing components that illustrate the training of teachers for inclusion in Ethiopian universities. These include the facilities and services of the programme, the status of the programme, the modality of the programme, the programme structure and curriculum, the integration of inclusive education learning areas in the programme, the teacher education programme pedagogies, the university and school partnership

(collaboration), the qualification requirements of the programme, the competence standard of the programme, and the induction programme; (2) how supportive is the training in developing the core competencies (knowledge, attitude, and practical skills and abilities) necessary to implement inclusive inclusion in the Ethiopian secondary school context; and (3) what a model or alternative strategy would be put in place to enhance its effectiveness, underpinned by the theoretical framework of inclusive pedagogy and guided by a mixed methods research design.

1.13. Definitions of Key Terms

A definition of key terms is provided in this study so as to avoid any ambiguities that may result from their use elsewhere. As a result, the following key terms and concepts are given operational definitions.

1.13.1. Effectiveness

Different metrics, such as student results, attitude change, knowledge and skill growth, teachers' worries, or teachers' self-efficacy, could be used to evaluate the success of teachers' inclusion training (Lancaster & Bain, 2010; Kurniawati et al., 2014; Browder et al., 2012). In this study, the effectiveness of teachers' preparation for inclusion was examined in terms of how teachers are trained for inclusion, with the question of how well the training assists trainee teachers in developing the core competencies (knowledge, attitudes, and practical skills) required to successfully implement inclusion in education being addressed by framing elements that illustrate the preparation of secondary school teachers for inclusive teaching in Ethiopia.

1.13.2. Inclusion

According to Corps et al. (2012), inclusive education is a process of enhancing involvement and lowering exclusion in a way that successfully addresses the various needs of all children. With a shared vision that includes all children of the proper age range and a conviction that it is the duty of the regular system to educate all children, it encompasses changes and adaptations in content, techniques, structures, and strategies (UNESCO, 2018). In this study, inclusion refers to the provision of services for all learners in an inclusive classroom, regardless of their socioeconomic status, gender, ethnicity, language, disability, or other factors.

1.13.3. Inclusivity

The term inclusivity is much broader and reflects a major shift in the beliefs and practices of educational communities regarding the provision of services for all students. It is not just for students with disabilities, but also for all students, educators, parents, families, and community members (Foreman, 2008). Inclusivity refers to an attitude or belief system embedded in policies, practices, and processes that needs to be nurtured in every educational setting. Inclusivity embraces the challenge of providing the best possible learning environment for all children (Forlin et al., 2015). In this study, inclusivity encompasses the idea that it is incumbent on all schools to provide optimal learning environments for all their learners, regardless of their social, cultural, or ethnic background, or their ability or disability in Ethiopian secondary schools.

1.13.4. Inclusive Education

According to UNESCO (2018), inclusive education is a process that entails changing schools and other learning environments to accommodate all children and offer learning opportunities for all children, adolescents, and adults. According to this study, inclusive education refers to a teaching method in which all reasonable accommodations are made in order to give every kid the chance to participate more actively and so improve their learning (Ainscow et al., 2019).

1.13.5. Inclusive Pedagogy

According to Florian and Walton (2017), inclusive pedagogy is a method that attempts to make learning as inviting and accessible to all students as possible. According to Florian and Black-Hawkins (2011), inclusive pedagogy is based on a change in pedagogical thinking from one that involves offering rich learning opportunities that are sufficiently made available for everyone so that all learners can participate in an inclusive classroom life to one that involves providing rich learning opportunities that are sufficiently made available for everyone. Belonging is fundamental to the idea of inclusive pedagogy (Florian, 2014), which encourages student participation and learning in the setting of Ethiopian secondary schools by preparing qualified graduates for inclusive teaching (EMoE, 2012b).

1.13.6. Inclusive Schools

Inclusive schools are ordinary (regular) schools in Ethiopia that are open to all learners regardless of their poverty, gender, language, disability, physical, intellectual, or emotional conditions (EMoE, 2006). Inclusive schools are supposed to be suitable for all learners by creating a welcoming and accessible environment in which children learn the major tenet of inclusive education (UNESCO, 2009). Regular schools with inclusive 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 cost-effectiveness of the entire education system (World Bank, 2013).

1.13.7. Initial Teacher Education

Initial teacher education refers to the completed training of teachers before entering any formal teaching service (EMoE, 2011; World Bank, 2013). In this study, it refers to the provision of adequate knowledge, abilities, skills, and professional qualities at pre-service levels so that the graduates will be able to provide quality education for all children in the Ethiopian secondary school context.

1.13.8. Secondary Education

Secondary education in Ethiopia is designed to prepare students for a range of future education (university and college), training, and career options and also links primary education with tertiary education (EMoE, 2009a). It covers four years (grades 9–12) and admits students aged 15–18, which leads to the Ethiopian Higher Education Entrance Examination, usually given in the July month of the final year (grade 12). The students take the exams in seven subjects, of which four are compulsory for both the natural and social sciences, namely, civics, English, general academic aptitude, and mathematics. In addition, students take exams in three subjects from a track (subject cluster). They can choose one of the following tracks: a natural science track with subjects like biology, chemistry, and physics; or a social science track with subjects like economics, geography, and history (EMoE, 2017b).

1.13.9. Secondary School Teachers

Secondary school teachers are also known as high school teachers in Ethiopia and teach students in grades 9–12 with the aim of educating and helping them develop skills that are necessary for college, university, or the job market (EMoE, 2009a). As a result, they are expected to understand the nature of the teaching profession and their responsibilities as teachers, as well as the professional values and ethical practices expected of them to become effective secondary school teachers (EMoE, 2011).

1.13.10. Teachers' Preparation for Inclusion

The training that provides aspiring teachers with the positive attitudes, useful skills, knowledge, beliefs, and values that support addressing learner diversity in an inclusive school is known as teachers' preparation for inclusion (Omede & Momoh, 2016). The process of preparing student teachers in a university to give them the skills essential to support all students in inclusive secondary schools, regardless of their particular differences, is referred to in this study as secondary school teachers' preparation for inclusion.

1.13.11. Trainee Teachers

Trainee teachers are candidates for the teaching profession who are attending a teacher education programme at a university for a specific period of time and are then certified to become secondary school teachers after the completion of the training (EMoE, 2009b).

1.14. Organization of the Thesis

The thesis is presented in nine chapters. These are:

Chapter One presents the problem and its settings including the background, statement of the problem, research questions and objectives, rationale and significance, theoretical framework, research design and methodology, ethical considerations, and definitions of key terms.

Chapter Two addresses the theoretical framework guiding the study including inclusive pedagogy, Vygotsky's sociocultural theory of learning, and Hart's notion of learning without limits.

Chapter Three covers a review of international literature related to teachers' preparation for inclusion.

Chapter Four presents a review of Ethiopian literature related to teachers' preparation for inclusion.

Chapter Five describes the research methodology and design adopted for the study.

Chapter Six presents the quantitative findings of the study.

Chapter Seven presents the qualitative findings of the study.

Chapter Eight presents the discussion of the study by merging the quantitative and qualitative findings.

Chapter Nine presents the summary, conclusions, and recommendations of the study.

1.15. Summary of the Chapter

This chapter presented the problem and its setting, focusing on the background to the study, the statement of the problem, research questions, objectives of the study, motivation for the study, the significance of the study, an overview of the theoretical framework for the study, research methodology and design, validity, reliability, and trustworthiness of the study, ethical consideration, the definition of key terms, and the organisation of the thesis. The next chapter presents the theoretical framework that underpins the study.

CHAPTER TWO: THEORETICAL FRAMEWORK

2.1. Introduction

The theory underpinning the investigation is presented in this chapter. According to Osanloo and Grant (2016), a theoretical framework is a logically established and interconnected group of concepts and premises that a researcher develops to support a study. According to Merriam and Tisdell (2016), a theoretical framework places a research study into the context of the discipline in which the researcher is engaged. It enables the researcher to theorise his or her work, establish clear assumptions about the outside world, and draw significant parallels between the current study and previously developed ideas. In order to better understand how teachers are trained for inclusion in higher education institutions around the world, the study is supported by inclusive pedagogy, a theory and instructional strategy. In addition, Vygotsky's sociocultural theory of human learning and Hart's notion of learning without limits were addressed as theories influencing the application of inclusive pedagogy in the training of teachers for inclusion.

2.2. Understanding Inclusive Pedagogy and Its Origin

The debate about the effectiveness of the segregated special education system and related studies in the 1990s led to the creation of inclusive education (Allan, 2014; Slee, 2011). Since then, questions related to civil rights have been firmly highlighted about segregated schooling, the overrepresentation of children from minority groups in special education programmes, and the stigma of labelling (Sharma et al., 2013). Accordingly, new definitions of inclusive education have been developed, and significant resources have been used to make schools more inclusive, but with mixed results (Symeonidou, 2017). These new policies and practises aim to raise standards and promote the inclusion of all students in the culture, curriculum, and community of mainstream schools.

In this regard, Slee (2013) and Deppeler et al. (2015) show that efforts to increase standards while also advancing towards greater educational inclusion have been questioned as being incompatible policy goals, and many schools find it difficult to resolve the conflicts between excellence and equity in education. Additionally, there is disconnection between these policies' rhetoric and the practises in schools, which frequently remain essentially intact and support

segregation (Florian, 2014). On the other hand, some institutions have succeeded in being both diverse and academically successful. In addition to having teachers whose pedagogical methods are founded on the idea that all children can learn and embrace the duty of educating all of the students in their courses, these schools also have pro-inclusion policies (Black-Hawkins & Florian, 2012; Jordan, 2007; Hart et al., 2004). The contested nature of inclusive education, the resulting variability in practises, and the knowledge that inclusion and standards are not mutually exclusive but rather mutually beneficial have guided the theoretical rationale for the development of an alternative inclusive pedagogical approach (Florian, 2014; Andreasson et al., 2013; Forlin et al., 2013).

Haug (2017), Slee (2019), and Gutierrez-Rodriguez (2019) have also suggested the need for a new set of ideas and institutional regularities to ensure a deep and systemic change in educational systems. In addition, Rose et al. (2014), Slee (2013), Black-Hawkins (2017), and Florian (2019) suggest that all educational contexts ought to be more attentive to children with a varied range of abilities, cultures, genders, religions, and other situations that arise in the classroom to be more inclusive and avoid the perpetuation of segregation. Similarly, since the United Nations Summits (2015), through Agenda 2030, one of the goals to be achieved worldwide is equitable education for all people (goal 4). Further, Florian (2014), Walton and Ruznyak (2019), and Mukelabai et al. (2020) proposed that the way in which teachers are affected by the culture of the school, by the pedagogical approaches that they take, and by the responses that they make when students encounter difficulties in learning, ought to be noticed and examined.

To do so, one critical and key area in which schools must respond is pedagogy (Mukelabai et al., 2020). Pedagogy is concerned with how teachers teach and how learners learn, and it is an essential component of any effective inclusive approach to teaching (Florian, 2015). Similarly, Katz (2013) and Loreman (2017) note that we have no functional system of education without effective pedagogy, and we have no basis for meaningful inclusion without deliberate and effective inclusive pedagogy. In support of this, Florian and Linklater (2010) reason that the desire to improve inclusive practices has no value until pedagogy offers learning opportunities

that allow all students to participate in an inclusive classroom. This implies that the effective implementation of inclusive education needs a careful and complex pedagogic design that deals with what teachers do, and how and why to respond to learners' differences to avoid the exclusion of some children in inclusive classrooms (Robinson, 2017).

In response, pedagogy focused on meeting the needs of all learners, minimising or eliminating the singling out of individuals for special education, and raising the attainment of the lowest-achieving groups has emerged based on Alexander's (2004) socio-cultural notion of pedagogy (Loreman, 2017). For Alexander (2004), pedagogy refers to what one needs to know and the skills one needs to command to make and justify the many kinds of decisions on which teaching is constituted. This decision-making is shaped not only by the professional knowledge and skills of teachers and the actions that they take, but also by the values and beliefs that they hold about children and the nature of teaching and learning, as well as wider social processes and influences (Florian, 2009). This view leads us to conceptualise inclusive pedagogy as a theoretical lens through which judgements about the processes and activities associated with inclusive practices can be made (Florian & Black-Hawkins, 2011).

The issue of inclusive pedagogy extends beyond learners with disabilities to include all learners who may be at risk of exclusion or marginalisation (Watkins & Donnelly, 2014). In this sense, the debate around specialist knowledge is outdated by the shift in focus away from inclusive education as concerned primarily with special educational needs and disability and towards situating inclusive practices in a broader framework concerning diverse learners and encompassing issues of cultural responsiveness (Sheehy et al., 2009). As Alexander (2004) has argued, pedagogy is multifaceted, involving many decisions that constitute teaching, including the individual characteristics, development, and upbringing of children; learning that takes place outside school; and children's previous knowledge, experiences, and interests. Such a view demands a broad and multi-faceted view of learning, which is in harmony with the socio-cultural perspective of human learning (Mukelabai et al., 2020).

According to the sociocultural view, individuals learn and change through their contacts with other people, and they in turn become capable of changing what is understood and valued in the

other social and cultural settings where they participate (Florian & Kershner, 2009). This view offers an interactive way of thinking about human learning, rather than something that develops according to a biologically determined sequence (Slee, 2019). In this sense, learning is the result of a dynamic process of social interaction that occurs over time and within specific contexts. This implies the starting point of inclusive pedagogy, which offers a way of thinking about how to understand and respond to the complexities inherent in teaching diverse groups of students (Florian & Linklater, 2010). Consequently, if learning is to occur in an interactive cultural and historic context, teachers are expected to consider how the decisions they make affect pupils' learning experiences, including taking the necessary actions to allow everybody to learn, avoiding labeling learners according to their capacities, as well as the idea that some will hinder the progress of others (Black-Hawkins, 2017; Morina & Orozco, 2019). This constitutes one of the founding principles of inclusive pedagogy.

Another viewpoint that aided the development of inclusive pedagogy stemmed from the recognition of inclusive education itself. One of the main concepts of inclusion is to broaden the scope of regular schools so that they can accommodate a greater diversity of children (Slee, 2011; Mittler, 2012). Extending what is generally available to learners necessitates a shift in thinking that replaces certain long-held assumptions about learning and learners, such as the assumption that ability is fixed, with the concept that all children's capacity to learn can change and be transformed for the better, as a result of what happens in the future and what people do in the present (Hart et al., 2004; Norwich, 2008). However, this does not necessarily require the identification of certain types or groups of learners to improve learning and plan to teach, while there may be other reasons for doing so (Florian & McLaughlin, 2008). This indicates that inclusive education does not place stock in denying individual differences, but rather, in accommodating them within the structures and processes available to all learners (Florian, 2014). Consequently, by including a response to the difference in the usual activity of the class, the problem of marginalisation that can emerge when certain children are treated differently is avoided (Hockings, 2011).

As previously noted, the inclusive practitioner's duty is not to argue the need to accommodate learner diversity by providing something different from or additional to, but rather to challenge

complacency about what is ordinarily or routinely accessible (Florian, 2012). This implies that expanding what is generally available minimises the need to give help that differs from or adds to what is ordinarily accessible. This idea is comparable to the architectural concept of inclusive pedagogy, which focuses on preventing the creation of physical and other environmental barriers in the first place, rather than anticipating solutions that would increase access for everyone (Florian & Rouse, 2009). As an alternative, inclusive pedagogy addresses the issue of exclusion by proactively avoiding the problems associated with labelling some students as different (Florian, 2015; Hitch et al., 2015). Thus, inclusive pedagogy begins with the notion that all learners are different, and that human diversity should not be neglected or disregarded, urging teachers to address these differences for all learners (Kift, 2009).

In this sense, the ultimate goal of inclusive pedagogy is to contribute towards an understanding of everyday classroom practices that recognise and respond to the individual differences of all learners, but does not marginalise or stigmatise some because of their particular needs. Inclusive pedagogy focuses on extending what is ordinarily available as part of the routine of classroom life and responding to differences between learners rather than specifically individualising for some. It represents a shift in thinking about teaching and learning from that which works for most learners to one that works for all (Florian, 2010; Florian & Black-Hawkins, 2011). This implies that inclusive pedagogy supports inclusive practices that reveal a shift in thinking from ideas of most and some learners, to everyone. Further, the rejection of the ability group as a deterministic construct of fixed ability that has historically underpinned the structure of education is a central tenet of inclusive pedagogy (Florian & Spratt, 2013). Thus, inclusive pedagogy is mainly directed at challenging practices that represent provision for most, with additional or different experiences for some, because focusing on difference exacerbates children's isolation and marginalisation and contributes to the social construction of disability (Gujónsdóttir & Karlsdóttir, 2012).

Further, inclusive pedagogy is a philosophical view that shifts the deficit model perspective to a more sophisticated understanding of diversity, incorporating an approach to teaching and learning in which teachers respond to learners' differences to avoid excluding certain students (Morina, 2020). In support of this, Florian (2015b) and Hitch et al. (2015) state that the basic

assumptions behind the notion of inclusive pedagogy involve the recognition that every learner is different, that learning must be improved for all students, and that everyone can learn when the conditions are suitable. Furthermore, Kershner (2009) and Florian and Black-Hawkins (2011) articulated that inclusive pedagogy is underpinned by a shift in pedagogical thinking from an approach that works for most learners, existing alongside something additional or different for those (some) who experience difficulties, towards one that involves providing rich learning opportunities that are sufficiently made available for everyone, such that all learners can participate fully in classroom life.

The notion of inclusive pedagogy embraces a view of individual difference as a source of diversity that can enrich the lives and learning of others (Tuitt et al., 2016). This, in turn, urges teachers to view their students as whole human beings consisting of mind, body, and soul (Thomas & May, 2010); create an interactive and dynamic classroom environment that inspires deep and meaningful transformational learning (Hockings, 2010); and draw upon their context-independent knowledge and engage with ideas within the multidimensional realities of their classrooms and schools (Hitch et al., 2015). The implications are relevant not only for teachers, but also for those who prepare teachers to work in inclusive schools as well as educational researchers in the fields of inclusive and teacher education (Morina, 2020).

Similarly, Black-Hawkins (2017) argues that the notion of inclusive pedagogy focuses on extending what is ordinarily available for everybody in the rich learning community of the classroom rather than offering those who experience difficulties in learning something additional to, or different from, the provision for most children. This means that inclusive pedagogy is an approach that aims to make learning as accessible and welcoming to all students as much as possible. In support of this, Makoelle (2020) views the concept of inclusive pedagogy as a pedagogical approach intended to promote a culture of accommodating all and ensuring practice that is based on the use of diverse teaching strategies—connecting learners with their own learning first and then connecting their learning to the curriculum. It is also assumed that inclusive pedagogy encompasses beliefs and conceptions about what constitutes inclusive teaching and learning, which requires an inclusive mindset and the celebration of differences

(Florian & Kershner, 2009). Therefore, this is what all classroom teachers are expected to do to increase the learning and participation of all children (Rix & Sheehy, 2014).

Moreover, Nind et al. (2016) propose that inclusive pedagogy is about opening up and involving everyone in learning, marked by the coming together of the teacher and learner. As a pedagogical lens, it helps the shift from deficit to asset perspectives and positions teachers as knowledge producers, rather than as targets of criticism (Specht, 2016). In addition, Florian and Black-Hawkins (2011) view inclusive pedagogy as educational practices that respect and respond to human differences in ways that include learners in what is ordinarily available. This happens through the development of a rich learning community characterised by learning opportunities that are made sufficiently available to everyone. Ruznyak and Walton (2017) also view inclusive pedagogy as the central piece of inclusive education. For them, it enables learning and achievement for all students and allows them to feel more engaged. Further, Makoelle (2014) views inclusive pedagogy as a totality of teaching methods, approaches, forms, and principles that enhance learner participation, and hence, teaching inclusively is central to the notion of inclusive pedagogy (Massouti, 2019; Dewa, 2020).

To summarise, the notion of inclusive pedagogy has emanated from the following three important issues and assumptions underpinning the educational practices of the day. These assumptions require a fundamental shift in teachers' pedagogical thinking and also require special attention, while preparing teachers for inclusion to advance the implementation of inclusive education (Florian & Black-Hawkins, 2011; Black-Hawkins & Florian, 2012; Florian & Spratt, 2013).

(1) Shifting the focus from one that is concerned with only those individuals who have been identified as having additional needs to one that is concerned with the learning of all children in the community of the classroom includes creating learning opportunities that are sufficiently made available for everyone so that all learners can participate in classroom life; extending what is ordinarily available for all learners – creating a rich learning community – rather than using teaching and learning strategies that are suitable for most alongside something 'additional' or 'different' for some who experience difficulties; and focusing on what is to be taught (and how)

rather than who is to learn it, which is alternatively expressed as a dilemma of difference or the idea of everybody (not most and some).

In support of this, it has been argued that when children experience difficulty in learning, it is unhelpful to do nothing. However, very often the help provided inadvertently exacerbates the problem by marking the child as different (Florian, 2010). Instead of providing something alternative or additional for children who experience difficulties in their learning, inclusive pedagogy seeks to extend what is ordinarily available to everybody (Florian & Black-Hawkins, 2011). Similarly, Engelbrecht and Green (2017) posit that pedagogy for inclusive education accommodates all learners by extending what is generally available in classroom activities and contesting practices that represent provision for most with additional or different experiences for some that intensify the isolation and marginalisation of children (Spratt & Florian, 2014); and hence, this constitutes one of the guiding principles of inclusive pedagogy.

(2) Rejecting deterministic beliefs about fixed ability and the associated notion that the presence of some will impede the progress of others. This includes believing that *all* children will make progress, learn, and achieve; focusing teaching and learning on what children can do rather than what they cannot do; using a variety of grouping strategies to support everyone's learning rather than relying on ability grouping to separate 'able' from 'less able' students; and using formative assessment to support learning, which is alternatively expressed as bell-curve thinking or the capacity to learn.

The issues of quality and equity in schooling have been associated with beliefs about some children's (limited) ability and potential for life (Florian & Rouse, 2009). In this regard, Fendler and Muzaffar (2008) have argued that the naturalisation of the bell curve as a structural feature of schooling is inherently unjust. The bell-curve way of thinking is an exclusionary practice that identifies individual challenges in learning as deficits within certain learners (Dewa, 2020). Hence, the need for an alternative approach that reveals otherwise proves necessary. Inclusive pedagogy rejects the notions that children have fixed abilities, that a child's current learning can be used to predict future potential, and that intelligence can be defined in terms of tests based on logical, mathematical, and reasoning skills (Spratt & Florian, 2014). Instead, inclusive pedagogy

holds that every child's capacity to learn is changeable (transformable); what teachers choose to do (or not to do) in the present can alter a child's learning capacity for the future; and nothing is neutral (Florian & Black-Hawkins, 2011). Thus, the limitations of bell-curve thinking led to the development of inclusive pedagogy.

(3) Seeing difficulties in learning as a professional challenge for teachers rather than as a deficit in learners encourages the development of new ways of working. This includes seeking and trying out new ways of working to support the learning of all children; working with and through other adults that respect the dignity of learners as full members of the community of the classroom; and continuing professional development as a way of developing more inclusive practices with commitment, which is alternatively expressed as becoming an active professional.

In this regard, Slee (2018) and Florian (2015) proposed that inclusion pedagogy starts with the assumption that classroom teachers ought to consider difference as a central concept of human development. This is because pedagogy that is inclusive of all learners is based on principles of teaching and learning that reject deficit views of difference and deterministic beliefs about ability, but see individual differences as part of the human condition. In addition, Florian (2014) stated that learners who encounter difficulties in learning may require teachers to seek specialist support and advice. However, in so doing, the teacher is not expected to relinquish his or her responsibility for others. Rather than sending the student to the specialist, the specialist is called upon to support the teacher in enabling the student to have a meaningful learning experience in the context of the classroom community. Further, Klibthong (2018) has argued that viewing difficulties in learning as a problem for teachers to solve, rather than problems within learners, proves helpful. Such a view discourages teachers from seeing themselves as unprepared or unqualified to teach children who are identified as having special or additional needs.

As Florian (2012) has argued, the above view will lead us to an understanding of inclusive pedagogy as a fundamental shift in teachers' pedagogical thinking, away from a traditional or individualised approach to learner diversity that starts by making provision for most learners, and then offers something additional or different for certain learners identified as having particular needs, and towards a pedagogical approach that starts with the learning of all. That is, in the

inclusive pedagogical approach, teachers focus on how to make rich learning opportunities available for everyone, so that all learners can participate in the community of the classroom and work with their colleagues in ways that address the demands that different subjects, topics, or tasks make on different learners. Thus, the third idea involves a focus on collaborative ways of working with and through others using the ideas of learning, pedagogy, and inclusion, which is one of the guiding principles of inclusive pedagogy (Florian & Pantic, 2017; Black-Hawkins, 2017).

To conclude, a shift in focus from one that is concerned with only those individuals who have been identified as having additional needs to learning for all; the rejection of deterministic beliefs about ability; and ways of working with and through other adults that respect the dignity of learners as full members of a classroom community, are views from which inclusive pedagogy originates. Inclusive pedagogy is a pedagogical response to individual differences between pupils that avoids the marginalisation that can occur with differentiation strategies that are designed only with individual needs in mind (Black-Hawkins & Florian, 2012). These problems include the repetition of exclusion, where learners are included in the classroom, but excluded from opportunities to participate in collaborative or group activities, because the work they are given is differentiated to such an extent that they are ultimately isolated from the classroom community, even though they may be physically present (Florian & Black-Hawkins, 2015; Florian, 2014). Thus, inclusive pedagogy was developed in response to questions about how individual pupils can receive the additional support or help they need without being treated differently from others. These notions are the architectural concepts of inclusive pedagogy that focus on not creating physical and other environmental barriers in the first place, but rather, anticipating solutions that will improve access for everyone. This implies that inclusive pedagogy is defined not in the choice of strategy, but in its use (Florian et al., 2017; Florian & Beaton, 2018).

2.3. Theories Influenced the Development of Inclusive Pedagogy

As stated in Chapter 1 of the study, teachers are key players in transforming schools and implementing inclusive practices so that every learner can benefit from inclusive education. For teachers to lead the reform of inclusion, an effective teacher education programme needs to be

offered that supports teachers to better understand and practice inclusive pedagogy (Spratt & Florian, 2015; Florian, 2014; Rose et al., 2014). The concept of inclusive pedagogy advocates an approach in which the teacher provides a variety of options that are available to all children (Spratt & Florian, 2013); encouraging the full participation of all children in the classroom community by extending what is normally viewed as the scope of the regular school to a greater intellectual engagement, connectedness, and trust (Bhowmik et al., 2013).

Inclusive pedagogy focuses on improving the quality of inclusive education and the role that schools can play in reducing inequality in attainment outcomes by reducing variability in practice. In support of this idea, Florian (2015a) states that the starting point for inclusive pedagogy is the acknowledgment of inclusive education. Given the degree of diversity that exists in inclusive schools today, teacher educators ought to make trainee teachers explicitly aware that individual difference is an ordinary aspect of human development, as the underlining principle of inclusive pedagogy (Florian, 2017). Accordingly, inclusive pedagogy as a theoretical framework underpinning this study is influenced by the notion of learning without limits (Hart et al., 2004) and Vygotsky's sociocultural theory of human learning (Vygotsky, 1978, 1981). The following discussion focuses on how the concept of learning without boundaries and the sociocultural theory of human learning influenced the development of inclusive pedagogy.

2.3.1. Vygotsky Sociocultural Theory of Human Learning and Inclusive Pedagogy

As stated somewhere above, to conceptualise inclusive pedagogy, Alexander (2004) argues for a broad definition of pedagogy and pedagogic discourse, which states that pedagogy is what one needs to know and the skills one needs to command to make and justify the many different kinds of decisions of which teaching is constituted, as well as a discourse that informs and justifies the act of teaching and the learning to which that teaching is directed. He further argues that this decision-making is shaped not only by the professional knowledge and skills of teachers and the actions that they take, but also by the values and beliefs that they hold about children and the nature of teaching and learning, as well as wider social processes and influences. The above definition suggests that the call for inclusive pedagogy is influenced by the sociocultural theory of human learning in how pedagogy connects with culture, language, social structure, and human agency (Florian, 2015).

This study applies Vygotsky's sociocultural theory of human learning, which resonates with Alexander's broader notion of pedagogy and its discourses, to illuminate an understanding of the concept of preparing trainee teachers for the pedagogy of inclusion. In support of this, Mukelabai et al. (2020) observe that inclusive pedagogy reflects Vygotsky's sociocultural theory, the main tenet of which lies in the social interaction and relationship between teacher and student. Tomlinson (2004) points out that the teacher constitutes the professional in the classroom, an individual who has been suitably trained to mentor and lead her students, using appropriate techniques and assisting each to reach their potential within the learning context. This implies that teachers are legally and ethically bound to be the experts leading the child to full development by truly understanding the socio-cultural perspectives of learning as well as the theoretical, policy, and legislative issues of pedagogy for inclusive education (Pantic & Florian, 2015).

Furthermore, Kalpana (2014) argued that Vygotsky's Zone of Proximal Development (ZPD) has been shown in the research to be a valuable tool towards assisting students with successful problem-solving outcomes through student-to-student interaction and student-teacher interaction. Warford (2011) defined the zone of proximal teacher development (ZPTD) as the distance between what trainee teachers can do on their own without assistance and a proximal level they might attain through strategically mediated assistance from more capable others (teacher educators, supervisors, or school teachers). In this sense, trainee teachers invoke a readiness to learn and to teach what they learn by bringing a set of experiences and beliefs shaped by everyday concepts from their home and community to their teacher training programme. This means that Vygotsky's theory relates to learner readiness, and the ability to actively construct their knowledge and meaning from their experiences, by perceiving various things around them and making sense out of those objects in a particular learning situation (Malinen et al., 2012).

Additionally, Williams and Chinn (2009) argued that learning is adaptive, because it integrates new knowledge with existing knowledge, and allows for the creation of innovative ideas or works; it involves more exploration and discovery through scaffolding learning at various stages of learning. Hence, the concept of the zone of proximal development is helpful for pre-service teachers to understand how learning takes place in social and cultural contexts through input

from others who are more skilled and experienced teachers (Cherry, 2019). Teachers acquire knowledge and skills about being an inclusive teacher with guidance through interaction and observing others who are more advanced, and they can expand this zone of proximal growth. In this way, initial teacher education programmes provide an opportunity to develop students' confidence in teaching in inclusive classrooms (Spratt & Florian, 2013).

At present, the need for building pedagogy of inclusion with well-defined characteristics is becoming more and more evident, and is also being promoted by individual researchers as a useful tool to explore the effectiveness of initial teacher education for inclusion (Mukelabai et al., 2020). Since Vygotsky's sociocultural theory of human learning focuses on the interaction of individuals within their social and cultural context, it has had a strong impact on the field of inclusive education in general and inclusive pedagogy in particular. Vygotsky advocated for inclusion based on positive differentiation, which is against segregation and mindless inclusion, and proposed that there is a need to create a very different learning environment, where all the staff could concentrate on the individual needs of the child (Sandir, 2014). He further argued that it is the pedagogical approach that ought to be changed, and not the school setting. Thus, a learner ought to be maintained within the mainstream social and cultural environment as a way of preventing or remediating the social construction of disability (Vygotsky, 1993).

Further to this, Vygotsky's sociocultural theory of human learning is supportive of the implementation of inclusive pedagogical approaches in the classroom (Hunter-Johnson et al., 2014). In this sense, the enactment of inclusive pedagogy is influenced by the socio-cultural context of the classroom, the role of social activity in learning, and the contribution of the learners to their development. In support of this, Rodina (2007) states that Vygotsky's theory supports the notion that learning is a form of social advancement that involves language, real-world situations, interaction, and collaboration among learners. To this end, isolating the child will affect the child's learning. Therefore, the child needs to interact with his or her peers in a regular class, which is one of the basic principles of inclusive pedagogy.

According to Dahms et al. (2007), Vygotsky's sociocultural theory of human learning stresses the importance of looking at each child as an individual who learns distinctively. Hence, it recognises that every child can learn. Consequently, the knowledge and skills considered worth

learning vary with each child, and so the teacher in an inclusive setup needs to focus on each learner's strengths rather than their weaknesses. The teacher also needs to recognise that instruction should be individualised to provide a positive educational experience (Dixon & Verenikina, 2007). As a result, classroom teachers should recognise that the holistic development of a child is a result of social learning that the child acquires through the internalisation of culture and social relationships.

Similarly, Kozulin (2012) has argued that contemporary educational practice is based on a paradigm shift from traditional pedagogies to modern progressive constructivist approaches that foster learning equity in the classroom. According to Vygotsky (1993), learning situations are facilitated by a go-between (mediator), who ensures that the learners understand the content at stake. In this sense, inclusive pedagogy foregrounds the social construction of knowledge through interactive teaching and learning activities in the classroom. Thus, inclusive pedagogy underpins the significance of knowledge as a product co-constructed by educators through meaningful interactions with learners (Mutekwe et al., 2013). The pioneer of this approach to human learning is Lev Vygotsky, who laid the foundation for what educators now claim to be formidable epistemologies (Wertsch, 2008). According to Mutekwe et al. (2013), the sociocultural theory of human learning has the advantage of affording virtually all learners in the classroom an opportunity to participate in interactive learning activities, since, as Vygotsky (1993) made it clear, it emphasises drawing from the learners' diverse sociocultural background.

To summarise, inclusive pedagogy is based on principles of teaching and learning that reject deficit views of difference and deterministic beliefs about ability, but see individual differences as part of the human condition that exists in the classroom, which enables the child to have a meaningful learning experience in the context of the classroom community. Such a view demands a broad and multi-faceted view of human learning, underpinned by Vygotsky's sociocultural theory (Florian & Rouse, 2009). In this regard, one of the main principles of the sociocultural theory of human learning is to take account of what happens in different contexts when people participate in activities, develop knowledge together, and contribute to the development of the cultural beliefs, practices, and artifacts that are valued in the immediate and wider contexts of social life (De Valenzuela, 2014). For this reason, it is important to develop a

context-relevant initial teacher education programme where teachers are equipped to work with students from culturally and linguistically diverse backgrounds (Symeonidou, 2017; Chhetri et al., 2020).

Individuals learn and change through their contacts with other people, and in turn, become capable of changing what is understood and valued in the other social and cultural settings in which they participate (Florian & Kershner, 2009). This is particularly important as socio-cultural theory offers a more interactive way of thinking about learners and learning than something that develops according to a biologically determined sequence. It has been argued that when learning is viewed as a result of a dynamic process of social interaction that occurs over time and within specific contexts, this leads to inclusive pedagogy, because it offers a way of thinking about how to understand and respond to the complexities inherent in teaching diverse groups of students. If learning occurs in an interactive cultural and historic context, then it is incumbent upon classroom teachers to consider how the decisions they make affect pupils' learning experiences, which is one of the guiding principles of inclusive pedagogy influenced by Vygotsky's sociocultural theory of human learning (Florian & Rouse, 2009; Florian & Kershner, 2009).

2.3.2. The Concept of Learning without Limit and Inclusive Pedagogy

The question of why inclusive pedagogy matters is further elucidated by the works of Hart et al. (2004) in their book entitled *Learning Without Limits*, which aimed to contribute to the advancement of pedagogical approaches to teaching underpinned by an optimistic view of human educability (Hart et al., 2004). Guided by the central concept of transformability, their work sought the possible basis for an alternative pedagogy to those ability-based pedagogies that are grounded in current and established understandings of what students can achieve in education. For them, the idea of transformability is described as a firm and unswerving conviction that there is the potential for change in current patterns of achievement and response, such that things can change and be changed for the better; a central insight in thinking inclusively about pedagogy (Veck, 2014).

In support of this, Loughran (2015) concedes a significant debt to the idea of transformability in developing a concept of inclusive pedagogy that rejects the deterministic thinking that pervades contemporary educational practices. For example, schools commonly base organisational decisions on the twin assumptions that firstly, children's ability is fixed and immutable, and secondly, that differences between students ought to be addressed by offering alternative provision, whether through ability grouping within classrooms or separate provision for special needs (Spratt & Florian, 2015). This rejection of fixed thinking in education is one of the basic principles of inclusive pedagogy. Placing the idea of transformability at the center of education, Hart et al. (2004) informed a view of pedagogy that includes not only all learners, but all learners as unique people, each with their own distinctive potential. Thus, transformability is an idea that signals the need for an ethical commitment to all young people, one which both precedes and informs the advancement of inclusive pedagogy (Veck, 2014).

It has been known for decades that the provision of education, grounded on predictions of potential based on current achievement, reproduces social inequalities by reifying hierarchies and undermining the sense of self-worth in some pupils (Spratt & Florian, 2013). On the contrary, inclusive pedagogy rejects ability labelling and offers an alternative framework for organising learning informed by the work of Susan Hart and her colleagues (Hart et al., 2004). In this sense, inclusive pedagogy urges teachers to create an environment that does not limit the expectations of either teachers or students. More specifically, inclusive pedagogy opposes practices that address education for all, by offering provision for most with additional or different experiences for some (Florian, 2010). Instead, it demands that teachers extend what is ordinarily available so that it is accessible to all children to learn within a classroom community that does not make judgments about ability (Florian, 2012); such a view challenges deterministic thinking about children's abilities and educational practices that are based on assumptions of a normal distribution of intelligence located within the notion of transformability.

As part of the concept of learning without limits, the core idea of transformability is central (Hart et al., 2004). Transformability recognises that all children's capacities to learn can change as a result of decisions and choices made in the present and that teacher can and do make a difference in what and how children learn. This informs thinking about the relationship between teaching

and learning in two ways, namely that the present is the future in the making, and that nothing is neutral. Achievements in learning are a result of relationships within communities, as expressed through the key practical pedagogical principles of co-agency, everybody, and trust, which are discussed as follows:

Co-agency: The notion of transformability and the principle of nothing being neutral demand that responsibility for learning be shared between teacher and learner. A central assumption of transformability is that teachers cannot do it alone. They are powerless without the participation of learners. **Trust:** For learners to take up the invitation to co-agency, teachers must trust that they make meaning and find relevance and purpose through their experiences. Learners need to know that they are the ones who can tell the teacher about how they learn. Trust enables a shared responsibility for the transformability of young people's capacity to learn, and the sharing is seen in the coming together, not the dividing of responsibility. **Everybody:** Transformability and the practical principles of trust and co-agency demand that there be an ethic for everyone, where teachers have both the opportunity and responsibility to work to enhance the learning of all. It is useful to remember that the opposite of the concept of everybody is not anyone but some people. In the relationships that support teaching and learning, nothing is neutral; whatever the teacher does will affect them either positively, or negatively. Teachers are in a privileged position to act to change things for the better. Choosing to plan opportunities for learning that will be part of a shared experience establishes an understanding of achievement through participation in a community, where equity is demonstrated through unity rather than sameness (Florian & Linklater, 2010).

The above principles of transformability emphasise that it is in the process of making pedagogical decisions that teachers can act to enhance children's capacity to learn as opposed to relying on notions of fixed ability. The concept of transformability and its key principles are valuable tools for inclusive pedagogy, because they provide a structure for students' understanding, where predictions often place a ceiling on what teachers think pupils can achieve. Thus, learning is understood as inextricably linked to the choices and decisions made by teachers (Florian & Spratt, 2013). As a result, the notion of transformability, located within the idea of learning without limits, has the potential to influence the development of inclusive pedagogy,

and be used to explore how teachers make the best use of what they already know when learners experience difficulty in an inclusive classroom (Florian & Kershner, 2009).

In summary, the concept of inclusive pedagogy was developed as an alternative to bell-curve thinking and the associated limitations that such thinking places on the development of inclusive practices (Florian, 2015). An educational system dominated by bell-curve thinking—that is, a deterministic view of ability—is inherently problematic because any normal distribution requires nearly half of what is being assessed to be below average. Many educational authorities, who understand the injustice associated with such a judgment, conclude that there must be other ways to think about improving learning, assessing performance, as well as executing an assessment. As a result, the notion of inclusive pedagogy provides an alternative to how a shift in thinking about learner differences can open up new possibilities for practice influenced by the core idea of transformability located within Hart et al.'s (2004) work entitled *Learning without Limits* (Florian, 2014; Spratt & Florian, 2015; Forlin et al., 2015).

2.4. Theories in Contrast with the Notion of Inclusive Pedagogy

Ethiopian universities and worldwide education policies both mention inclusive education, but the legacy of the special education method is still pervasive in many policy documents and in actual practises. The ideological divide between special education and inclusive education, which Symeonidou (2017) identified as a major obstacle to the development of effective teacher preparation for inclusive education in various locations, lends weight to this viewpoint. Additionally, according to Allan (2014), the "ideological battles" between "inclusionists" and "special educationists" obstruct the transition to inclusive education because special educationists hold to the presumption that teacher education should take place in contexts that are ideologically divided (between various teacher educators, researchers, policymakers, parents, and teachers). This suggests that one of the main obstacles to inclusive teacher education is the legacy of special education.

According to Florian (2014), the special educationists' perspective is based on deficit models of disability, which again follow the practices of identification of differences in children and separate forms of service provisions for different types of learners that perpetuate segregation. In

this regard, Florian (2017) makes the point that these traditional mechanisms for meeting specific learning needs in segregated forms are a social justice issue, because they are dependent on the logic of exclusion. This means that when human differences are isolated and treated as something additional or extra, the idea of difference is reinforced as a problem. This, in turn, leads to the perpetuation of bell-curve thinking and notions of fixed ability; the identification of difficulty in learning, and the associated focus on what the learner cannot do; teachers' belief that some learners are not their responsibility; and the avoidance of change in thinking about inclusion from 'most' and 'some' to everybody (Florian & Black-Hawkins, 2011).

Florian (2012) notes that the presentation of special needs education as a problem for and a remedy to educational injustice has brought to light the access and equity issues present in educational systems that depend on various forms of provision for various categories of learners. Special education is widely recognised as one of the processes by which kids who have learning challenges are both included in and excluded from the modes of schooling that are typically available to children of similar ages, as numerous experts have noted. In support of this, Black-Hawkins and Florian (2012) claim that one crucial justification for the continuation of "special" or "additional" support for some students is that school systems are actually utilitarian in structure and are set up around the debunked but widely held notion that intelligence is fixed, measurable, and normally distributed. Most students will therefore be satisfied by what is typically provided, while a small number of students at the tail of the distribution may need something extra or different from what is typically offered, supporting the bell-shaped distribution of students in many countries (Florian, 2012).

Furthermore, Ainscow et al. (2019) argue that most conceptions of inclusion arise out of debates on special educational needs, the provision of separate special schools for some children, and the use of external agencies to foster educational integration. They further highlighted that this type of provision is generally focused on providing specific technical or additional support for those with physical and mental impairments, either within or outside the confines of the school, which ultimately perpetuates inequality (Sosu et al., 2010). In this regard, Florian (2012) claimed that, for certain people and not for very long, special education was considered more as a "solution to" than a "problem of" social justice in education. Scholars have written about the paradox of

special education as something that serves both the humanitarian and controlling goals of society as a result of sociological critiques of special education that have demonstrated the injustices that can arise in systems with separate forms of provision for students who deviate from what is considered to be the norm (Forlin & Chambers, 2011).

In this regard, Norwich (2007) clarified that teachers and other school personnel face a conundrum regarding how to react when students have difficulties, how to accommodate all students without sustaining the stigmatising effects of singling out some students as different, differences that can and should be ignored, which differences matter, and how teachers will know. These challenges draw attention to the conflicts between the educational system's structure, which is built on the notions of the greatest good for the greatest number of people and the supposition that the population is regularly distributed, and the equity concerns it raises. In other words, there is a conflict between "mainstream and special education" and "inclusive education," or between "schools for all" and "schooling for the majority and some" (Florian, 2012). Instead, Hart et al. (2004) have persuasively shown that positive changes may be made based on what teachers do now, guided by the idea of transformability.

In response, numerous researchers—Kershner among them—have created a learning typology with the goal of enhancing involvement, active learning, and achievement while also addressing individual differences. Her paradigm makes sense of individual differences without relying on categories for disabilities, which emphasises the connection between the teacher's job and learning. His definition of learning as a holistic idea in which the teacher employs a variety of teaching techniques to assign the proper work is consistent with the idea of inclusive pedagogy, which maintains that inclusive education is distinguished by an acceptance of student differences as typical features of human development (Florian & Kershner, 2009). As a result of this perspective, we now promote inclusive education as a different approach that helps students access the core curriculum in public schools (Florian et al., 2010). This suggests that inclusiveness is based on the idea that schools should serve all students, regardless of their disability or differences in social, emotional, cultural, or linguistic backgrounds (Florian & Spratt, 2013). This calls for a redesign of traditional education so that all schools can accommodate all students. In other words, inclusion is a component of a larger human rights

agenda that calls for access to and equity in education and fights against all forms of segregation (Florian & Kershner, 2009).

Florian and Linklater (2010) made the case that this is true by asserting that studies of what works in special needs education have demonstrated that the instructional tactics employed in inclusive education may be modified to help students who have been recognised as having learning difficulties. In general, attempts to identify what is "special" about special education accept that good special education practises frequently derive from inclusive education, and that excellent special education practises frequently appear in inclusive education (Hegarty, 2007). As a result, it is challenging to argue that students who have been identified as needing special or supplementary support require pedagogically distinct teaching methods and approaches from those utilised with the majority of learners (Florian, 2010). It is extremely challenging to make the case that teachers lack the information and abilities necessary to instruct every student. It is not the same as missing teaching talents, knowledge, or skills to feel unclear about how to respond to specific issues or to feel competent in providing accommodations (Forlin & Chambers, 2011).

Although there has been significant progress in understanding the connection between teaching, curriculum, and learning in many schools in both developed and developing countries, according to Florian and Rouse (2009), the education of kids who are thought to have "difficulties" frequently remains the sole responsibility of special-needs experts, as opposed to being shared with classroom and subject teachers. This type of support is historical and has its origins in the idea of diagnostic prescriptive education, where interventions are based on debunked theories about addressing the underlying weaknesses in people (OECD, 2010; UNESCO, 2013). In this way, the emphasis on examining human differences has sustained the idea that learning challenges are predicted by individual variations. According to Florian and McLaughlin (2008), this viewpoint has reinforced deficit-based categorical approaches to the delivery of educational services in the majority of nations. But deciding on educational treatments has not proven to be a good use of the often used medical categories of disability (Norwich, 2008). This suggests that in order for inclusion to be successful, the diagnostic paradigm associated with special educational needs must be abandoned, and a framework for teachers' lifelong learning must be developed

that focuses on an inclusive pedagogy that is social justice-oriented and gives teachers conceptual and practical autonomy (Mukelabai, 2020).

Gujónsdóttir and skarsdóttir (2016) assert that the inclusion movement requires teachers to reevaluate their views of teaching, learning, and the curriculum, as well as their roles as participants in school change, and to conduct in-depth self-examinations of their values and beliefs. This indicates that school practises can modify, enhance, or build educational environments to address students' resources rather than relegating children who do not achieve academic or classroom criteria or who do not otherwise fit in to separate settings. To develop rich learning opportunities for all learners so that everyone may engage in classroom life and learning, teachers are expected to go beyond what is often provided in a regular classroom, according to Florian and Black-Hawkins (2011). Here, the emphasis is on what all students in the classroom should learn and how teachers can help those who experience learning obstacles. In the end, this is one of the guiding principles of pedagogy for inclusion, which aims to contest practises that represent provision for the majority with additional or different experiences for some. This is because focusing on difference only serves to further the social construction of disability and to increase children's marginalisation and isolation (Grenier, 2010; Florian & Spratt, 2013).

Cochran-Smith et al.'s discussions of three factors that they believe separate the two opposing points of view—the "inclusionist" and the "special educationalist" support the notions in the preceding paragraphs. The three primary difficulties for them are the disciplinary traditions, the definition of the suffix "dis" in the term "disabilities," and the curriculum content and accessibility for all students (Gujónsdóttir & Skarsdóttir, 2020). The various theoretical disciplines were the first problem they discovered. Special education has typically looked to behavioural psychology, medicine, and psychometrics for its theoretical underpinnings, whereas inclusion studies education from a social justice viewpoint, using disciplines like anthropology, sociology, cultural psychology, and sociolinguistics. Accordingly, inclusive teacher education centred on social justice and supported by the idea of inclusive pedagogy proves important (European Agency, 2011; Dalmau & Gujónsdóttir, 2017). This implies that preparing new

teachers to be inclusive requires much more than simply adding on a special education course or module.

The second problem, which permeates special education rhetoric, is the notion that a handicap is something that students struggle with or struggle to perform well. This places learning issues with the person in line with the theoretical underpinnings of special education in medical and behavioural psychology by treating all disabilities and deficiencies equally. According to this viewpoint, finding the most effective teaching strategies (best practises) to teach a skill deficit that prevents learning is necessary (Gujónsdóttir & Skarsdóttir, 2020). The social constructivist view of learning, on the other hand, is a commitment made by inclusionists with a social justice emphasis. This approach places human learning and its failure in the context of human connections. Here, inclusive pedagogy and results that take learners' needs, preferences, families, communities, and cultures into account are preferred over educational systems founded on the idea that pupils should be normalised (Kozleski et al., 2014). As a result, even though the needs of students and their families can vary greatly, not every school needs to be a repository for all of these variations. Instead, this calls for pre-service teachers to have access to numerous professional development opportunities so that they can effectively address regional needs (Gujónsdóttir & Skarsdóttir, 2020).

The third concern is to the general school curriculum and how all students can access it. It matters how learning opportunities are established and whether they are appropriate for all learners since the context of the learning environment influences how and what people learn (Allday et al., 2013). Access to the mainstream curriculum for students with exceptional needs has long been a top priority in special education. The hierarchies and mechanisms controlling the personalised and contextualised learning environments developed in schools have changed as a result of the information age (Grenier, 2010; Florian & Spratt, 2013). There is widespread agreement that pre-service teachers who comprehend the advantages of inclusive schooling and are prepared for inclusive pedagogy will improve the quality of education for all learners (Sharma & Nuttal, 2016). This is true despite the ongoing debate among teacher educators about what types of systems and organisational structures will produce highly effective teachers for inclusive schools (Forlin, 2012; Watkins & Donnelly, 2014).

Dewa (2020) has suggested that in order to teach pre-service teachers about inclusive knowledge, attitudes, and beliefs as well as practical skills, teacher educators must first undergo rigorous pedagogical training. This suggests that the teaching style empowers instructors in ways that are suitable for the vast majority of students. In a similar vein, Florian (2011) contends that inclusive pedagogy exposes pre-service teachers to a range of inclusive curriculum, assessments, and instructional strategies that decide how much they advance inclusion. Pre-service teachers should therefore be aware of widely used practises that will test their socialisation strategies (Florian & Walton, 2017). The teaching, learning, and engagement of all students are therefore welcomed and made possible by inclusive pedagogy (Florian & Black-Hawkins, 2011). According to the literature, inclusive pedagogy was created as a response to bell-curve thinking, which perpetuates educational inequalities (Fendler & Muzaffar, 2008). This calls for a paradigm shift away from the medical model and towards the social model, which is framed within the human rights approach and converts integrated human values into the rights of marginalised students (Engelbrecht, 2006).

A comprehensive overhaul of basic teacher education for inclusion is also required, according to Echeita (2014), if we hope to equip future teachers for the successful implementation of inclusive education. These changes in behaviour must be supported by an understanding of the social model of disability. According to UNICEF (2013), programmes that lack a firm knowledge of inclusion and are founded on the ideas of segregation or special education are frequently incompatible with the pedagogy of inclusive education. Additionally, it is advised that inclusive pedagogical approaches be used to redefine inclusion competencies rather than special pedagogy (European Agency, 2011). In order to prepare student teachers for the pedagogy of inclusion, redefine the relationship between teachers and learners, and empower teachers as co-curriculum developers, it is necessary to reconceptualize student teachers' roles, attitudes, and competencies (Gujónsdóttir & Skarsdóttir, 2020).

The act of extending what is typically available as opposed to providing something "additional" or "different" for some is, as has been demonstrated elsewhere, a complex pedagogical endeavour that necessitates a shift in perspective away from the widely accepted notion that providing for everyone by differentiating for some is the best way to serve everyone (Florian &

Spratt, 2013). It is unique in that it acknowledges the idea of learner differences on an individual basis without depending heavily on individualised techniques to address such differences (Florian, 2012). As stated by Black-Hawkins and Florian (2012), it also suggests a knowledge base for teacher education that sees classroom teachers as competent actors whose perspectives on students' aptitude for learning, pedagogical decisions, and interpersonal interactions affect student outcomes. In order to establish a pedagogy that is inclusive of all learners rather than a distinct special pedagogy, teacher education programmes must therefore focus on increasing the quality of education for everyone (European Agency, 2010).

To conclude, special education has relied on behavioral psychology, medicine, and psychometrics for its theoretical foundation to equip teachers for special education (Cochran Smith et al., 2009). Firstly, the impact of behavioral psychology underscores the commonly held premise in special education that any behaviour can be broken down into a finite set of component skills and sub-skills that are then the focus of remediation (Kauffman & Sasso, 2006). Failure to learn a skill as expected is due to deficiencies, and deficit thinking is central to current special education discourse. Secondly, the medical paradigm has long influenced the practices of special education (Dudley-Mailing & Paugh, 2005). In the context of special education, diagnosis has mostly focused on identifying disabilities and the specific skill deficits that are thought to underpin these conditions. Thus, the disease-oriented medical model fosters the deficit mindset that pervades special education discourse (Gallagher, 2010). Thirdly, psychometrics has a significant historical effect on special education that corresponds to its medical and behavioural emphasis. When it comes to determining effective, research-based instructional strategies for addressing student weaknesses, psychometric methods promise objectivity and precision (Gujónsdóttir & Skarsdóttir, 2020). The concept of the normal curve, which is a core component in special education, is the most significant contribution of psychometrics to special education. The normal curve, which is a statistically defined representation of the concepts of normal and abnormal and serves as a foundation for decision-making in experimental research, is preferred by most special education researchers (Kauffman & Sasso, 2006).

On the contrary, teacher educators working from a social justice perspective depend on fundamentally different theoretical traditions to influence their work. Rather than behavioural

psychology, medicine, or psychometrics, they are influenced by anthropology, sociology, cultural psychology, and sociolinguistics (Cochran-Smith et al., 2009). They argue that, based on a sociocultural view of human learning, that learning cannot be reduced to a set of autonomous skills isolated from the sociocultural contexts in which they are applied. The thesis here is that the context influences the way in which people learn through involvement in cultural activities, and what is learned, the social practices, and the setting itself are all components of what is learned (Gujónsdóttir & Skarsdóttir, 2020). The important argument from this point of view is that psychological processes are not independent of sociocultural contexts; rather, they are defined by the contexts of which they are a part.

As a result, learning to teach, for example, is not something that can be achieved once and for all but rather requires teachers to learn a set of practices over the course of a lifetime (European Agency, 2010). Because they reject the practice of separating learning from its social and cultural contexts, sociocultural teacher educators develop different methodological choices from behavioural approaches. In addition, in their stance towards deficit thinking, teacher educators who are using a sociocultural model of learning differ from special educators who use behavioural models of learning. As previously stated, identifying and fixing learning deficits is fundamental to the practice of special education. However, sociocultural teacher educators explicitly reject deficit thinking, believing it to be incompatible with sociocultural theory and the pathologies of individual students, their families, their languages and cultures, and the communities from which they originate (Gee, 2008).

The current study thus serves as a critique of deficit thinking, which I believe is at the core of special education, and is informed by the sociocultural theory of human learning, Alexander's fundamental idea of pedagogy, and the basic principles of transformability located within the learning without limits perspectives, which underpin the theoretical framework of inclusive pedagogy. The idea of inclusive pedagogy represents a change in perspective on teaching and learning from what works for most students along with something "different" or "additional" for those who have difficulties, to an approach to teaching and learning that involves the creation of a rich learning environment, characterised by lessons and learning opportunities that are sufficiently available to all, so that all can participate in classroom life. Additionally, rather than

expressly individualising for some students, it concentrates on expanding what is typically available as part of the daily routine of classroom life. The idea that inclusive pedagogy is crucial to the process of moving from a special education paradigm to an inclusive education paradigm is strengthened by this in the end (Florian & Black-Hawkins, 2010; Forlin & Nguyet, 2010; Sharma, 2010).

2.5. The Notion of Inclusive Pedagogy and Its Applications for the Study

Ainscow (2015) made the case that inclusive education is acknowledged as a fundamental human right and the cornerstone of a just and equitable society. It calls for the establishment of an educational system that can meet the needs of all students in local schools around the world, with Ethiopia being no exception (Moria, 2017; Forlin, 2013). This educational approach envisions schools in which all students can participate and be treated as valuable school members (Reindal, 2016; Messiou et al., 2016). Prior to higher education institutions, inclusive education was developed and used in school settings. While this is going on, its ideas are beginning to influence universities teaching and learning (Kumari et al., 2019). Many have argued in favour of greater inclusion in higher education, contending that it is the institution's duty to cater to the needs of all students (Doughty & Allan, 2008). In this respect, Gairn and Suárez (2014) contend that inclusion can be regarded as one of the distinguishing characteristics of a top institution.

Inclusion policies no longer place a high priority on meeting the needs of students with disabilities enrolled in mainstream education. Since the beginning of the 1990s, inclusive education has developed to include all learners, particularly those who experience exclusion or marginalisation at school (Hick & Thomas, 2009). This is why inclusive education is a philosophical shift away from fitting special education learners into an already established system and towards a scenario where everyone has the right to get an education that satisfies their requirements (European Agency, 2015). As a result, teachers deal with a variety of learner groups more frequently than ever before, however they frequently state that they don't feel sufficiently qualified for the position (Reay, 2012). In order to work with and overcome the obstacles of diversity in inclusive educational environments, teachers must be prepared in light of this paradigm change (Florian & Panti, 2017). Fostering inclusion through and within teacher education courses continues to be a persistent difficulty as calls for teachers to be better equipped for inclusive education become more widespread (Ball & Tyson, 2011).

Thus, countries working towards this vision, including Ethiopia, are expected to have teacher education programmes focusing on enabling teachers to engage in inclusive practices that help to provide quality education for all learners (Symeonidou, 2017). Proponents of inclusive education have indicated that numerous variables influence its effectiveness, particularly inclusive pedagogy. Thus, incorporating the notion of inclusive pedagogy into a teacher education programme proves crucial in preparing teachers for inclusion (Florian & Pantic, 2017; Slee, 2018). This is because inclusive pedagogy upholds the principle that every learner is different and that learning must be improved for all learners (Black-Hawkins, 2017; Gale et al., 2017). Therefore, due to the significant role that they play in influencing inclusion and learners' achievement, teachers should be sensitised, well-informed, and trained in how to carry out inclusive pedagogy in today's classrooms (Florian & Black Hawkins, 2011; Fordyce et al., 2013).

As this is an area of increasing interest and pressing concern among policymakers and teacher educators in many countries, including Ethiopia (EADSNE, 2011; OECD, 2010; Florian et al., 2010; Florian & Kershner, 2009; Black-Hawkins, 2013), understanding how teacher education programme in Ethiopian university prepare and support trainee teachers to respond to differences between individual learners without perpetuating the marginalisation of some constitutes the primary concern of this study. The researcher also believes that teacher education programmes embraced by the notion of inclusive pedagogy will boost trainee teachers' understanding of the learner, learning and teaching, the curriculum in general, and the enactment of inclusive pedagogy in particular.

As was previously said, inclusive pedagogy is a teaching strategy that strives to improve learners achievement while ensuring the inclusion of those who are at risk of marginalisation and exclusion. The foundation of inclusive pedagogy is the notion that every learner is unique and that every learner's experience of learning must be enhanced. Individual differences are still significant, but this rejects the idea that failure is inevitable (Florian, 2016). Some of the presumptions and methods used in teaching and learning are disrupted when using inclusive pedagogy concepts. It specifically opposes the deterministic practises that are prevalent in modern education, which encourages teachers to have gloomy beliefs and doubt their ability to effect change. Instead, inclusive pedagogy contends that when teachers remove the constraints

imposed by deterministic beliefs, a child's capacity to learn can be transformed (Kuzolin, 2014), based on the works of Hart et al. (2004). A sociocultural concept of learning, which recognises that learning occurs in the context of the person plus, or, to put it another way, the individual along with the intricate web of social relationships that he or she lives, informs inclusive pedagogy. Children are viewed to develop into the intellectual and cultural life of the community through their interactions with others, according to Vygotsky's (1978) work. Therefore, the belief that the ability to learn may be improved by the decisions made by teachers is prioritised rather than the idea that learning ability is completely based on inborn elements like intelligence quotient (IQ) (Harry, 2014).

The above view recognises that in the micro-culture of the classroom, the choices that teachers make about learning and teaching convey messages that are much wider than the formal learning focus of the lesson. Through its unconditional recognition and acceptance of all learners, the notion of inclusive pedagogy recognises that all children have much in common, while acknowledging that each child is unique. Rather than denying the differences between children, it seeks supportive ways of accommodating diversity. Thus, understanding how to respond to difficulties in learning in ways that respect what has been called the dignity of each child within the classroom community is critical (Florian, 2010; Linklater, 2011). More specifically, inclusive pedagogy opposes practices that offer provision for 'most' alongside additional or different experiences for 'some'. Instead, it demands that teachers extend what is ordinarily available to be accessible to all by offering a range of options that are available to everybody, and then favours classroom practices that encourage collaboration between children in learning activities that build a sense of inclusive community learning together (Spratt & Florian, 2015; Florian, 2016).

The methods in which teachers respond to individual diversity, the decisions they make about how children and young people learn together, and the way they use specialised knowledge set inclusive pedagogy apart from other approaches. Inclusionary pedagogy demands a rethinking of the professional relationship in learning assistance by refusing to group children into categories based on perceived abilities (Biesta, 2011). In order to prevent stigmatising children, classroom teachers and other professionals are urged to regard children's learning challenges as professional dilemmas and continuously collaborate to find innovative techniques to support kids. Specialists are no longer considered to be parallel professionals to whom issues can be referred, but rather as

partners with whom to explore novel approaches to working with children. With inclusive pedagogy, which replaces outdated ideas of consultation and counsel, professionals can collaborate with others to co-construct knowledge (Florian & Black-Hawkins, 2011; Florian, 2016; Spratt & Florian, 2015).

In summary, inclusive pedagogy fosters an open-ended view of each child's potential to learn, which illustrates that what teachers choose to do or not do can affect a given child's capacity to learn. In this sense, inclusive education is expected to allow children's uniqueness to "come into being" as they develop rather than simply socialising them into the status quo (Black-Hawkins, 2017). This creates a new type of classroom where the 'lovely diversity' of children is expected and welcomed as an asset in the learning of all, which is one of the guiding principles of inclusive pedagogy (Florian, 2016). From the discussion above, we can understand that over time, the focus on inclusive education has generally shifted to inclusive pedagogy, which has now invaded university meeting agendas, processes, policies, research, and teaching and learning methodologies (Sandoval & Doménech, 2020). In this regard, teacher education programmes for inclusion play an influential role in initiating a paradigm shift and effecting significant pedagogical changes relative to inclusive pedagogy. As a result, trainee teachers invariably tend to adopt and transport their training institutions' practices, attitudes, and thinking to their classrooms. In this sense, teacher trainees' struggle to work with the diversity of today's classroom is due to their not being exposed to other ways of thinking about inclusive education for diverse learners (Spratt & Florian, 2015).

Nowadays, teacher education programmes are under increasing pressure to provide evidence that they are developing competent teachers for inclusive teaching, including universities preparing trainee teachers for secondary school teaching in Ethiopia (Abebe & Woldehanna, 2013). In response to these pressures, international reforms of teacher education are underway to explore how best teachers are prepared to enhance their students' learning and achievement (Loreman, 2015). In Ethiopia, PGDT was designed to prepare teachers for today's classrooms and aims to become the forerunner of a new teaching approach that imparts the scientific method, creativity, and higher-order skills (Koye, 2014). The programme emphasises that teacher training programmes model strategies for both dealing with variations in students' learning styles and promoting active learning and reflection that go with the philosophy of inclusive education.

Hence, teachers are expected to learn to identify their own learning needs, manage their professional development, and continuously update their subject-matter and pedagogical knowledge (Semela, 2014).

Fundamentally, the PGDT programme initiative aims to improve the teacher education experiences for teacher trainees, and to provide evidence that the training that teachers undergo prepares them with the qualities and skills necessary for raising students' achievement and managing diversity issues in an inclusive setting (World Bank, 2013; UNESCO, 2013). However, providing evidence of the effectiveness of teacher education preparation for inclusion is a complex task requiring negotiation of difficult methodological issues (Cochran-Smith, 2008b; Enterline et al., 2008). In this regard, Cochran-Smith et al. (2009) identified two pathways that we can follow, namely the impact of teacher education on trainee teachers, and the link between the qualities acquired by the graduates and the achievement of the students they are going to teach.

Over and above this, the debate on the effectiveness of teacher education for inclusion is also rooted in contrasting views on the aims and purposes of education. While there is pressure on teachers to raise student attainment informed by bell-curve thinking that dominates the educational practices of the day, there is also increased attention paid to the challenges of access and equity in education influenced by the notion of inclusive pedagogy on which the current study is based on (Florian & Rouse, 2009; McIntyre, 2009). Evidence from the literature also shows that teachers can influence the various aspects of a learner's development other than through test scores. This has led to a call for broader measures of effectiveness that cover all the domains of education systems in general, and the teacher education systems in particular (Alexander, 2004; Black-Hawkins, 2017; Deppeler et al., 2015).

In support of the above views, in his broader notion of pedagogy, Alexander (2004) argued that pedagogy calls for refining experience and exploring various evidence points to develop a professional knowledge base, while acknowledging teaching, learning, learners, and the curriculum as core elements of any pedagogical discourse. He further insists that a foundational step in intelligently understanding the pedagogy of inclusion requires the synergistic interplay

among the following three domains: (1) the learner, learning, instruction, and curriculum; (2) the institution and its policies; and (3) the culture, individual, and history—which enable, legitimise, formalise, and locate teaching, respectively. In light of these arguments, Loreman (2017), Moriña (2020), and Buchan et al. (2019) argue that pedagogy is critical to any practical, inclusive approach. Without an effective process for teachers to reflect on their knowledge, understanding, and ways of engaging in developing proposed inclusive approaches, there is no foundation for inclusion.

According to the notion of inclusive pedagogy, children's learning potential is determined by what teachers believe, know and do (Florian, 2014). Inclusive pedagogy forms part of the teacher's responsibility; where the social justice that provides circumstances of emancipation and change is essential. This entails taking the necessary steps to ensure that everyone has the opportunity to learn, as well as avoiding labels that categorise learners based on their abilities and the notion that some will impede the advancement of others (Black-Hawkins, 2017; Florian, 2019). In support of this idea, Rouse (2009) has argued that teachers' teaching behaviours are influenced by what they believe (expectations and trust in students), know (about theoretical, political, and legislative issues), and do (translating knowledge into actions). A fourth dimension, one relating to design and planning, might be added to these three, which could be drawn from higher education institutions (Gale et al., 2017). As a result, four aspects make up the nation's inclusive pedagogical approach, viz.: beliefs, knowledge, design, and actions.

Teachers' beliefs are the concepts or ideas that motivate them to build and implement a curriculum that includes all students. Few studies have questioned those professionals who work in inclusive settings about their pedagogical beliefs, about how all students learn in such settings or how they view diversity (Florian, 2014). The concept that every student has something to contribute to the learning environment is central to inclusive pedagogy. Diversity is understood as a valuable resource that enhances the teaching and learning process. This is the most difficult part of the inclusive pedagogy paradigm, because altering people's views or attitudes proves itself to be difficult (Göransson & Nilholm, 2014). Despite this, recent studies in the area show that experience and profession determine these issues (Sheehy & Budiyanto, 2015). In addition, studies conducted by Tiwari et al. (2015) and Van Houtte and Demanet (2016) have revealed that

successful inclusion is dictated by the ability of a teacher to generate and maintain a positive attitude. This implies that teacher beliefs regarding learner teachability play critical role in their willingness to stay in school. Hence, creating initiatives in this area proves important.

Knowledge is defined as the theoretical, political, and legal frameworks that encourage educators to use inclusive pedagogy. Rouse (2009) emphasised several topics as examples of inclusive knowledge, including learning strategies, disability issues, how children learn and what they need to learn, classroom organisation and management, where to get help when needed, identification and assessment of difficulties, evaluation and monitoring of children's learning, and the legislative and political context. Teachers are conscious of their role as facilitators and of every child's inherent right to get an education alongside their peers, where knowledge develops with the self-evaluation of the practise, according to Sheehy and Budiyanto (2015). According to Majoko (2016), inclusive pedagogy training for teachers benefits pupils. Florian and Linklater (2010) also looked into whether teachers have the knowledge and abilities required to teach in inclusive classrooms and how they may use what they currently know more effectively when interacting with students who exhibit challenges. They discovered that the main issue impeding the successful implementation of inclusive education was a dearth of adequate teacher preparation in the area, which in turn affected teachers' capacities to address the diverse learning requirements of kids in inclusive classes.

Finally, actions correspond to the adopted learning and teaching strategies. These are not only about detecting and applying prior knowledge, but also about working with students rather than acting on them; where the teachers include the students (Klibthong & Agbenyega, 2018). There is scientific evidence that the practices of inclusive pedagogy include flexible teaching, active learning, teachers who encourage learners to share their beliefs, knowledge, and experience, constant feedback, high expectations and respect for different learning styles (Nind et al., 2016). Other research suggests that teaching for inclusion ought to include the establishment of strategies that allow all students to participate and that respect varied ways of feeling, thinking, and acting (Brennan et al., 2019; Lawrie et al., 2017). Thus, teachers should recognise that students learn in different ways, and employ a variety of teaching approaches to guide learners as

they actively create new information, such that pedagogical methods be diversified (Sheehy & Budiayanto, 2015; Gómez & Badia, 2016).

Similarly, in the situations of inclusive action, the emotional and affective components of education ought to be considered. As a result, not only excellent teaching strategies but also positive interactions between teachers and their students, the concern they show for them, personal connections, respect, and everyone's attention are required in the educational dimension associated with inclusive actions (Loizou-Raouna & Lee, 2018). In recent years, some studies have called for greater emphasis to be paid to the emotional aspect of teaching (Chen, 2016). They even acknowledge the importance of emotion pedagogy (O'Brien et al., 2017). Emotions, according to them, influence students' cognitive resources, motivation to learn, learning strategies, and self-regulation. The above views suggest that participating in teacher education programmes oriented towards inclusion at either the undergraduate or postgraduate level inform positive teacher attitudes and a better understanding of inclusive education, as well as its design and action, and ultimately supports its implementation in practice. However, a key question is as to how effective these university-based teacher education programmes in preparing teachers for inclusive education informed by the notion of inclusive pedagogy, where Ethiopia is no exception in this regard (Mintz & Wyse, 2015).

Ultimately, the responsibility of advancing inclusive pedagogy has been placed on teacher educators and other faculty members in teacher education programmes. As argued by Florian and Walton (2017), inclusive pedagogy principles ought to form a major part of the theoretical foundation of teacher education programmes when preparing teachers for inclusion. Hereafter, trainee teachers should be prepared by training institutions to find a variety of ways to extend pedagogic responsiveness to all learners, therein working towards making inclusion a norm with the help of changing policies, educational structures, practices, teachers' knowledge, beliefs, and practical skills and abilities (Dewa, 2020). Although teacher training institutions have an essential role to play in the shift towards inclusive pedagogy, extant literature indicates that higher educational institutions can facilitate this shift through their policies, philosophies, campus cultures, administrative services, and support (Moriña & Orozco, 2020). Consistent with this, Loreman (2017) proposes that to be inclusive, institutions must attend to pedagogy

concerned with the way in which teaching and learning occur. In addition to this, institutional input on inclusion tends to increase teachers' confidence, teachers' attitude, and implementation of inclusive pedagogy in an inclusive setting (Gannon, 2018).

In support of these views, Florian and Walton (2017) claim that the challenge for teachers remains, because they are assessed against national standards. This means that although teachers can be trained in inclusive pedagogical practices, without restructuring the education system, it will be a challenge to implement the theories they have acquired. This shows the importance of coupling the restructuring of teachers' knowledge, beliefs, and attitudes with the environment in which they will work. Failure to take this into serious consideration will prove futile for all efforts made to train initial teachers well (Deppeler et al., 2015). Consistent with the above, Olkaba et al. (2019) argue that for the development of effective teacher education, components of teacher education programmes and the efficiency of the process of teachers' pedagogical skill development within the programmes requires serious attention. As a result, they developed a framework that helps to analyse the effectiveness of teacher education programmes located within a university towards preparing the graduates for inclusive teaching.

As discussed in Chapter One of this study, in the Ethiopian context, the diversity of learners attending regular classrooms has increased since 1994 (MoE, 2016; World Bank, 2013; Abebe & Woldehanna, 2013; Semela, 2014; Aweke, 2015). In addition to that, the implementation of inclusive education has been informed by many international and national policy documents that the country committed for. This being the case, however, many teachers feel that they lack the necessary knowledge, practical skills, and understanding of inclusive education to create an inclusive learning environment for diverse learners in today's classrooms (Tirussew, 2010; UNESCO, 2013; Mekonnen et al., 2014; Ahmad, 2013). This gap can largely be attributed to the lack of opportunities to develop teacher professional learning for inclusive practices across the continuum of teacher education in Ethiopia (Gezahegne & Yinebeb, 2010; Tirussew, 2005; Kedir, 2007; Koye, 2014).

In order to successfully implement inclusive education, teachers must know that diversity among children is a crucial aspect of child development and that they are qualified and capable of

teaching all children (knowing); believe this to be true (believing); and adopt creative methods for collaborating with other stakeholders (doing) (Florian & Black Hawkins, 2011; Loughran, 2015) to acquire the skills necessary to teach inclusively in a variety of settings, which will be made possible by their initial teacher education degree. Since teachers' "doing," "knowing," and "believing" are interrelated in terms of enacting inclusive pedagogy, teacher education programmes with an inclusive focus have the potential to influence teachers' knowledge of, being, and becoming inclusive teachers (Florian & Linklater, 2010; Forlin et al., 2014; Pantic & Florian, 2015). As a result, teachers should be ready to acquire the skills necessary to teach inclusively in a variety of settings, which will be made possible by their first teacher education curriculum.

Blecker and Boakes (2010) and Johnstone and Chapman (2009) argue that the principles of inclusive pedagogy ought to inform the theoretical foundation of teachers' training by exposing them to a variety of curricular, assessment, and instructional approaches that are known to be more inclusive. The question in this regard is how effective are the teacher education programmes in Ethiopia in preparing secondary school teachers for inclusion as teachers are expected to believe that they are qualified and capable of supporting all children in teaching and learning, as well as the capacity of all children to learn; know about socio-cultural perspectives on learning as well as theoretical, policy, and legislative issues of inclusion; and work to create adequate conditions for all children and to support inclusion in general (Pantic & Florian, 2015; Florian, 2016; Loreman, 2017), which are the founding principles of inclusive pedagogy governing the study. Therefore, drawing on a mixed-methods research approach and informed by the notion of inclusive pedagogy, the study aimed to explore the effectiveness of secondary school teachers' preparation for inclusion in the Ethiopian universities.

2.6. Chapter Summary

The chapter presented the details of inclusive pedagogy as a theoretical framework for the study, including its origin, theories that influenced its development and theories that stand in contrast with its notion and its application in the current study. The next chapter of the study (Chapter Three) will deal with a review of related international literature concerned with teacher education for inclusion.

CHAPTER THREE: REVIEW OF INTERNATIONAL LITERATURE RELATED TO TEACHER EDUCATION FOR INCLUSION

3.1. Introduction

The theoretical underpinning for the study, which considered how inclusive pedagogy affected teacher preparation programmes for inclusion, was described in the previous chapter. To find out what other academics and authorities in the field have already done, this chapter (Chapter Three) explores the pertinent international literature in relation to teachers' preparation for inclusion. According to Creswell (2012), a literature review aids in developing novel research questions and contextualising the planned study. Mertens and McLaughlin (2004) further assert that a literature review aids in contextualising a study, making a case, and identifying a gap that must be filled by a specific research study. Furthermore, according to Bryman (2012), the goal of reviewing the literature is to determine what is already known about the topic under investigation as well as to determine what concepts and theories are pertinent. This includes determining whether the study's topic has any open questions.

This review assumes that teacher preparation for inclusion should equip educators to work with learners who differ in terms of their age, gender, sexual orientation, ethnicity, culture, linguistic background, or religion, as well as their socioeconomic status, ability, and special educational needs. Therefore, emphasising the following aspects is essential to summarise the concepts in the area of inclusive teacher education that served as the foundation for the current study. As a result, this chapter reviews and discusses the international literature on teacher education for inclusion, including the movement towards teacher education for inclusion, international perspectives on initial teacher education for inclusion, fundamental elements, components, and indicators of effective teacher education for inclusion, and the professional competencies required to successfully implement inclusion.

3.2. The Move Towards Teacher Education for Inclusion

For at least the past three decades, educators, policymakers, and researchers have been concerned about the international trend towards including children with special educational needs in regular classes (Amor et al., 2018). Since the Salamanca Statement and Framework for Action, inclusion

and inclusive practises in education have been hot topics and often regarded as orthodoxy (UNESCO, 1994). The need of ensuring inclusive educational institutions around the world, including Ethiopia, is explicitly mentioned in the current evident movement towards inclusion and broad agreement on its fundamental principles (UNESCO, 2009). Many international policy documents now use the phrase "inclusive education," which asserts that inclusive schools that are ready to accept all students regardless of their unique features may provide equal learning opportunities (Symeonidou, 2017). Additionally, the trend towards educational inclusion is noted in a wider range of sources than just international declarations, statements, recommendations, laws, and policy documents, which reaffirms the importance of inclusive education in the context of global educational policy (Loughran, 2018).

As a result, a wider definition of inclusive education is dominant nowadays, where inclusion is understood as both principle and process, and the term is used in relation to learners who are vulnerable not only because of their special educational needs (EADSNE, 2015a). This means that, while the initial focus of inclusive education was on students with disabilities, a broader interpretation of inclusion emphasises the importance of providing quality education to a broader range of students, including those from different ethnic, racial, cultural, or linguistic backgrounds (Forlin, 2012). In this sense, inclusive education constitutes a means of offering quality education for all, influenced by the educational justification of the UNESCO policy guidelines on inclusive education, which states that inclusive schools have to develop ways of teaching that respond to individual differences and benefit all children without exclusion (Slee, 2011).

Diversity is acknowledged as "natural" for any group of learners in this line of thinking and in discussions in contemporary educational literature, and inclusive education can be seen as a way to increase achievement through the presence (access to education), participation (quality of the learning experience), and achievement (learning processes and outcomes) of all learners (EADSNIE, 2014a). Booth (2009) makes the case that inclusive education encompasses access, such as accessible curricula and teaching, accessible schools, and suitable technology; quality education, such as education that respects individual differences, learning styles, and academic levels; and values, such as valuing all students equally, encouraging participation, and eliminating discrimination. Since all children have a right to attend their neighbourhood school

and participate in curriculum with peers their own age, in their age-appropriate grade, the educational systems of many nations, including Ethiopia, have adopted an inclusive education model that is not without its difficulties (Somma & Bennett, 2020).

Additionally, according to the UNESCO (2018) definition, inclusive education is an ongoing process that aims to provide high-quality education for everyone while respecting diversity and the various needs, abilities, characteristics, and learning expectations of the students and communities by doing away with all forms of discrimination. Similar to this, Arnesen et al. (2009) highlight that inclusion may be regarded as a process of reshaping cultures, communities, and institutions like schools to become diversity sensitive rather than just adding to existing systems. They also stress how the global commitment to human rights has changed perceptions and diminished the importance of a person's impairment, with personalised support now being seen as the standard for all learners (Smith et al., 2009). This oblique reference implies that inclusive thinking has broadened beyond the narrow notion of recognising and eliminating a deficit; rather, inclusive education is now generally acknowledged to be concerned with issues of gender, ethnicity, class, social conditions, health, and human rights that encompass universal involvement, access, participation, and achievement (Ainscow et al., 2019).

Further to this, the essential tenet of inclusive education is that all students should be taught together, regardless of any challenges or differences they may have, in order to meet their specific requirements for resources and assistance (Materechera, 2014). Increasing engagement in learning, cultures, and communities while minimising exclusion from and within education are all parts of the inclusion process, which seeks to address and meet the diversity of needs of all children (UNESCO, 2013). In order to establish a setting where all children may get a quality education, inclusive education also enables all children to be grouped together in inclusive classes and taught by regular teachers (Akinsola & Chireshe, 2016). Additionally, inclusive education entails developing a setting where all students can feel emotionally supported, while also receiving the necessary accommodations for learning and being valued and accepted for all of their differences (Somma & Bennett, 2020).

According to Chireshe (2011), inclusion in education refers to the degree to which conventional schools accept all students as full members of the community and respect their contributions. Further, inclusive education involves open schools that welcome a variety of learners, equal education for all, and that learners are taught to appreciate and respect differences between people (Vogel et al., 2006). It also indicates adaptable, accessible curricula and learning support tools. In this way, inclusive education has the potential to improve the standard of instruction across educational systems by employing methods that take into account the naturally varying learning preferences of all students while also meeting the unique learning requirements of a subset of them (Walker et al., 2013). Ainscow et al. (2019) state that inclusion also attempts to lessen exclusion and discriminatory attitudes linked to age, socioeconomic class, ethnicity, religion, gender, disability, attainment, and special educational needs.

Due to this, inclusive education is now considered a requirement for effective teaching and learning strategies along with the requirement for high-quality teachers who are well-equipped to meet all learners' needs and to provide not only equal opportunities but also high-quality education for diverse learners in an inclusive classroom (Verity, 2010). To engage with diverse pupils in an inclusive classroom, however, many teachers are reluctant and unsure (Kurniawati et al., 2014). While many teachers claim to support inclusive policies, research from numerous countries shows that the main issues that need to be addressed in teacher education programmes that prepare teachers for inclusion are inadequate preparation and managing an increasing number of students with diverse educational needs (EADSNIE, 2010). Therefore, it is crucial and necessary to train qualified teachers for the effective implementation of inclusive education, especially in developing nations like Ethiopia.

The idea that the normal classroom instructor has specific knowledge and awareness regarding the needs of various learners, teaching style, and instructional tactics underpins the practise of inclusion (EADSNIE, 2010). The demands on schools and teachers are more complex than ever before because society now expects schools to deal with diverse student populations, foster tolerance and social cohesion, and effectively address the needs of underprivileged students and students with learning disabilities (OECD, 2010). Ballard (2003) asserts that inclusive education is concerned with social justice issues, which implies that graduates entering the teaching

profession are expected to understand how they will set up classrooms that address issues of respect, fairness, and equity. This statement relates to teacher education for inclusion. Mitchell (2005) makes the case that teachers should be given the opportunity to comprehend the historical, sociocultural, and ideological circumstances that give rise to discriminatory and oppressive practises in the educational system.

Similar to this, Savolainen (2009) observes that teachers are crucial to providing students with a high-quality education and cites McKinsey et al. (2007), who contend that an educational system's quality cannot surpass that of its teachers. Additionally, research by academics like Bailleul et al. (2008) suggests that teacher quality is more important to student accomplishment than any other element, including class size, class makeup, and background. This suggests that in order to provide not only equal chances for all, but also quality education for an inclusive society, which is the ultimate goal of inclusive education, it becomes obvious that we need high-quality teachers able to fulfil the requirements of all learners. According to Reynolds (2009), a teacher has a significant impact on the growth of the inclusive school because they bring their knowledge, beliefs, and values to bear when establishing a productive learning environment for kids. Because they provide teachers with all the competencies they will need throughout their careers, teacher education programmes for inclusive education therefore play a crucial role in this regard.

The goal of teacher education, in accordance with Florian and Rouse (2009), is to equip individuals to enter a profession that embraces both individual and group responsibility for enhancing the learning and involvement of all children. Similar to this, Cardona (2009) points out that emphasising teacher education would seem to offer the best way to produce a new generation of educators who will guarantee the effective adoption of inclusive policies and practises. To tackle the obstacles that they will face in the current school climate, teachers must have faith in their competence, knowledge, and expertise in inclusive education (Carroll et al., 2003). This is because educational and social changes have put new demands on the teaching profession, and classroom populations of young people now consist of a more diverse range of backgrounds, abilities, and disabilities (Symeonidou & Phtiaka, 2014). Teachers must adapt to these changes by regularly developing their knowledge and abilities as well as acquiring new

ones (European Commission, 2007). As a result, teachers are crucial in ensuring that students are ready to enter society and the workforce.

Additionally, one of the essential elements for the successful implementation of an inclusive education system globally is teacher preparation for inclusion. The relevance of teacher professional development for the development of more inclusive and equitable educational systems is highlighted by study findings from nations that were early adopters of inclusive educational practises (Rusznyak, 2015). Similar to this, the Salamanca Statement and Framework for Action confirmed that progress towards inclusive schools can be promoted by ensuring that all educational workers are properly prepared (UNESCO, 1994). Since then, academics from all over the world have alerted policymakers and educational authorities in their nations to the necessity of providing teachers with knowledge, practical skills, and attitudes in order to successfully implement inclusive education. Further to this, classroom teachers have been named as the main resource for fulfilling the objectives of an inclusive education system in works of literature in the subject (Walton, 2017). This indicates that general education teachers must develop new abilities through training in order to teach in a way that includes all students and to better manage the diversity of students in today's classrooms.

In this regard, what is significant for this study is the commitment made to guaranteeing inclusive and equitable quality education in the policies and strategic documents of many nations, including Ethiopia, as no education target should be regarded as having been met unless it is attained by all (UNESCO, 2017). For this to be accomplished, teacher education programmes must be well-resourced, effective, and controlled (Kurniawati et al., 2017). Teachers also need to be empowered, well-trained, professionally qualified, motivated, and supported. Since instructors in ordinary classrooms are responsible for implementing inclusive education, teacher education for inclusion is crucial (Papadopoulou, 2020). This suggests that all instructors should receive considerable support because they are essential to ensuring student achievement and implementing inclusive education in inclusive schools.

Additionally, the teacher's job is getting harder and more complicated in today's schools. Since students are now expected to support their own learning, develop independence, and take

ownership of their behaviour, the focus of the teacher's professional operation is no longer limited to the mediation of knowledge (Coates, 2012). Instead, instructors are required to support students as they learn, achieve independence, and take ownership of their behaviour. Therefore, raising the standard of teacher education to better prepare teachers for excellent instruction demonstrates to be the main objective of any nation, including Ethiopia. Professional development is especially crucial as educational institutions grow more inclusive due to the significant and novel problems that face normal school instructors who must address a broader diversity of students' demands (UNESCO, 2008). According to Isaac and Dogbe (2020), who support this, the best investment that can be made is to guarantee that newly qualified teachers have a fundamental understanding of inclusive teaching in inclusive schools (Kim, 2013). For this reason, appropriate initial teacher preparation for inclusion is singled out as a policy initiative around the world.

The adoption of the inclusive philosophy necessitates that ordinary classroom teachers be ready to teach students with a variety of needs, according to Mangope & Mukhopadhyay (2015). This suggests that if teachers are to receive training in inclusive methods, their training curricula must likewise be structured in an inclusive manner. According to UNESCO (1994), teaching must take into account the intellectual quality, relevance, social support, and recognition of difference in an inclusive atmosphere. To equip new teachers with the appropriate attitudes, knowledge, skills, and competences for the successful implementation of inclusion in education, however, is a challenge (Forlin, 2010). Studies carried out in nations where inclusive education is practised have shown that teacher preparation programmes fall short in preparing teachers to work in inclusive environments. Additionally, according to Isaac and Dogbe (2020), teachers were unprepared to meet the requirements of diverse students.

Therefore, it is crucial to produce teachers who are sufficiently qualified for the successful implementation of inclusive education. Due to this, modern classroom practises are incompatible with the pedagogies needed to ensure that everyone has access to a quality education (Forlin, 2010c). The learning process must be tailored to the requirements of the kid rather than the child adjusting to the pace and character of the learning process (Rouse & Florian, 2012). This necessitates an inclusive pedagogy that recognises that human diversity is normal. As a crucial

component of inclusion, this necessitates teachers adopting a more child-centered pedagogy and changing their curricula (Loreman, 2007). Each student has a different beginning place for learning and a different knowledge foundation, and child-centered pedagogical approaches acknowledge this (Nketsia, 2016). Regarding this, teachers are expected to acknowledge the significance of the student's degree of engagement and motivation in an activity where students are in charge of their environment and that the teacher helps students' ability to govern their day (Hemmings & Woodcock, 2011).

Similar to this, Rouse and Florian (2012) claim that inclusive pedagogy represents a change away from methods that are effective for the majority of students, towards methods that coexist with "additional" or "different" methods, and towards methods that offer everyone a wealth of learning opportunities. This causes the emphasis to change from learning for all to students with special educational needs (LeFanu, 2013). In order to ensure that all students can participate in and profit from the class, inclusive pedagogy offers learning opportunities that are beneficial to everyone. Therefore, the adoption of inclusive pedagogy is supported by child-centered educational techniques (Kuyini & Desai, 2009). According to Johnstone and Chapman (2009), child-centered pedagogical strategies help instructors be more able to implement inclusive education. Due to the teachers' lack of adequate training during their initial teacher preparation programmes that prepare them to practise inclusive education in their teaching, inclusive pedagogical approaches have, despite this, only rarely been observed in the regular classrooms of many nations (Alhassan & Abosi, 2014).

This implies that teacher education programmes are expected to give teachers the knowledge, attitudes, beliefs, values, and practical skills they need to deal with the diversity of students in today's classrooms. This has important implications for teacher training institutions like teacher education colleges and universities as well as for teacher educators who have a crucial role to play in pre-service teacher education programmes. However, one of the biggest obstacles to the implementation of inclusive education worldwide, particularly in developing nations like Ethiopia, is the preparation of teachers for this goal. The lack of teacher training is a shared global concern, despite the very different problems that nations in the Global North and those in the Global South confront when attempting to implement inclusive education (Nketsia, 2016). As

a result, it is still difficult for teachers to be adequately prepared to meet the needs of all students in their classrooms (UNESCO, 2015). As a result, the training of teachers for inclusive education has recently drawn more attention on a global scale (Kamenopoulou et al., 2016). The performance of different students in an inclusive environment is significantly influenced by the preparation of instructors for the effective implementation of inclusive education.

To sum up, inclusion entails creating an educational system that embraces the values of equity, diversity, and social justice as well as reflecting a significant change in the attitudes and behaviours of educational communities towards the provision of services for all students in inclusive settings (Abu-Heran et al., 2014). All those directly involved, especially classroom instructors, must be prepared and committed to the move towards the inclusion of all pupils in regular schools (Kurniawati et al., 2014). As a result of their critical role in educating children with a wide range of needs and skills, teachers serve as the major figures in the inclusion process (Kim, 2013). This suggests that teachers must address the process of teaching children in a way that is pertinent to their special educational needs (Abu-Heran et al., 2014); be sensitive to students' learning styles and levels of motivation (Das et al., 2013); design appropriate learning materials and adapt instruction (Pijl, 2010); and create environments in which active student learning is maximised. In order to successfully adopt inclusive practises, all of these positions necessitate that instructors gain new information, practical skills, values, behaviours, and beliefs (Shelile & Hlalele, 2014). Therefore, a crucial component of today's classrooms and schools is preparing teachers who are prepared to put the inclusion concept into practise and create a more inclusive educational system.

Additionally, the environment in which instructors are currently working is evolving quickly. The role of teachers has significantly altered over the past few decades, and new methods to curriculum and assessment have been implemented in many educational systems in both developed and developing nations (Forlin, 2012). Additionally, there have been revisions in several countries' laws around how learning challenges are defined, from special educational needs to additional support for learning. These adjustments have required a shift in emphasis from what is wrong with the kid to what the child needs to promote his or her learning, as well as the creation of new insights into the interactive nature of children's needs (Abu-Heran et al.,

2014). Such changes have had a significant impact on the roles and responsibilities of today's teachers, as well as their professional identity. This has important implications for how teachers are supported and trained, as well as for how they view their roles, status, and identity during their initial teacher education preparation for inclusive education (Zulu, 2014).

In this regard, the results of numerous research show the need to move towards inclusive teacher education that equips educators to operate in a more inclusive environment. This is due to the fact that teacher education for inclusion plays a significant role in modifying teachers' attitudes towards individuals with disabilities and/or attitudes towards inclusion (Forlin et al., 2011); improving teachers' self-efficacy and confidence related to teaching students with special educational needs (Sharma et al., 2011); and relieving their concerns about their knowledge related to inclusion and stress levels (World Bank, 2013). All of these factors have an immediate impact on what teachers teach. In order to ensure successful inclusion around the world, including Ethiopia, the movement towards teacher education for inclusion must be viewed as essential. Therefore, teachers must obtain professional development that is in line with an inclusive education philosophy in order to ensure successful and long-lasting inclusion. Despite this, many nations around the world, including Ethiopia, have not yet developed the process for training new teachers for inclusive education.

3.3. Teacher Education for Inclusion: An International Perspective

From the discussion above, one can understand that the pressing move towards inclusion is based on its basic principles, stating that all children should have the same access to education; that children learn best when learning together; and that recognising and celebrating diversity and enhancing opportunities for equal participation are central. This requires teacher education programmes to actively promote inclusive practices and to develop the relevant skills of future teachers who can best cope with the diversity of today's classrooms. Several studies also reveal that there is a strong link between the quality of teachers' competencies and knowledge and the achievements and progress of diverse learners in an inclusive setting (DeLuca, 2012). This implies that the appropriate preparation of pre-service teachers is a key factor that stands out in promoting the progress towards inclusive schools. In addition to this, a perception of inclusive education as a driver for more far-reaching change in the education system leads to the initiation

of teacher education for inclusion (UNICEF, 2013). Thus, as systems become more inclusive, the professional development of teachers is particularly important, because of the major new challenges that regular school teachers face (UNESCO, 2011).

While conceptualising the importance of teacher education in today's political arena, the American Commission on Teacher Education has noted that the quality of a nation depends upon the quality of its citizens; the quality of its citizens depends not exclusively but in critical measure upon the quality of their education; and the quality of their education depends more than any single factor upon the quality of their teacher (Rani, 2017). This implies that the quality and extent of learner achievement are determined primarily by teacher competencies, sensitivity, and motivation. Similarly, the International Council for Teacher Education has defined teacher education as a programme of education, research, and training of people to teach from pre-primary to higher education level (Boyd et al., 2008). This means that teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession, and face concomitant challenges. In this sense, teacher education involves all the formal activities and experiences that help to qualify a person to assume the responsibilities of a member of the educational profession, or to discharge his responsibilities more effectively and efficiently (Avalos, 2011).

Furthermore, Darling-Hammond (2006) suggests that teacher education programmes are required to encompass teaching skills, sound pedagogical theory, and professional skills as their basic elements to produce competent graduates for today's schools and classrooms. These teaching skills include providing training and practice in the different techniques, approaches, and strategies that would help the teachers to plan and impart instruction, provide appropriate reinforcement, and conduct an effective assessment, as well as effective classroom management skills, preparation, and use of instructional materials, and communication skills (Darling-Hammond, 2017). The pedagogical theory includes the philosophical, sociological, and psychological considerations that would enable the teachers to have a sound basis for practicing the teaching skills in the classroom, which is stage-specific and based on the needs and requirements that are characteristic of that stage (OECD, 2010). Professional skills include the

techniques, strategies, and approaches that would help teachers to grow in the profession and also work towards the growth of the profession, as well as soft skills, such as counselling skills, interpersonal skills, computer skills, information retrieval and management skills, and above all, lifelong learning skills (Rani, 2017). Thus, the amalgamation of teaching skills, pedagogical theory, and professional skills would serve to create the right knowledge, attitude, and skills in teachers, thereby promoting holistic development in learners.

Furthermore, teacher education issues are high on the policy agenda of many countries, where increasing attention is being given to inclusive teacher education programmes in particular (Zulu, 2014). Supporting this, many research studies reveal that teachers' attitudes, knowledge, skills, and understanding constitute major factors in the inclusion of all children in inclusive classes (UNICEF, 2013) that teachers are expected to draw from a repertoire of evidence-based initial training to meet the needs of diverse learners in an inclusive context (Graham & Scott, 2016). Thus, building the capacity for inclusion in education must include teacher education programmes that ensure that teachers are aware, ready, and willing to bring inclusion into action (Nguyet & Ha, 2010). Beyond this, in promoting inclusion, qualified teacher educators and teacher education institutions that are oriented towards inclusive education should be an integral part of the national education systems of any nation (Chitiyo et al., 2015).

Training teachers to address the diversity of learners and to develop inclusive educational environments for all is relevant and impactful for building a sustainable future, to which individuals learning today in universities should be given a chance to contribute (Cretu & Morandau, 2020). Teacher educators from different parts of the world make great efforts to empower future teachers to work within the framework of inclusive education. In this regard, Walton and Rusznyak (2016) state that teacher education for inclusive education has become a major focus in the context of intensifying the international policy agenda on inclusive education, which has resulted in an increasing diversity of students in inclusive classrooms. For instance, in 1994, the Salamanca Statement and Framework for Action called upon governments to ensure that pre-service teacher education programmes address the issue of inclusion in inclusive schools (UNESCO, 1994). The United Nations Convention on the Rights of Persons with Disabilities in

2006 emphasised the need to provide training that supports professionals working at all levels of education with persons with disabilities (Cretu & Morandau, 2020).

Similarly, in 2008, the participants in the UNESCO International Conference on Education agreed on the importance of a wider approach to inclusive education that ought to cater to the needs of all learners, and that can serve as a fundamental principle towards education for sustainable development and lifelong learning for all, where the role of tertiary education in training teachers about inclusive education was also clearly highlighted (UNESCO, 2008). Further, in 2015, the Education 2030 Framework for Action, including inclusive education as a part of the fourth goal, argues that inclusive school facilities and teacher training on inclusive education should be regarded as strategies to address the exclusion and marginalisation of children with disabilities (UNESCO, 2015). These initiatives and documents with worldwide impact highlight a growing political focus on teacher education for inclusion and the successful implementation of inclusive education in today's regular schools.

This implies that to build human resources in the field of inclusive education, teacher training must be done at all levels (Nguyet & Ha, 2010). Thus, teacher education programmes are able to ensure that initial teachers acquire the knowledge, dispositions, and performance skills required to succeed in educating all children before they get to school (EADSNIE, 2010). The practice of inclusion in education depends on the quality of professional training of teachers at initial teacher education levels to equip them and update their knowledge and skills to meet the needs and aspirations of a diverse school population (Andrew & Danladi, 2016). This is because supporting all learners' demands skilled, professionally autonomous, and committed regular classroom teachers, who can adapt teaching and curricula to the diverse needs of all students in regular classrooms (O'Gorman & Drudy, 2011). Thus, to have successful and sustainable inclusion in education, the professional preparation of initial teachers in the education system is mandatory and a pressing agenda item of the day.

Thus, the importance of teacher education for the development of inclusive education systems cannot be contested (Walton & Rusznyak, 2019), as it is expected to equip future teachers with the necessary knowledge, skills, attitudes, and values to teach diverse student populations in an

inclusive classroom (UNESCO, 2008). This means that higher education institutions delivering teacher education programmes are responsible for this aspect of their endeavour (Coates et al., 2020). In this regard, teacher educators are continuously exploring ways to make inclusive teacher education effective, where there is an on-going debate as to what components are needed for the successful preparation of teachers towards inclusive education (Symeonidou, 2017). The approach to inclusive education from the perspective of teacher education opens up two main avenues for analysis, viz.: initial and continuous teacher education for inclusion. In the present study, the focus is placed on initial teacher education for inclusion (Cretu & Morandau, 2020). Thus, how the issues of inclusive education are entertained effectively within the university-based initial teacher education programme for the Ethiopian secondary school context constitutes the question to be addressed in this study.

Initial teacher education is the first and most important step in a teacher's career. It establishes the foundations of a professional mindset, and equips new teachers with the necessary tools to facilitate meaningful learning in the classroom; it also provides a taste of future daily practice by allowing teachers to experiment in a safe and supported atmosphere where they can discuss, reflect, and share ideas or experiences with peers and experts (Miskolci, 2016). Above all, it increases the understanding of the complexities of teaching that helps in the development of dispositions to learn, relearn, and unlearn when situations and requirements change (European Commission, 2014). Further to this, initial teacher education is a rigorous programme that requires student teachers to be both learners and teachers at the same time, receiving assistance in learning how to teach and assisting students in learning how to learn (Mukhopadhyay et al., 2009). However, it is also intellectually demanding, since it necessitates analysing, questioning, and revising concepts in the context of practice; and it also has the potential to affect the entire person, including their attitudes, beliefs, emotions, knowledge, and competencies that can serve as catalysts for their own and others' learning (World Education Forum, 2015).

In support of this view, EASNIE (2015) has discussed that initial teacher education is pre-service training provided to student teachers before they have undertaken any teaching, eventually leading to a teaching qualification. It usually takes place in higher education institutions, particularly universities. In the context of this study, the term 'student-teacher' is used to refer to

students studying at a university for a professional teaching qualification or degree. Higher education institutions or universities are used in this study as generic terms referring to the establishment that provides higher education, particularly teacher education. As the first and crucial phase in a long and dynamic process of professional development, initial teacher education lays the foundation for inclusion in education in terms of fostering the knowledge, skills, attitudes, and values that initial teachers need to become inclusive educators and enhance learning in all pupils (Cretu & Morandau, 2020).

In this regard, Florian and Rouse (2009) argue that the task of initial teacher education is to prepare people to enter a profession that accepts individual and collective responsibility for improving the learning and participation of all children. This foundation ought to be strong enough so that, in time, initial teachers can develop the competencies required for inclusive teaching (Walton & Rusznyak, 2019). Abu-Heran et al. (2014) also claims that the way in which teachers are trained through their initial teacher education plays a critical role in how they employ inclusive education strategies when teaching full-time in schools. Furthermore, to address the issue of inclusive education, there is a widespread acceptance that our regular education sector must ensure that teachers are trained to teach effectively in classrooms, where there are students with a variety of learning needs (Kurniawati et al., 2014). Furthermore, several researchers have also concluded that successful implementation of inclusion reforms depends largely on the goodwill of teachers, including teachers' perceptions, attitudes, and opportunities for collaboration, which is expected to be done during their initial training (Loreman, 2017).

Similarly, Lambe and Bones (2006) contend that the initial teachers' training stage is the most effective time to nurture favourable attitudes and build confidence through the provision of high-quality training. Thus, the preparation of initial teachers for inclusion requires appropriate and dependable training during initial teacher education that enables them to use a greater range of teaching strategies and have increased access to professional advice on approaches to inclusive education (Forlin et al., 2011). In addition, Sharma et al. (2013) state that the successful implementation of policy reform for inclusive education depends most importantly upon how adequately the initial teachers are prepared to implement the reform. Further, Miskolci (2016) argues that, if initial teachers have developed inclusive practices at university, then these

practices will be maintained throughout their teaching careers. Thus, teacher education for inclusion ought to be at the centre of inclusive education reform, since it paves the way for the successful implementation of inclusive practices (Watkins & Donnelly, 2014).

Considering this real need, over the last decades, many teacher education programmes have gone through a reform process, in terms of both structure and curriculum, to find better ways to prepare initial teachers for the demands of inclusive education (UNESCO, 2018). In this regard, teacher educators have an important role to play in ensuring that teacher education programmes help prospective teachers to respond wisely to diversity (Florian, 2009). However, they have been challenged regarding how to address inclusive education as an essential component of teacher training, to implement curricular approaches embedded with various aspects of inclusive education, or even to develop their own skills in the field to train future teachers (Symeonidou & Phtiaka 2014). The initiatives and efforts they made have generated research and projects that focused on issues related to teacher training for inclusive education. In support of this, Symeonidou (2017) highlights the increase in the number of research or projects addressing teacher education for inclusive education and note their evolution from the inclusion of learners with special educational needs towards broader issues of social inclusion.

Even if promoting inclusion is a core aim of many initial teacher education programmes across the globe, international studies demonstrate that new teachers continue to feel unprepared to address issues of diversity in an inclusive setting (Kurniawati et al., 2014). The challenges of teachers in developing inclusive practices are attributed to the inadequate professional development that hinders them from providing quality education to students with diverse needs (Shevlin et al., 2013). This has been commonly found during the implementation of inclusive education in many countries, such as Cyprus (Symeonidou & Phtiaka, 2014), Australia (Woodcock et al., 2012), Bangladesh (Malak, 2013), South Africa (Nel et al., 2011), Zimbabwe (Jenjekwa et al., 2013), US (Cornelius & Nagro, 2014), and Ghana (Nketsia, 2011). Studies in the above countries reveal that the inadequate training of initial teachers constitutes the primary challenge in meeting the needs of children with diverse abilities in an inclusive setting (Forlin et al., 2009). These perceptions of inadequacy in teacher preparation are problematic as, without

the requisite tools to become inclusive practitioners, teachers are unable to effectively meet the needs of their diverse learners (Sharma et al., 2012).

In support of this, Arthur-Kelly et al. (2013) state that negative attitudes, ambiguous beliefs, and fragmented or unclear concepts of inclusive education among teacher educators and concerns about the lack of resources and inadequate preparation of teachers are among the many challenges that hinder the successful implementation of inclusive education. In addition, Forlin (2010) and Rouse (2010) state that teacher educators involved in the training of initial teachers lack confidence and use curriculum structures and instructional strategies that may not prepare confident initial teachers to teach in inclusive classrooms. Furthermore, Allday et al. (2012) and Harvey et al. (2010) found that practicum experiences provided to initial teachers are inadequate, where shorter inclusive education course lengths are a challenge in preparing initial teachers properly. This reveals that teachers' readiness and willingness to accommodate the diverse learning needs of all children in inclusive settings is determined by their initial training; and inclusive education preparation for pre-service teachers ought to be the key focus for all (Forlin et al., 2015).

For inclusion to be implemented effectively, changes to teacher education programmes are needed, and this must not be sidelined due to other so-called pressing agendas for universities. In this regard, many studies have been conducted internationally on how best university-based teacher education programmes prepare initial teachers for inclusion in education over the last two decades, but little is known about what constitutes effective teacher education for inclusion in both developed and developing countries of the globe (Kim, 2013). There have been heated debates and discussions about the components that ought to be addressed in initial teacher education programmes for inclusion, as well as how effective those preparations are in preparing graduates for the challenges of inclusive education (Rouse, 2010). In this regard, one recurring theme that dominates the discussions about the components of initial teacher education for inclusion is how to achieve a balance among the knowledge, practical skills, and attitudes and beliefs the graduates ought to have (Kurniawati et al., 2014). This implies that when students learn in an environment where teachers do not hold positive attitudes about diverse learners, where they lack confidence and are ill-prepared to teach students with a wide range of learning

needs, learners who struggle cannot achieve both their social and academic potential (Forlin, 2012).

Supporting this view, Forlin (2010b) argues that preparing teachers for inclusion requires them to gain both theoretical and practical knowledge. But this does not guarantee that they will value all the children in their class equally, which is one of the fundamental principles of inclusive education. For inclusive education to play the role of enhancing the capacity of citizens and informing important choices for their welfare effectively, the issue of access needs to be accompanied by quality instruction. This, in turn, necessitates teachers being qualified in order to do their job effectively, being reflective and change-oriented in order to meet the societal demand for quality education, and taking into account the dynamic nature of the learners and society at large (Walker, 2016). Thus, in addition to gaining formal and practical knowledge during their training, teachers need to develop positive values, supportive ideas, high moral principles, and strong ethical understanding regarding accepting responsibility for the education of all children in an inclusive setting (Muyungu, 2015); and hence, adopting inclusion as a philosophy that underpins initial teacher education will help the newly graduated teachers to be more positive, to value diversity, and to become knowledgeable about inclusive teaching.

In this regard, several researchers have identified the quality of teacher preparation during pre-service teacher education as an important factor for the successful implementation of inclusive education (Bechham & Rouse, 2011). During pre-service education, teachers may or may not acquire knowledge and experience relevant to teaching in inclusive classrooms. Researchers have argued that a well-designed initial teacher education programme positively impacts on the uncertainties felt by pre-service teachers regarding inclusive education (Ahsan et al., 2013); pre-service teachers who engage with appropriate pedagogy for inclusive education demonstrate their preparedness by displaying welcoming attitudes and high levels of teaching-efficacy for a diversity of students (Sharma et al., 2009); and they are able to use teaching approaches that address individual learning needs of all students in an inclusive classroom (UNESCO, 2018).

This being the case, however, there is a significant body of international research that confirms that initial teacher education programmes have not yet prepared teachers well for inclusive

teaching (Abu-Heran et al., 2014; Symeonidou & Phtiaka, 2014). To cite some examples, Das et al. (2013) found that 70% of their sample of 349 primary school teachers in Delhi had neither received any training in inclusive education, nor had experience with teaching students with diverse needs. This finding is also supported by Bhatnagar and Das (2014), who conducted focus group interviews with 20 secondary teachers selected from four administrative zones in New Delhi. The secondary teachers in this study did not feel prepared to teach students with diverse needs in their classrooms. Similarly, Bukvić (2014) surveyed 86 Croatian teachers, who were employed in regular schools where students with special educational needs were enrolled. The findings indicated that 70% of this group reported having little to no knowledge about how to teach students with special educational needs. Abu-Heran et al. (2014) also presented a questionnaire to 340 teachers randomly sampled from the teaching population of Palestine. The process of inclusive education as described by the researchers was in its infancy stage in that year. Palestinian teachers were generally concerned about the inadequacy of their preparation for the inclusion of diverse children into regular classrooms. In addition, in Cyprus, Symeonidou and Phtiaka (2014) also found that teachers were dissatisfied with their initial teacher education for inclusion.

Researchers have also suggested that well-prepared pre-service teachers are better able to face resistance to inclusive education (Forlin, 2010). For example, Bechham and Rouse (2011) reported that initial teachers often experience anti-inclusion views from teachers during their practicum placements. When teacher education programmes were based on democratic principles of equity and consistent with inclusive education, they were highly motivated to teach and establish inclusive practices despite the challenges and difficult circumstances associated with negative views and resistance to inclusive education (Ahsan et al., 2013). Thus, teachers' preparedness during initial teacher education programmes can be considered an indicator of their future success in inclusive classrooms. In addition, teacher education reform for inclusive education needs to move beyond embedding inclusive education courses into the existing programmes so as to provide pedagogy that supports teachers to be confident and to provide high-quality teaching that meets the learning needs of all children (Slee, 2010).

Similarly, Ahsan et al. (2013) noted that the aim of initial teacher education programme is to equip trainee teachers with the necessary competency to teach diverse students in inclusive classrooms. From their findings, they conclude that simply attending an inclusive teacher preparation programme is not sufficient for developing positive values and beliefs, and that female teachers' show more positive attitudes towards inclusive education than males. They further claim that curriculum content, practicum opportunities, and experience with children with disabilities were all deemed to contribute to the better preparation of teacher candidates for inclusive classrooms. In addition, EADSNE (2010) completed a literature review on teacher education for inclusion in terms of curriculum. As a result, they further recommend that an initial teacher education curriculum ought to include information about diversity amongst the school population, as well as how to translate theory about responding to diversity into practice.

Beyond this, inclusion requires commitment from a range of stakeholders, including governments, teacher training institutions, schools, teachers, and the school community, if it is to be successful (Bustos et al., 2012). As we move towards an inclusive future, it is teacher training institutions that will become pivotal in ensuring that teachers have the appropriate attitudes and skills to further this agenda (Sharma et al., 2008). These aspiring teachers must have enrolled in and mastered the pedagogy of implementing inclusive education in their teaching, methodologies, and viewpoints from the moment they entered their pre-service teacher education to their workplaces later (Pearce et al., 2009). As early as in their pre-service career, they have to develop concern for children with diverse needs and transform negative attitudes in order to eliminate the prejudicial aspects of being a teacher towards these children (Angelides, 2008). This implies that universities offering teacher education for inclusion ought to properly train their pre-service teachers such that they can manage the challenges of today's inclusive classrooms.

More specifically, the European Agency for the Development of Special Needs Education (EADSNE, 2012) suggests that initial teacher education for inclusive education ought to promote reflection on issues of the norm, difference, inclusion, intercultural education, positive attitudes and high expectations, innovative skills in assessment, good communication, and information and communication technology. It further states that teacher educators ought to provide

developmentally appropriate content, as well as clear instructions for student-teachers; opportunities for student-teachers to practice at an appropriate level of difficulty and participate in appropriately designed task progressions; and accurate feedback on and assessment of subject matter and role performance (Symeonidou & Phtiaka, 2014). In support of this, Bustos et al. (2012) suggest that inclusive education is not about training special teachers for special children, but about getting teachers to challenge the way they conceptualise difference and educational failure in our day.

Furthermore, Di Gennaro et al. (2014) have advocated for the training of teachers in critical reflection as a means of assisting them to become perpetual problem solvers, who analytically question what is happening in their classrooms. They have also suggested a means of developing reflective practice for initial teachers that includes the use of reflective journaling, portfolios, mind-mapping, storyboarding, scenario-based role plays, micro-teaching, and video reflection; and also urge that teacher education training ought to aim to reorient teaching methods to be in line with inclusive values and support teachers in handling the complexity characterising the educational context of the twenty-first century. Similarly, Zion and Sobel (2014) undertake an evaluation activity to map out gaps in teacher education programmes for inclusion across the US. Their findings revealed disparities across teacher education programmes in four critical areas, namely: socio-cultural knowledge; affirmative attitude; collaborative skills; and pedagogic diversity. Further, Harvey et al. (2010) have conducted a study to explore teacher preparation for inclusion to find that educational institutions in the US had made an effort to address concerns in the literature about the preparation of teachers for inclusive education; that course works were offered to initial teachers across all departments; and that all students were taking introductory courses in the area of inclusive education.

In Serbia, studies conducted by Stankovic (2011) found that pre-service teacher education institutions focus on instilling disciplinary knowledge, rather than on building skills and competencies for inclusive education. They further revealed that the teacher educators considered themselves to be ill-prepared, and pointed to insufficiently reformed initial teacher education, among other factors. In support of this, Milovanovic et al. (2010) found that the content and methods of pre-service teacher education programmes in Serbia are generally

outdated and noted ineffectual promotion inclusive practices in education. In addition to that, they revealed that although the curricula lack the elements most relevant for inclusion currently, they do contain some subjects intended for future teachers working with students with special educational needs, which are mostly based on the medical model that fosters knowledge of defectology, contrary to the philosophy of inclusive education.

In Scotland, Florian et al. (2010) reviewed the Professional Graduate Diploma in Education (PGDE), a one-year full-time or two-year part-time course offered jointly by the University of Aberdeen and associated schools. The PGDE programme was revised to ensure that social and educational inclusion was addressed within the core of the programme rather than being an optional pathway selected by a few initial teachers. The focus of this course was on inclusive pedagogy, or the creation of lessons and learning opportunities that enable all learners to participate in classroom life. The researchers reported that the reformed course addressed three challenges, namely: (i) how inclusive teacher education might take the difference into account from the outset (knowing); (ii) how teachers might be convinced that they are qualified to teach children with additional needs (believing); and (iii) how teachers might learn new strategies for working with and through others (doing). Through their research into the PGDE, Florian et al. (2010) actively encouraged the reflective practice of lecturers and students for the successful enactment of inclusive pedagogy.

In Zimbabwe, Mafa and Makuba (2013), in their research entitled mainstreaming inclusion in teacher education, found that teacher trainees need to be exposed to a variety of teaching methods, and conclude that the curriculum on teaching strategies ought to include pupils' styles of learning, as these influence the teacher's choice of what teaching methods to use. They further suggested that the curriculum ought to include a multi-sensory approach so that readers can make use of available pupils' senses in their teaching, as well as task analysis to ensure mastery of complex concepts, remediation compaction, and scaffolding, in order to deal with pupils' different rates of learning and assessment of diverse pupils' work (Mafa & Makuba, 2013). In support of this, Mandina (2012) found that teachers trained in the mainstream are equipped with traditional and progressive methods or strategies of teaching in Zimbabwe, which includes

lecture methods, demonstration, discovery, project, excursion, question, and answer, drama, to mention a few.

The above discussion implies that the growing international recognition that reforms in university-based initial teacher education are essential for the successful implementation of inclusive education. In support of this, many educators and researchers (Florian et al., 2010) called upon teacher educators not only to examine their students' attitudes towards diversity and the accommodation of that diversity within inclusive classrooms, but also to engage in self-study and internal evaluations to better understand their capacity to infuse diversity issues throughout teacher education curriculum. In this regard, they identified three key concepts associated with the development of inclusive practices that ought to underpin teacher education for inclusion. These include the understanding that the challenge of inclusive practice is to respect and respond to human differences in ways that include learners; the understanding that this is manifested when the teacher works to extend what is ordinarily available to all as opposed to doing something additional from that which is available to others; the understanding that the complex pedagogical endeavour depends on a shift in thinking about teaching and learning towards the creation of lessons and learning opportunities, which enable all learners to participate in classroom life; and that this shift in thinking about teaching defines the basic principles of inclusive pedagogy, which is the theoretical framework of the current study (Forlin, 2010).

Supporting this view, Florian (2009) utilised a community of practice approach to investigate teachers' understandings of inclusive pedagogy, and found that inclusive pedagogy represented a significant paradigm shift from teacher-directed teaching to students, with special educational needs as contributors of knowledge. Florian's paradigm shift concerning inclusive teaching is significant in transforming traditional beliefs about children with special educational needs, where as a consequence, many teachers found it difficult to implement. In this regard, Florian and Black-Hawkins (2011) examined teachers' professional being, knowing, and acting as inclusive teachers using inclusive pedagogical approaches for action (IPAA) in two Scottish primary schools. They found that the IPAA framework extended what is ordinarily available to every student, whether or not they are labelled as students with special needs. They further stress that it is a pedagogical approach that focuses on everybody in the community of the classroom.

In addition, IPAA is based on a philosophy that transforms deterministic views of ability and children's cognitive development and replaces them with the concept of transformability (Spratt & Florian, 2014).

Another piece of research in this area is by Makoelle (2014), who explored inclusive pedagogy with selected inclusive practitioners in one education district in South Africa. The findings revealed that the teachers lacked a universally accepted definition of inclusiveness. However, the various meanings associated with inclusive pedagogy by teachers were related to their context, philosophies, and underlying assumptions about special educational needs and ability. These perspectives are consistent with the findings of Florian and Black-Hawkins (2011) that teacher beliefs and practices of inclusion, if situated in positivist orientations, advocate for a change of behaviour in the learner. However, if framed by a constructivist perspective, it supports full inclusion and privileges learning through discovery (Florian & Kershner, 2009). This means that the philosophical assumptions have strong power in influencing teachers' knowing, being, and becoming inclusive teachers, where teacher professional learning must focus on transforming the philosophical assumptions of teachers towards constructive perspective in order to shift their perspectives to new ways of working to cater to the needs of all children (Rouse, 2009).

Furthermore, teacher education institutions throughout the world are also seeking better ways to prepare pre-service teachers for inclusive education, by targeting teaching practicum experiences. For example, Kim (2013) has researched in the mid-west university of the US that had an inclusive laboratory school. Kim's findings were that those students with field experience in the lab school showed stronger teaching efficacy than did their counterparts, who had their field experience in less controlled settings. Correlational analyses revealed that field experience at the lab school was positively related to teacher efficacy in teaching children, with diverse needs concerning student engagement; instructional strategies; and classroom management. Kim further concluded that the best way to provide teachers with knowledge and skills for teaching children with diverse needs was to provide pre-service teachers with first-hand experience in an inclusive setting, where the curriculum and programme are professionally established according to disciplinary knowledge of best practice specific to inclusion.

Similarly, Hamman et al. (2013) found that practicing teachers who serve as mentors during field experience represent one of the most important sources of information accessed by pre-service teachers regarding how to provide instruction to students with diverse needs. In their study, three questionnaires were distributed to 337 pre-service teachers at a south-western US university on completion of their teaching practicum. One questionnaire asked pre-service teachers about inclusive education in the practicum. The second questionnaire focused on collaboration with supervising teachers, and the third questionnaire targeted evidence of teaching efficacy. The findings of this study were that both scaffolded collaboration and a focus on inclusion contributed to pre-service teachers' sense of efficacy for implementing inclusive practices. Importantly, they conclude that conscientious, collaborative, co-operating teachers make an important contribution to the capabilities of their students. Thus, exposure to teaching practicum is supportive for initial teacher preparation for inclusive education.

In this sense, an initial teacher education programme that promotes the basic principles and philosophy of inclusion in education, collaboratively agreed on by stakeholders, and comprehensive in addressing basic elements of effective teacher training for inclusive education is needed (UNESCO, 2012). Armstrong, Armstrong, and Spandagou (2010) argue that the move towards teacher education for inclusive education is fundamental, where amongst other relevant prerequisites, that it is necessary to successfully reform the education system of a nation for the ever-expanding challenges of the 21st century. However, the development of teacher education for inclusion is challenged by the narrow understanding of inclusive education related to several traditions in education: children with special educational needs were usually educated in special schools, children's non-enrolment, absences, and early school-leaving were readily accepted; and deep-rooted beliefs regarding the separate pre-service training for professionals working in the special school sector across the globe (Milovanovic, 2012).

While it has been established that field experience or teaching practicums or collaboration among stakeholders are important for the successful implementation of inclusive education, Atilas et al. (2012) sought to accurately estimate how much direct field experience early childhood pre-service teachers had with students who experienced disabilities. These researchers surveyed 165 pre-service teachers attending a mid-west university in the United States. The

measures of positive efficacy made by these pre-service teachers related to the amount of time they spent in inclusive classrooms. However, the results were not simply contingent on the number of hours the pre-service teachers spent in inclusive settings: instead, high efficacy was found to be systematically related to the ratio of children with disabilities to typically developing peers in their practicum classrooms. They further acknowledge that it may not always be possible to find placements with high ratios of students who present with learning disabilities. They suggest, instead, that the focus ought to be on identifying mentoring teachers who model best practice interventions, and that teacher candidate ought to be guided to reflect on their observations of and experiences with, these mentors.

Hence, to provide quality education for all, initial teacher education for inclusion must be adjusted in such a way that the graduates can accommodate a greater diversity of learners in inclusive settings. Studies indicate that there is a strong link between teachers' preparation and educational quality, especially in the areas of teachers' beliefs and practices, student learning, and implementing educational reforms, including inclusive education (Jordan et al., 2009). Nevertheless, teachers do have concerns about inclusion and teachers' attitudes towards inclusion are not particularly positive. Further, they express concern about their lack of preparation for inclusion, and for teaching all learners (Rouse, 2010). This requires teacher education institutions to provide initial teachers with balanced content and facilitate the development of knowledge, skills, and positive attitudes towards inclusive education; this needs reform and investigation as to the extent to which teacher education programmes are effective in this regard (Young, 2018).

Similarly, Forlin and Chambers (2011) have suggested that initial teacher education programmes that prepare teachers for inclusion need to be re-evaluated to ensure teachers' efficacy in knowing (knowledge), being (values), and doing (skills), since there is insufficient data to judge the appropriateness and adequacy of teacher education for inclusion across the nations based on their historical, socio-cultural, and political context. They also suggest that critical analysis of what these programmes actually consist of and the ways in which they can be considered effective in preparing teachers to be inclusive practitioners proves important. Further, Rouse (2007) suggests that developing effective inclusive practice is not only about extending teachers'

knowledge, but also about encouraging them to do things differently and getting them to reconsider their attitudes and beliefs. In other words, it should be about knowing, doing, and believing. He further discusses that, if two of the three aspects of development (knowing, doing, and believing) are in place, then it is likely that other aspects will follow. This means that if teachers acquire new knowledge and are supported in implementing the new practice, then attitudes and beliefs will change over time. Equally, if teachers already have positive beliefs and are supported in implementing new practices, then they are also likely to acquire new knowledge and skills (Rouse, 2007).

There is increasing recognition that effective inclusive teachers who cater to the needs of all children within regular neighbourhood schools and classrooms need to exhibit positive traits and skills in three areas, namely: head, heart, and hands. In support of this, Rouse (2010) argues that there ought to be a change in the ways inclusion is conceptualised and its realisation can only be achieved if all teachers are supported in the development of all aspects of knowing, doing, and believing. According to him, the development of cognitive knowledge and the theoretical basis of the profession represent the head; the development of ethical and moral attitudes and beliefs reflected in one's behaviour represents the heart; and the acquisition of technical and practical skills necessary to carry out the essential roles of the profession represents the hands. Each of these areas has been under investigation by various researchers examining teacher attitudes and inclusion, for example, by Sharma et al. (2008); inclusive teaching skills, for example by Florian and Linklater (2010); and knowledge acquisition relative to inclusive teaching, for example by Coates (2012). All agree that these elements are critical in the preparation of effective initial teachers for the practice of inclusive education.

In support of this, Shulman (1986) also claimed that a crucial element in the development of inclusive practice is better preparation of and support for teachers that incorporate three essential elements, namely head, hands, and heart, which he refers to as the "three apprenticeships". The apprenticeship of the head implies the cognitive knowledge and theoretical basis of the profession; the apprenticeship of the hand includes the technical and practical skills that are required to carry out the essential tasks of the role; and the apprenticeship of the heart is the ethical and moral dimensions, the attitudes and beliefs that are crucial to the particular profession

and its ways of working (Shulman, 1986). This being the case, however, the way in which these three essential elements, namely knowing, doing, and believing, relate to the development of initial teacher education for inclusion in Ethiopian teacher education universities is an important question here.

Furthermore, Smith and Tyler (2011) argue that the problem of how best initial teachers are prepared to work most effectively in inclusive settings has yet to be solved. They also claim that even if inclusive practices have been implemented for decades, teachers are consistently reporting that they feel inadequately prepared to meet the learning needs of diverse students. Similarly, Crowe (2010) affirm that teacher education programmes in many countries have not yet produced competent initial teachers to meet the demands of the more difficult-to-teach students in today's schools. They further claim that the evaluations of initial teacher education programmes have so far supported the conclusion that such programmes insufficiently address the task of preparing future teachers to teach all students well, but the problem is rooted not only in initial teacher preparation but also in professional developments. The challenges stated above are compounded by the rapid growth of new knowledge about effective teaching practices in an inclusive setting, particularly the issue of inclusive pedagogical approaches (Florian & Spratt, 2013). Thus, an effective initial teacher education programme for inclusive education is required, as well-trained teachers make significant differences in the lives and educational achievement of their students.

Consistent with the increasing diversity of students in today's classrooms worldwide, there is a great concern about the extent to which teachers are equipped to secure learning for all (Walton & Rusznyak, 2014). In response to this concern, Forlin (2010a) argues that a growing research base is yielding a repertoire of innovative approaches to prepare teachers for inclusive classrooms, particularly in terms of content, or what pre-service teachers need to know. In this regard, Loreman (2010a) has reviewed the literature on pre-service teacher education for inclusion and presents seven essential skills, knowledge, and attributes for inclusive teachers, which he refers to as outcomes for pre-service teacher preparation, namely respect for diversity and an understanding of inclusion; engaging in inclusive instructional planning; instructing in ways conducive to inclusion; engaging in meaningful assessment; fostering a positive social

climate; collaboration with stakeholders; and engaging in lifelong learning. These seven areas serve as a useful framework for understanding what is required for pre-service teachers to begin working effectively in inclusive classrooms. Picower (2011) also adds that in order to be effective in promoting inclusion, pre-service teachers need to develop critical sensibilities that enable them to recognise injustices and identify and resist the exclusionary pressures and practices that prevail in schools.

Several studies have also examined the professional preparation of teachers for inclusion in the African context. For instance, Majoko (2017) established that Zimbabwean mainstream teachers lack professional preparation to practice inclusion in early childhood development. Similarly, Mukhopadhyay et al. (2009) found that in Botswana, special education student-teachers were not professionally prepared to meet the learning needs of all children in regular school setting, because they lacked an effective teacher professional preparation model for inclusion. In addition, Chitiyo et al. (2015) established that professional preparation programmes for special-needs educators in Kenya, Malawi, Zambia, and Zimbabwe did not equip them to meet the needs of all children in mainstream classrooms. Further, Muyungu (2015) found that in Tanzania, most of the pre-service student teachers had limited knowledge about the concept of inclusion and its practices due to a lack of inclusive and special education-related courses in their teacher education curriculum. The findings from the above countries imply that programmes for professional preparation of teachers for inclusive education ought to provide student-teachers with training on both the pedagogical knowledge around collaboration and the pedagogical skills necessary to collaborate. However, the transferability of the findings of the above studies to the Ethiopian context is unknown, as these were carried out in other countries, whose contexts are different from Ethiopia. Thus, the current study is intended to examine the effectiveness of the PGDT programme in supporting pre-service teachers to develop the core competencies necessary for the successful implementation of inclusive education in the Ethiopian secondary school context.

Inclusive education has become a global trend in the 21st century and is seen as a way of addressing barriers to learning for children with diverse backgrounds, needs, abilities, and learning styles. The key to the success of the implementation of inclusive education lies in

teacher education, as this is where teachers are trained. Teacher education is thus expected to equip pre-service teacher trainees with relevant and effective strategies to enable them to implement inclusive education effectively in their schools in response to learner diversity. In this regard, Forlin (2012) argues that there is a need to have teachers who are better trained to provide inclusive practices for learners with diverse needs, and this requires appropriate and effective training to be available for all pre-service teachers. Thus, studying whether newly qualified teachers feel adequately prepared to provide effective and appropriate instruction for students with diverse needs and conditions that promote inclusion in initial teacher education programmes remains a persistent and pressing issue facing teacher education today (Makiwa, 2017).

Taken together, the issues discussed above foreground the need for investigation into the effectiveness of university-based teacher education programmes incorporating inclusive education experience. Thus, today's teachers ought to be prepared to provide quality education for all children in an era of ever-changing demands that include increasing accountability mandates, new knowledge of evidence-based practices, and enduring social concerns (Israel, 2009). The researcher also argues that if teachers are acquainted with the knowledge, attitudes, and practical skills needed for the successful implementation of inclusive education during their initial teacher education programme, then these will be maintained throughout their teaching careers. In this regard, the current study was aimed at exploring the extent to which the PGDT programme offered in Ethiopian teacher education universities has truly kept up with the changes and reforms of inclusive education and is adequately meeting the needs of initial teachers for practicing inclusion in an Ethiopian secondary school context.

3.4. Components of Effective Teacher Education for Inclusion

In recent decades, educational systems across the world have experienced major changes. One of these changes is related to the increase in the diversity of school populations (Isaac & Dogbe, 2020). This means that the educational system is increasingly becoming responsible for including a large number of pupils and for providing a differentiated and appropriate education for everyone (UNESCO, 1994). In this sense, ensuring quality education for all through appropriate curricula, organisational arrangements, teaching strategies and resource use is

critical. This can be done in partnership with their communities and in their education system to achieve quality learning outcomes. Improving the overall well-being of all learners is, thus, the ultimate goal of many countries across the globe, including Ethiopia. As educational systems become more inclusive, UNESCO (2011) emphasised the fact that professional development is particularly important because of the major and new challenges that confront regular school teachers who have to respond to a greater diversity of students' needs. This implies that ensuring that newly qualified teachers have a basic understanding of inclusive teaching in inclusive schools is the best investment that can be made (Isaac & Dogbe, 2020).

Similarly, Obi et al. (2005) indicate that the adoption of the inclusive ideology means that regular classroom teachers must be prepared to teach children with diverse needs. This implies that if teachers are to be trained in inclusive approaches, then their training programmes also must be organised on inclusive lines. Further, UNESCO (1994) points out that in teacher training institutions, specific attention ought to be given to preparing all teachers to exercise their autonomy and apply their skills in adapting curricula and instruction to meet pupils' needs, regardless of their disabilities. Teaching in an inclusive environment needs to attend to the intellectual quality, relevance, social support, and recognition of difference. However, the challenge for initial teacher education is to equip teachers with the right attitudes, knowledge, skills, and competencies for the successful implementation of inclusive education policy (Forlin, 2010). Several studies from both developed and developing countries have found that initial teacher education programmes do not adequately prepare teachers to teach in inclusive settings. Teachers also felt unequipped with the knowledge and skills to address the needs of children with special needs and disabilities (Isaac & Dogbe, 2020).

This implies that a large responsibility lies on the shoulders of colleges and universities offering teacher education to properly train their initial teachers and review the curriculum they are offering to their students by emphasising teachers' competencies pertinent to the development of inclusive education practices. Effective initial teacher training programmes are critical because student-teacher seems to make the first contact with their future workplaces during their initial teacher education. Considering this real need, over the last decades' many teacher education programmes have gone through a reform process in terms of structure, curriculum, and

components to find better ways to prepare teachers for the demands of inclusive education. Several research studies have also questioned the effectiveness of the preparation of initial teachers for inclusive education (Cretu & Morandau, 2020). Thus, the effectiveness of teacher preparation in catering for diversity has become a key focus in many recent research reports; but there have been strong debates and discussions about what constitutes effective teacher education for inclusion, and to what extent those preparations are effective in preparing the graduate for the challenges of inclusive education (Chambers & Forlin, 2010).

From the above discussion, there is a need for countries to step up the process of teacher education for inclusion and embed it more in a broad inclusion framework. In doing so, a number of different models could serve as the basis of such redesign and adaptation, but they tend to be inconsistent (Kubacka & D'Addio, 2020). Questions remain about what constitutes high-quality training and how it should be delivered in different parts of the world. The starting point for the process can be an agreement on the core elements, components, and indicators that can guide teacher education and professional development for inclusion (Pearce, 2008).

For example, EASNIE (2012) identified four basic elements, components, and quality indicators necessary for effective teacher education for inclusion, namely: supporting all learners, working with others, valuing learner diversity, and engaging in professional development. In supporting all learners, teachers are expected to promote academic, practical, social, and emotional learning as well as engage in effective teaching approaches in heterogeneous classes based on an understanding of a variety of learning processes and how to support all learners. In working with others, teachers are required to work with parents and families to engage them effectively in the learning of their children, as well as work with other education professionals, including collaboration with other teachers. In valuing learner diversity, teachers are expected to understand inclusive education based on a belief in equality, human rights, and democracy as well as respect, value, and view learner diversity as an asset and finally, engaging in professional development require teachers to be reflective practitioners that implies systematically evaluating one's performance, as well as view initial teacher education as the foundation for on-going professional learning (Florian, 2019).

The framework proposed by the European Agency is consistent with the advocacy work of many other organisations. For instance, the International Disability Alliance (IDA, 2020) calls for education system reform that would empower teachers with the knowledge, skills, and competencies to respect disability as part of human diversity and support for teaching and learning methods that are based on students' strengths rather than remediation. It also highlights the need for curriculum reforms that would support flexible, individual pathways leading to the competencies needed in the 21st century (European Commission, 2017). Further to this, inclusive approaches to teaching also require teachers to take responsibility for all learners by making a range of options available to everybody in the classroom rather than offering a set of differentiated options only to some (Florian & Spratt, 2013). For instance, adapted learner-centred approaches that establish measurable academic goals, address strengths and challenges related to learning, and mitigate social and behavioural challenges suitable for students with diverse needs (Hayes et al., 2018). To meet the standard of inclusion, these approaches should be applied in ways that do not exclude some learners from opportunities available to others.

In addition, Forlin and Sin (2017) state similar essential elements for teachers to make their classrooms inclusive with that of European Agency, including valuing learner diversity, supporting all learners, working with others, and personal and professional development. Further to this, Sokal (2012) suggests that the essential elements that help teachers to make their classrooms inclusive include knowledge about students' diversity and their teaching strategies, involving all students in all class and out-of-class activities, identifying additional supports and resources, conducting observations, record-keeping, and situation analyses, and collaborating with all stakeholders of the school. This implies that at an international policy level, there is an increasing focus on human rights and equity. Inclusion is now seen as a strategy to promote social cohesion, citizenship, and a more equitable society. Thus, a key policy priority for countries working towards this vision is to plan for more effective teacher education programmes that focus on empowering teachers to engage in inclusive practice to provide high-quality education for all learners (Florian, 2014).

Supporting this view, the European Union emphasises the following seven essential components to prepare initial teachers for inclusive education (Donnelly, 2010). First, the teacher education

programme should include awareness of the diversity of learners and social issues in their communities, due to the fact that the school is the point where different people engage and meet, and teachers have a pivotal role to play in encouraging everyone to participate, regardless of race, social status, and disability; second, teachers need to know how to recognise individual differences and implement learning strategies for all students; third, teachers need to know how to collaborate with other teachers and staff of the school to teach students with special needs, and need to have a good relationship with other stakeholders, including the school management committee and guardians; fourth, teacher education should be interpretative and comprise critical paradigms such that teachers can understand their tasks and are prepared to do action research to develop these; fifth, teachers need to connect with other institutions outside their schools such as other neighbourhood schools, to understand their educational skills and the support facilities of these schools; sixth, inclusive teachers should be cross-categorical or multi-tiered persons so that they can gather knowledge about the global and multicultural aspects of education and philosophical approaches; and seventh, teachers are required to learn from other experienced teachers who already know how to teach diverse students within one class (Donnelly, 2010).

Furthermore, Ikonimi et al. (2010) reveals that, during the research activities in Albania, teachers were encouraged to reflect upon and discuss their understanding of the competencies needed for inclusion. They identified key skills considered vital in modifying their teaching methods, classroom management, and relationship with students and parents to accommodate the demands of an increasingly diverse group of students based on their current practices. These skills include the ability to develop an understanding of diversity and the right of every child to learn and develop in the school nearest to their home; to gain knowledge about various disabilities and how they influence the learning processes of a child; to develop empathy and patience in dealing with both students with special educational needs and their parents; to be open and actively seek knowledge on student-centred teaching methodologies and individualised planning and teaching to meet the demands of students with special educational needs; and to develop and implement an individualised educational plan based on the specific learning ability of the pupil and create specific instructions for students with learning difficulties (Deppeler, 2012).

Similarly, several authors claimed that there is a specific body of knowledge for working with children with special educational needs that need to be adequately covered during initial teacher education (Michailakis & Reich, 2009). These involve gaining an understanding of the socio-cultural factors that produce individual differences or specialist knowledge about disability and children's learning needs; and an awareness of educational and social issues that can affect children's learning. Another distinct current stance, according to Florian and Rouse (2009), is that teacher competencies for inclusive educational practices ought to include skills relevant to the improvement of teaching and learning for all including the capacity to reduce barriers to learning and participation as inclusion is not only about special children. According to this view, teacher competence on inclusion ought to involve a multifaceted pedagogy that recognises how decisions informing teaching should take account of children's individual characteristics; the learning that takes place outside school; and learners' previous knowledge, individual and cultural experiences and interests.

In support of this, Loreman (2010) has indicated seven key areas that are critical for the success of beginning teachers in the inclusive classroom: an understanding of inclusion and respect for diversity; collaboration with stakeholders; fostering a positive social climate; instructing in ways conducive to inclusion; engaging in inclusive instructional planning; engaging in meaningful assessment; and engaging in lifelong learning. Forlin (2010b) also argues that teachers need to gain theoretical and practical knowledge, but also possess the belief that they are responsible for the education of all of their students regardless of their diversity. It is no small task, but one that is essential if our next generations are to be healthy and valued members of society. The question remains as to how to structure our initial teacher education programmes for graduate teachers who are prepared to teach in inclusive classrooms, and how to help them to continue their professional development as they gain the experience of teaching. Further to this, there are arguments over whose job it is to develop inclusive teachers. From the various research findings, it is evident that for inclusive education to be effective, teachers need to believe that all students belong in the regular classroom, feel confident in teaching all students in the regular classroom, and have the knowledge and skills to do so (Copfer & Specht, 2014).

In addition to the core components and associated competence indicators necessary for effective teacher education for inclusive education, many research studies discuss the effectiveness of different approaches and models to the preparation of initial teachers for inclusion. For example, Stayton and McCollum (2002) identified three models that exist in programmes that train teachers for inclusion, namely: the infusion model, the collaborative training model, and the unification model. In the infusion model, student-teachers take 1/2 courses that cover inclusive education. In the collaborative training model, many more courses deal with teaching inclusive classes, and mainstream teaching students and special education students do all or part of their practical experiences together. In the unification model, all students study the same curriculum that trains them for teaching mainstream education, with a focus on pupils with special needs. Pugach and Blanton (2009) also refer to these models as discrete, integrated, and merging models and point out that these form a continuum from least to most collaborative. In support of this, Wang and Fitch (2010) conclude that all initial teacher education programmes should embrace the key elements of successful co-teaching to train better collaborative teachers for 21st-century inclusive education.

Similarly, an approach that incorporates specific activities for inclusive education training in a general education subject is described by Pearson (2007). This is also referred to as the permeation or embedded model, and requires careful planning and monitoring if it is not to appear unplanned and incoherent. This content-infused approach is under-researched, but is supported by many studies including that of Loreman and Earle (2007). However, the findings of the studies stressed the need for strong coordination and leadership within this approach, and suggest that teacher education tends to 'get caught in the trap' of focusing on detail, for example, teaching about human rights, rather than taking an active human rights approach (Cardona, 2009). In this regard, the model most commonly described in the literature is that of mandatory or elective courses on inclusive and/or special education (Lambe & Bone, 2007), but Florian and Rouse (2009) argue that modules or units on special education in initial teacher education serve to reinforce the sense of separation that characterises special education and leads to the belief that such children are the responsibility only of those who have undertaken specialist courses.

Further, Florian and Camedda (2020) state that two main approaches have been promoted in addressing what teachers need to know about the differences between learners over the years. One has been to add content knowledge about difference and diversity to existing programmes through additional courses, the other has been to infuse specialist knowledge into existing courses. However, it has been argued that these approaches are insufficient to improve inclusive practice in schools, because, in addition to being theoretically incompatible, the content is decontextualised from the broader pedagogical and curriculum knowledge that student teachers have to learn and be able to apply in the classroom (Florian & Rouse, 2010). While few would disagree that more knowledge about the reasons that some learners experience difficulties in learning is needed, questions remain about the nature of this knowledge and how it can be embedded in teacher education programmes (EADSNE, 2012).

A growing number of teacher educators have begun to address this challenge through research and development projects termed teacher education for inclusive education, but did not provide advice as to how these values and competencies ought to be developed within different teacher education programmes (Forlin, 2010). Consequently, it has become increasingly clear that teacher education reform has an important role to play in supporting the development of inclusive education in addressing the dilemmas of access and equity in education (Florian & Pantic, 2017). These wider deliberations are reflected in a range of projects undertaken by teacher educators interested in developing a shared understanding of what it means to teach in ways that are inclusive of all learners regardless of any differences between them (Copfer & Specht, 2014). In this regard, Cochran-Smith et al. (2009) have pointed out that when issues of learner differences are presented as distinct content, issues of diversity become marginalised within teacher education programmes. In response, teacher education for inclusive education ought to consider how all teachers are prepared to work with diverse groups of learners, and the role that teacher education can play in achieving inclusive education (EADSIE, 2011).

In general, there are two approaches used to prepare student teachers to teach in inclusive settings, namely separate modules, and an embedded approach (UNICEF, 2014). In many countries, student teachers learn about inclusive education through separate modules or units. These modules, often called special needs education, are often optional and limited in time. As

these modules are not obligatory for all students, many miss the opportunity to prepare themselves for teaching in inclusive settings. Furthermore, the special modules can give the impression that inclusive education is different from 'normal' education, and not the responsibility of all teachers. It reinforces the idea that inclusive education requires special expertise. Within the embedded or permeated model, inclusive education forms part of training for all teachers, and is reinforced in every element of pre-service teacher training. It is more likely that teachers develop inclusive values and attitudes and feel responsible for all children through an embedded approach. It has been widely agreed that using a child-centred pedagogy and accommodating the needs of children with disabilities in the regular classes benefits all children. Introducing inclusive education to all student teachers through obligatory courses therefore increases the quality of education for all children (UNICEF, 2014).

More than ever before, teacher education requires strong links with other partners. In this regard, Darling-Hammond (2006) point out that the enterprise of teacher education ought to venture out further and further from the university and engage ever more closely with schools in a mutual transformation agenda, with all of the struggle and messiness that this implies. Similarly, Cochran-Smith (2008a) states that teaching practice, when consistent with the aims of social justice, always addresses the social distribution of resources and any relevant social discrimination. Regardless of which model is followed, a critical consideration for teacher education is how expertise develops. In support of this, Rytivaara and Kershner (2012) reflected on the interactive phases of development in order to gain a sense of the combination of scaffolding, collaboration, and developing action involved in gaining the know-how of an expert teacher. These phases are externally supported, transitional, and self-regulatory, and all depend on a transformational approach to learning, involving meaning-seeking, and looking beyond the immediate task.

The importance of initial teacher education in the quest to realise inclusive education systems is uncontested. What remain contested are the impact, form, and content of teacher education programmes. In this regard, scholars are struggling to demonstrate benefits for students and advancements in inclusion that are linked to specific types of teacher education (Florian, 2012). Teacher education course content is typically derived from the knowledge, skills, and attitudes

deemed necessary for inclusive teaching practices (Walton & Rusznyak, 2017). Despite the recognition of the importance of teacher education for inclusive education, and the proliferation of research on the topic, several issues remain under-explored. One such issue noted by the European Agency for Development in Special Needs Education (2012) is that initial teacher education programs lack an organised approach linking courses and field experiences within a conceptual framework. The concern about a disconnection between field experience and coursework is not limited to concerns about preparing pre-service teachers for inclusive education, but is echoed by others. Zeichner (2010), for example, identifies this as one of the central problems in university-based teacher education. The recognition of this disconnection has led to various initiatives which provide explicit opportunities for connections to be made between coursework in inclusive education and field experiences.

The importance of strong links between practice and theory is emphasised in many studies, where pre-service teachers have opportunities to enact the pedagogical-content knowledge explicitly taught in coursework units (Hopkins et al., 2018). In this regard, Salend (2010) argues for field-based experiences in inclusive educational settings that enable students to link theory and practice and apply the programme's competencies. Similarly, Gravett (2012) advocates for a teacher preparation model where students are expected to articulate their practical theories in making meaning of a real-life situation or dilemma that they have observed or experienced. The role of a teacher educator here is to facilitate reflections, provide case studies, and then draw pre-service teachers' attention to some pertinent aspects of their experience, subsequently introducing relevant theoretical perspectives. Therefore, to build the kind of expertise where pre-service teachers learn to draw an appropriate conceptual knowledge that informs their practice, initial teacher education programmes are expected to link the theory to the conceptual map of the field of knowledge (Winch, 2013). In support of this, Loreman (2010) indicates collaboration with stakeholders to be the key to success, and hence, more should be done to provide this type of knowledge in their pre-service teacher education programmes; particularly in the developing countries where inclusive education is practiced.

Furthermore, Zeichner (2010) suggests that traditionally, academic knowledge is viewed as the primary source of knowledge for preparing teachers. However, expanded learning opportunities

for prospective teachers remain essential to enabling improved complex teaching practices in the current educational climate. To become an effective resource for inclusive education, teachers must be provided with a curriculum that includes appropriate opportunities to practice what they have learned during their preparation in schools while receiving constructive feedback (Monteiro & Forlin, 2021). Many reforms of teacher education include enhanced field experiences, which are now a significant part of teacher preparation. Field experiences are considered key mechanisms in preparing prospective teachers to bridge theory and practice, and to develop pedagogical and curricular strategies (Hollins & Guzman, 2005). Further to this, Darling-Hammond (2010) suggest that extensive fieldwork, intensive supervision, expert modelling of practice, and using pedagogies linking theory and practice are critical in preparing prospective teachers. Such exposure will help the student-teachers to learn and organise their experiences, integrate and use their knowledge to adapt their practice in a well-grounded and innovative way, and to meet the specific classroom contexts they later encounter in real school settings.

In England, for example, coaching and mentoring to develop classroom practice has provided for professional development and teacher education (Lofthouse, 2018). These provisions include improvements in the quality of teaching, professional learning, and the facilitation of professional working relationships between teachers and the wider school community. Coaching has increasingly been recognised as an effective way to enhance teachers' self-efficacy and their capacity to improve teaching practice and skills and student outcomes. This approach has arisen to inspire motivation, reflective practice, and mastery of teaching (Trautwein & Ammerman, 2010). In support of this view, Tschannen-Moran (2010) suggests that a coaching model is a model that encompasses concern for consciousness, concern for connection, concern for competence, concern for contribution, and concern for creativity. Coaching has thus become an integral part of teacher preparation in many parts of the world, and can provide the necessary support required to improve the quality of teachers as inclusive practitioners (Monteiro & Forlin, 2021).

It has been accepted that knowledge production has moved out of universities to a greater emphasis on learning within the work environment. There is an increased expectation for teacher education to occur within a situated pedagogy, where teachers can develop an understanding of

real classroom practices and application (Darling-Hammond, 2017). The importance of teaching practice in schools with strong links between university theory and school pedagogy has been well-documented, acknowledging the value to be achieved through such collaborative links (Cochran-Smith & Lytle, 2009). Exemplary pre-service teacher programmes that have been found to produce well-prepared teachers include those that have robust university school relationships with shared beliefs and common pedagogical knowledge (Darling-Hammond, 2006). This implies that linking theory and practice is critical in preparing prospective teachers for the successful implementation of inclusive education.

To conclude, initial teacher education that extends beyond university-based learning to add professional experience for their pre-service teachers is widespread. In Australia for example, initial teacher education is driven by the need to make teacher preparation programmes more practical, so as to provide pre-service teachers with authentic opportunities to engage with professional learning communities (Morrison, 2016). This driver for change builds on critical understandings that cooperation between universities and schools is beneficial to prepare pre-service teachers for career entry rigorously. In support of this view, Jackson and Burch (2018) suggest that initial teacher education programmes could be more effective if they are collaborative, with the school and the university working together, rather than in parallel; and creating a space to enhance the effective partnership between a university and school-based teacher education is critical. This implies that collaboration is essential for success in inclusive education and examination of student-teachers preparedness to collaborate with others is necessary, due to its importance for instruction and student outcomes.

There is little doubt that teachers are the best resource for enabling effective inclusive education. Providing them with an appropriate curriculum is essential if they are to be able to act as an effective resource for supporting all learners in an inclusive classroom (Forlin & Sin, 2019). Thus, curriculum reform in initial teacher education for inclusion ought to ensure that teachers have the initiative as well as the ability to use their talents to implement the proposed move to a more inclusive paradigm. While most countries of the globe have been engaged in regular curriculum reform, the lack of supports for teachers to adjust to new practices is frequently insufficient (Camburn & Han, 2015). While many factors influence student academic

achievement and outcomes in schools that serve diverse student populations, one of the major factors is quality teachers who are backed by a well-managed curriculum during their training (Monteiro & Forlin, 2021). In support of this, Chambers and Armour (2012) argue that acting as a resource for inclusive education, a curriculum that is provided for preparing teachers must be rigorous, and its quality should be assured to prepare the most efficacious teachers. Therefore, a more innovative initial teacher education curriculum is needed if newly graduated teachers are to be able to implement effective practices that accommodate the changing needs of diverse student populations (UNESCO, 2014).

The increasing demands within the educational environment of today have critical implications for the curriculum of pre-service teacher trainees. UNESCO's Policy Guidelines on Inclusion in Education mention the need for teachers to be trained in teamwork, skills for working with parents and civil society, ability to adapt to different age groups, interactive methods, ability to respond to gender and the individual needs of all learners, protection, health, and safety of all children (UNESCO, 2009). On the contrary, many research findings revealed that inclusive education is still not seen as an overarching concept in the curriculum for pre-service teachers training of many nations across the globe (Rieser, 2013). Due to this, UNICEF (2013) mentioned that there is still a need for information on the nature and content of courses offered to teachers at the pre-service levels, as many general teaching courses do not cover content relevant to inclusive education. Courses on inclusion are not always integrated throughout initial teacher education programmes, but are listed as optional, or run by special education training institutes. In this way, the student teachers are not adequately equipped with the requisite skills, knowledge, and attitudes to take responsibility for and meet the needs of all learners (UNESCO, 2015).

In this regard, Echeita (2014) notes that adding some courses on inclusion to the general curriculum of initial teacher education institutions is insufficient and inadequate, where wider reforms are needed across the entire initial teacher education structure in order to adequately prepare inclusive teachers. UNICEF (2013) supports this and stresses that programmes that lack a solid understanding of inclusion and are based on concepts of segregation or special education as their conceptual core, can often be incongruent with inclusive education principles and

philosophy; and recommended that inclusion competencies ought to be redefined such that initial teacher education programs be reformed as broad-based good teaching competencies, rather than special ones. This reform of the teacher education curriculum is based on the understanding that inclusion and standards are not mutually exclusive, particularly in the UK (Guðjónsdóttir & Óskarsdóttir, 2019). To support this, three core assumptions form the basis of this teacher education reform, which includes that teachers must understand that difference is a normal aspect of human development, that they are capable of teaching all children, that they ought to develop collaborative ways of working (Florian & Rouse, 2009). These are the basic principles guiding inclusive pedagogy, as a theoretical framework underpinning the current study.

Further to this, Stegemann and Stevens (2015) suggest six characteristics that can provide a foundation upon which initial teacher education programmes may design programme goals and objectives towards the vision of an inclusive community. Such programmes should be integrative, co-operative and interactive; invested for the social and economic health and wellbeing of all members; diverse in all structures, processes, and functions of daily community life; equitable so that everyone has the opportunity to develop capacities and participate actively in community life; accessible, sensitive and safe; and participatory, so that all members may be involved in planning and decision-making. In addition, the Teaching and Learning International Survey (TALIS, 2013) has recommended the following three components to be considered in the initial teacher education programme for inclusion: content – it is essential that prospective teachers have sufficient academic knowledge of the subject(s) they will teach; theory of teaching (pedagogy) – trainee teachers need to be theoretically prepared to teach their subject, support pupils in learning, and manage classes; and practice-it is important for trainee teachers to gain concrete experience in real classes as soon as possible including learning how to handle real issues inherent in teaching and class management in a variety of situations (OECD, 2010). Thus, further research is needed to establish the impact of different models on the coherence of the curriculum and the development of knowledge and skills of student teachers within initial teacher education programmes for inclusion (EADSNE, 2011a).

Inclusive approaches to teacher education are concerned with preparing student teachers to work effectively with all children, irrespective of their specialist learning needs, differences, or

disabilities (Moran, 2020). This means that accommodation of difference in the context of educational inclusion involves contributing to an inclusive society by shaping the curriculum through which the participation of all children and young people in education is enabled and enhanced. In this regard, Deppeler (2012) argues that quality teaching within inclusive schools requires focused attention on improving the collective professional knowledge and practices of teachers. However, teacher training reform for inclusive education remains a challenge, because very few academics are engaged in developing appropriate curricula for inclusive education, and employing suitable inclusive pedagogies for children with special needs, particularly in developing countries. Forlin (2010a) also claims that another critical issue in countries where inclusive education has been embraced recently is the insufficient pre-service inclusive teacher training in professional practice through their curricula. Further, Forlin (2012) stated that the teacher education curriculum for inclusive education has been tokenistic at best, and non-existent at worse in most regions.

The initial teacher education curriculum for inclusive education needs to reflect the changing needs of the current school system. In this regard, Menter et al. (2010) mention that modern professional development for inclusion ought to involve teaching an increasingly diverse range of learners; value education, literacy, and numeracy across the curriculum; using assessment data effectively; engaging in action research and self-review; collaborating in school teams; and integrating technology effectively. In addition, Snoek and Žogla (2009) suggest that three integrated core curricular areas should exist in initial teacher education curricula for inclusion, namely subject area aspects and methodologies; transversal/pedagogical aspects (linking knowledge of pupils' ways of learning, school curricula, and strategies to deal with diversity in the classroom); and teaching practice and supervision. They further claim that university-based initial teacher education programmes ought to enjoy a fair amount of autonomy in determining the curriculum, within the national guidelines of their nations.

In response to the growing currency towards inclusion around the world, teacher education institutions have started integrating inclusive education courses into their initial teacher training program in line with inclusive education principles. In this regard, Franzkowiak (2009) argues that introductory courses on inclusive education ought to be mandatory for all teacher education

programmes working towards inclusive education students. This move has been furthered by international recommendations from UNESCO to include content on inclusion as part of teacher training programmes (UNESCO, 1994). This implies that ,considering the impact of teacher education, offering an inclusive education course to pre-service teachers to work in inclusive regular classrooms and their attitudes and concerns about inclusive educational practices proves very important. The study conducted by Bustos et al. (2012) confirms that improved provision at the pre-service level, together with a more aggressive approach towards training for inclusion-based practices, would be the best point to begin in teacher education. Similarly, Lambe and Bones (2006) found that positive attitudes did exist in student teachers at the start of their initial training, concluding that this stage of teacher education was the most effective time at which to nurture these attitudes through the provision of high-quality training and by the integration of inclusive education course into their curriculum.

In summary, curriculum design and implementation in university-based teacher education programs form an important theme concerning indicators of effective initial teacher education for inclusive education on an international level. For a curriculum to be inclusive and to allow for adequately scaffolded instruction, it must be designed consistent with the principles of universal design for learning in mind, in the sense that it is written to include a diverse range of learners from the outset. This means engaging in teaching that provides multiple forms of representation, multiple means of engagement, and multiple opportunities and means for expression for student teachers (Loreman et al., 2014). This clearly shows that much more research is needed to understand what curriculum model initial teacher education programmes should offer in order to enable more inclusion; and why the current curriculum offerings do not translate into the realisation of greater inclusivity in today's schools. Therefore, effective teacher development programmes should have a curriculum that produces knowledgeable, reflective, empathetic, and responsive teachers, as well as place emphasis on the new social-contextual paradigm underpinning the inclusive teacher education movement.

The other issue to be considered is a pedagogy that enhances the effectiveness of initial teacher education preparation for inclusion. Alexander (2007) defined pedagogy as the observable act of teaching, together with its attendant discourse of educational theories, values, evidence, and

justifications. It is what one needs to know and the skills one needs to command to make and justify the many different kinds of decisions of which teaching is constituted; and this requires fundamental changes in thinking about children, curriculum, pedagogy, and school organisation (Slee, 2011). Based on the above, Florian and Black-Hawkins (2011) emphasise the need for a shift in pedagogical thinking, that is, from an approach that works for most learners, towards one that involves everyone. Shifting the gaze from ‘most’ and ‘some’ learners to ‘everybody’ requires collective learning experiences to be taken into account so that teachers are encouraged to develop approaches that are appropriate for all children (Black-Hawkins, 2012). This implies that in order to be effective, pedagogy must be inclusive, and ought to consider the diverse needs of all learners, as well as matters of student equity (Husbands & Pearce, 2012).

The inclusive teacher is a teacher who responds to the diverse needs of all learners, using child-centered approaches and appropriate active learning methods. Nowadays, a student-centred pedagogy is the most favoured approach in many developed countries of the globe and is also increasingly being adopted in many developing nations including Ethiopia (Lumpkin et al., 2015). The movement has been from a teacher-centred emphasis, where students were expected to be passive learners, to a more constructivist approach, involving students in their learning. Student-centred learning methods have long been advocated for as an effective and efficient form of teaching and learning (Adkins, 2018), and their roots can be traced as far back as to educational ideologies of student-centeredness and discovery-based learning proposed by Dewey in 1938. The development of inclusive practice is an essential feature of professional learning for initial teachers. In order to implement the inclusive practice, initial teachers should be equipped with pedagogy of inclusion that helps to meet diverse learners’ needs and develop more equitable education systems (Engelbrecht, 2013). Similarly, Darling-Hammond (2006) argues that initial teachers need to know how and when to use a range of practices to accomplish their goals with different students in different contexts to practice inclusive education. With this in mind, initial teacher education programmes should reflect the provision of opportunities for student-teachers to learn effective pedagogical approaches that include all learners in their classrooms.

The inclusive classroom is a place where inclusion is realised, and where many of the thematic factors influencing its implementation interact in complex ways, including pedagogical

techniques and strategies that support learning for a wide range of diversity, and catering to areas such as multiple intelligences and different learning styles (Cushing et al., 2009). In this regard, Florian and Spratt (2013) proposed the Inclusive Pedagogical Approach for Action (IPAA) by means of which to evaluate the inclusive practices of newly graduated teachers based on the basic principles of inclusive pedagogy, which underpinned the theoretical framework of the current study. Their Framework for Action includes three important themes, where: difference must be accounted for as an essential aspect of human development in any conceptualisation of learning; initial teachers must believe (can be convinced) they are qualified/capable of teaching all children; and the profession must continually develop creative new ways of working with others (Loreman et al., 2014). This implies that all teachers need to be competent and capable with the efficacy-related features of inclusive pedagogies (Kretlow & Helf, 2013). Thus, the importance of evidence-based pedagogies for inclusion is well established, and is indicative of the need to ensure that such pedagogical practices are widely employed to meet the needs of all students (Blank, 2013).

The expectations of teacher education for inclusive education are internationally understood, and serve to develop teachers who know about inclusive pedagogy, who have the skills to construct and manage classroom activities efficiently, who communicate well, use technology, and reflect on their practice to learn from and improve it continually (Darling-Hammond, 2006). To develop the above pedagogical competencies, Rouse (2008) proposes that teacher education for inclusion ought to involve three aspects, namely: knowing, doing, and believing. Consequently, teacher education for inclusion has the added challenge of requiring teachers to question their assumptions about diversity and to reconsider the role and functioning of schools by finding ways to work collaboratively with others. Further, Florian (2012) argues that these are challenging tasks to be accomplished through initial teacher education alone, and that continuous professional development for diversity must afford teachers opportunities to develop an understanding of social justice and of learning that takes into account differences between learners. Similarly, Rouse (2008) argues that teacher education for inclusion ought to include 'knowing' about the policy context, teaching and classroom management strategies, understanding how children learn, knowing how to assess learning, how to identify difficulties, and how to find help when needed which are the basic principles of inclusive pedagogy.

Initial teacher education for inclusion must also afford opportunities for student teachers to develop inclusive thinking and beliefs that all children are worth educating; that all children can learn; that student teachers can make a difference in children's lives; and that such work is their responsibility and not only a task for specialists (Rouse, 2008) that are enshrined in the philosophy of inclusive pedagogy. On the contrary, the beliefs about students' abilities being fixed (Hart et al., 2004), and that intelligence, ability, and performance can be distributed according to the statistical principles of the normal curve (Florian, 2019), have an impact on teacher's behaviour and expectations regarding their students. For example, assumptions about diversity might undermine pedagogical innovations when teachers believe that students are disadvantaged and in need of fixing or worse, as deficient and therefore, beyond fixing (Ainscow, 2006). Ensuring that all learners succeed within existing educational systems is a challenge, and research suggests that many teachers may not have the inclusive pedagogical knowledge, skills, and attitudes, or feel unprepared to support all learners and create inclusive education (Flores & Ferreira, 2016). Developing schools where all learners can participate and learn requires student teachers to recognise that they do have the power, and indeed the responsibility to act as agents of change (Lloyd, 2010) and transform classrooms into inclusive cultures (Kozleski & Waitoller, 2010) of which all are the founding principles and values of inclusive pedagogy.

As most education systems throughout the world embrace inclusion, preparing teachers for this role has become a key issue. It is readily acknowledged that teachers require the appropriate skills, knowledge, and disposition if they are to successfully offer an inclusive curriculum, and education systems worldwide have taken a variety of approaches to support teachers in gaining these competencies (Forlin, 2008). In this regard, one of the key issues hindering a more inclusive curriculum approach for institutions, especially in countries embracing inclusion for the first time, is that teacher educators themselves are poorly equipped to take on the role of educating pre-service teachers about inclusion. This is because the existing curriculum is still very much focused on academic objectives rather than on a children's needs perspective (Forlin & Nguyet, 2010). The need to upskill teacher educators in order to offer an appropriate curriculum and to employ suitable pedagogies to prepare teachers for inclusion poses quite a

challenge in countries where few academics are themselves trained in inclusive education, and lack the necessary skills, knowledge, and orientation to undertake such a role (Forlin, 2010).

In addition to a diverse group of pre-service teachers, inclusive initial teacher education programmes are strengthened by having a diverse faculty (Salend et al., 2006). Such a faculty allows pre-service teachers and faculty to learn from and interact with individuals who have different areas of expertise, experiential and cultural backgrounds, pedagogical practices, and teaching styles. Therefore, the evaluation questions related to the diversity of the faculty including their varied roles, expertise, backgrounds, and teaching practices are an integral part of initial teacher education programme evaluation for inclusion. Here, the questions to be answered include what efforts have been implemented to encourage and support faculty diversity, and how successful have these efforts been; what factors are affecting the programme's success at having a diverse faculty; and what actions need to be taken to enhance the diversity of the faculty (Forlin & Lian, 2008). This implies that the readiness of teacher educators in equipping student teachers for the successful implementation of inclusive education is critical.

In this regard, the EADSNE review on teacher education for inclusion in Europe found that teacher educators lacked knowledge, understanding, commitment, and experience to teach about inclusive education. However, there is generally no formal induction for teacher educators, even though it requires very different skills from classroom teaching (EADSNE, 2010). This point is highlighted by Forlin, who states that it is unrealistic to expect teacher educators to use innovative approaches when they have had no preparation themselves (Forlin, 2012b). This implies that teacher educators not only require training, but also the same practical classroom experiences and observation of child-centred approaches as their teacher trainees (Grimes, 2009). Further to this, they need to develop a self-critical awareness of their own beliefs, attitudes, and expectations, and their own culture, bias, and discriminatory practices (EADSNE, 2010).

Although the concept and implementation of inclusion vary greatly by country (Mitchell, 2005), one critical variable in the successful implementation of inclusive education is the quality of the preparation that the student-teachers receive (Salend, 2008). As a result, initial teacher education programmes throughout the world have been utilising innovative pedagogies and approaches to

help teachers develop the knowledge, skills, and dispositions necessary to implement inclusive education effectively. Given the critical role that the preparation of teachers plays in the implementation of inclusive education, evaluating inclusive teacher education programmes to improve their effectiveness, as well as its approaches and practices, is very important. While teacher education certainly has an important role to play in how well-prepared new teachers feel for the challenges of today's schools and classrooms, little is known about components that are effective and professional knowledge base needed in order to prepare teachers for the challenges of today's schools (Furlong, 2013). If teacher education is to respond to the current calls for reform based on concerns that teachers are not adequately prepared to address the problem of educational inclusion, then research examining the effectiveness of teacher education reform for inclusive education is needed (OECD, 2010).

In the political arena of the day, evaluating the way in which the initial teacher education preparation influences teachers' effectiveness, especially their ability to increase student learning in measurable ways, is becoming increasingly important for the improvement and survival of teacher education (Lambe & Bones, 2007). In light of these concerns, teacher educators and researchers are seeking to develop strategies for assessing the results of their efforts-strategies that take into account the complexity of teaching and learning and that provide a variety of lenses on the process of learning to teach (Pechone & Chung, 2006). Many programmes are developing assessment tools for gauging their candidates' abilities and their success as teacher educators in adding to those abilities. Commonly used measures range from candidate performance in courses, student teaching, and on various assessments used within programmes to data on entry and retention in teaching, as well as perceptions of preparedness on the part of candidates and their employers once they are in the field (Kunzman, 2003). This being the case, however, how teachers learn to teach in ways consistent with new understandings of how children learn and what they need to know in the 21st-century knowledge society demanding critical thinking and collaboration, as well as learn to teach the ever-increasing diverse student populations, are critical questions to be answered (Cochran-Smith, 2008b).

According to Cochran-Smith et al. (2009), the above questions have been explored in teacher preparation research of the day including the following components: preparing teachers to teach

subject matters; examining the influence of coursework and programmes on teacher candidates' learning to teach; understanding the influence of fieldwork, especially student teaching, mentoring arrangements, and teacher candidates' learning to teach; analysing teacher education programme contents, structures, and pedagogies; studying teacher educators' learning, characteristics, strategies and knowledge; and exploring how teacher candidates learn to teach over time, including relationships between the initial teacher education period and the early years of teaching. They further proposed areas to be included in teacher preparation research for inclusive education, namely: the influence of courses and field-based opportunities on teacher candidates learning to effectively teach increasingly diverse student populations, including students traditionally marginalised and not well served by existing school systems; strategies for recruiting and preparing a diverse teaching force; analyses of content, structures, and pedagogies for preparing teacher candidates for diverse populations; and examinations of teacher educators' learning about and experiences with preparing teacher candidates for diversity (Cochran-Smith, 2008a).

Similarly, Salend et al. (2006) suggest that the evaluation of initial teacher education programmes should focus on important evaluative dimensions related to the critical aspects of initial teacher education programmes for inclusive education. The critical aspects of initial teacher education programs for inclusive education suggested by Salend (2006) include addressing the programme's (a) core beliefs; (b) curriculum and competencies; (c) pedagogical practices and learning activities; (d) field-based experiences; (e) recruitment and graduation of a diverse pool of pre-service teachers; (f) faculty diversity; and (g) impact on the field. He further recommended the critical aspects of each dimensions, evaluation criteria, related evaluation questions, and potential data sources that can be used during programme evaluation, as well as issues related to institutional structures within the programme of teacher education, staff experiences of integrating inclusion into teaching practice, and understandings of inclusion in relation to teaching and pedagogy.

As discussed above, the focus of this literature review section (3.4) is on the basic elements, components, and indicators of effective teacher education for inclusion. The elements, components, and indicators of effective teacher education for inclusion included under this

review were international policy, philosophy, and principles of inclusive teacher education; core values and associated competencies necessary for effective teacher education for inclusion; approaches and models of teachers education for inclusive education; university-school partnership, field experience, and practicum; issues of initial teacher education curriculum, courses to be included and their impact in initial teacher education; issues of inclusive pedagogy and student-centered approaches of teaching in initial teacher education for inclusion; and issues related to teacher educators readiness and diversity. Over and above this, the study employed the conceptual tools proposed by Darling-Hammond (2017), Olkaba et al. (2019), and Tacconi and Hunde (2014) that help to investigate the effectiveness of university-based teacher education programme designed to prepare teachers for inclusive education in Ethiopia.

The proposed framework, consisting of ten basic elements (components) and their indicators, namely the facilities and services related to the teacher education programme; the stand of the teacher education college running the teacher education programme; the modality and approaches of the teacher education programme; the teacher education programme structure and curricula; the integration of inclusive education courses in the teacher education programme; the teacher education programme pedagogies; the teacher education university and secondary school partnership (collaboration); the qualification requirements of the teacher education programme; the induction and continuous professional development for graduates of the programme; and the national standard set for teachers graduated from the programme (Darling-Hammond, 2017; Olkaba et al., 2019; Tacconi & Hunde, 2014). According to these scholars, for the development of quality teacher education for inclusion, the framework pays attention to two types of problems, viz.: the quality of teacher-training institutes and the efficiency of the process of teachers' pedagogical skill development. In conducting the analysis, reference was made to the framework stated in Table 3.1 below to investigate the effectiveness of one teacher education programme (PGDT) running in Ethiopian universities towards preparing secondary school teachers for inclusion and propose an alternative strategy on how such programmes can better prepare future teachers for inclusive teaching.

Table 3.1: Conceptual Framework Employed: Components and Thier Indicators

Components	Indicators
The facilities and related services	The indicators are the availability and adequacy of library, laboratory, information communication technology (ICT), and other curricular resources, guidance and counselling services, overall orientation regarding the programme, and communication related to the expected outcomes of the programme.
The stand of the teacher education college	The indicators are stand of teacher education college compared to other colleges (resources, staffing's, funds; the professional identity of teacher educators), teacher educators, policies and practices concerning recruitment and training of teacher educators, professional preparation of teachers.
The modalities of the teacher education programme	How the trainee teachers perceive the rigorousness of modalities being used in addressing adequate time for learning contents, pedagogical preparation, and longer school-based practices which includes add-on program vs. concurrent programme, discipline vs. professional area focused preparation.
The programme structure and curricula	How the trainee teachers perceive and realises the effectiveness of structure of teacher education programme in preparing competent and professionally committed teachers, programme duration, representativeness of the programme contents for the development of knowledge bases of teaching, alignment of the curriculum content, and practices of different phases of teacher education programme to avoid counter productiveness, alignment of teacher education curricula with school curricula and the broader context of teaching.
Integration of inclusive education in the teacher education programme	How well the inclusive education course is integrated in the programme in terms of course objectives, course content, course teaching strategies, as well as the role of teacher educators offering the course.
The teacher education programme pedagogies	How trainee teachers perceive the effectiveness of pedagogies used in teacher education programs in effectively preparing future teachers. These include alignment of pedagogies used in teacher education programmes and key pedagogies emphasised in school curriculum framework, using of pedagogies to support and promote inclusiveness, and the degree to which pedagogies of teaching students with difficulties is being emphasised.
The teacher education university and school partnership (collaboration)	How trainee teachers perceive the effectiveness of the current teacher education and school relationship is allowing the implementation of highly supervised clinical practices for extended periods. The indicators are the availability of favourable conditions for the strong collaboration between universities and schools.
Qualification requirements of the programme	How trainee teachers perceive the appropriateness and effectiveness of requirements set for certifying the would-be teachers to teach. The indicators are the way the qualification requirement and final examination link the programme goal to its different components; link of the programme components to the demands of the world of teaching.
Induction and continuous professional development	How trainee teachers perceive the effectiveness and appropriateness of induction in bridging teacher education and the real world of work as well as the effectiveness of on-going professional development practices.
National standard set for the programme	How trainee teachers view the quality of teachers at secondary school level for delivery of quality education including the quality of education across secondary schools, teachers' normal workload hours per week, and professional commitment of teachers measure against the national standard set for secondary.

Source: Darling-Hammond (2017), Olkaba et al., (2019), and Tacconi and Hunde (2014).

3.5. Core Competencies Necessary for Inclusion

Ever since the Salamanca Statement and Framework For Action in 1994, the concept of inclusion has been influencing international policies that aim towards acknowledging and promoting inclusion in education. This has affected teachers on how they approach inclusion in their classrooms. Teachers have a great influence in making inclusion a reality, but many times they feel unprepared to deal with inclusive settings (Richert, 2016). Helping teachers develop an inclusive mind-set is a challenging task particularly during their initial training (Slee, 2010). In support of this, EADSNE (2012) states that there is a developing, but still quite limited, research base documenting how initial teachers are being or should be prepared for challenging tasks ahead of them. Thus, interventions during this stage should support teachers in understanding and gaining the basic professional competencies necessary for the effective implementation of inclusive education. The professional competencies of teachers are often regarded as one of the most critical aspects necessary for the successful implementation of inclusive education by the global community (Mu et al., 2015). Given the complicated role of teachers in practicing inclusive education, a universal definition of teachers' professional competence is neither conceivable nor desirable as well as highly depends on the professional standards of a given nation (Gafoor & Asaraf, 2009).

Despite the difficulties in defining teachers' professional competency, Fisher et al. (2003) identified the required practical skills, knowledge, and beliefs to be fundamental competencies for all teachers working in an inclusive classroom. In support of this, Liakopoulou (2011) argues that teachers' competence was predicated on their attitudes, skills, and knowledge. Similarly, Johnstone and Chapman (2009) discovered that initial teachers' knowledge, skills, and attitudes, including their beliefs and values, are major determinants of the successful implementation of inclusive education policies and practices. In addition, these competencies enable and support teachers in providing adequate service to all students in an inclusive context (Blecker & Boakes, 2010). Furthermore, the European Agency for Special Needs and Inclusive Education (EASNIE, 2012) identified three competence areas to be developed during initial teacher education to implement inclusive education effectively, which includes teachers attitudes or beliefs, knowledge or levels of understanding, and practical skills or abilities (NCSE, 2019).

Recognising the importance of teachers' professional competencies necessary for the effective implementation of inclusive education, synthesising literature and formulate conceptual tool that helps to investigate how the training supported teachers in developing the competencies necessary for inclusion in Ethiopia. In this regard, studies have recognised teachers' attitudes, knowledge, and practical skills as the core professional competencies necessary for the successful implementation of inclusion (Mu et al., 2015). For example, Blecker and Boakes (2010) attempt to determine whether teachers in the US displayed the dispositions, knowledge, and skills necessary to implement inclusive education and whether these attributes are influenced by their initial training. Similarly, Johnstone and Chapman (2009) examine secondary school teachers' attitudes towards, knowledge about, and practical skills in the implementation of the national policy concerning inclusive education in Lesotho. In addition to the above-mentioned work, many empirical studies have separately provided in-depth insight into each of these dimensions. Accordingly, the researcher, reviewed issues related to knowledge about, practical skills in, and attitude towards inclusive education as the three core competencies respectively necessary for inclusion.

3.5.1. Knowledge Related Competency

The first important competence dimension necessary for effective implementation of inclusive education is teachers' knowledge about inclusion and children with disabilities. Fleisch (2007) states that what teachers know serves as one of the most important factors that influence inclusive schools, classrooms, and learner performance. This means that what teachers know is an important element in their being able to carry out their work effectively. Early this century, studies articulated four major areas of teacher knowledge necessary for practicing inclusion (Mu et al., 2015) that include the content knowledge of the taught subjects and the expanded curriculum; the pedagogical knowledge that requires teachers to understand how to effectively teach these contents; the knowledge of each student's abilities and disabilities, learning strengths and needs, prior experiences, and cultural and linguistic backgrounds, as well as specialised knowledge of specific disabilities and their implications for teaching and learning; and the contextual knowledge of the inclusive education policies, procedures, and legal requirements that provide the framework within which teaching of students with diverse needs occurs (Sanches-Ferreira, 2012).

Similarly, Bocala et al. (2010) suggest a package of knowledge for general education teachers working in an inclusive context, which includes the understanding of the legal and historical foundations of inclusive education, as well as the growth and development of children with special educational needs, coupled with the capture of the instructional design, planning, and methods of inclusive education. In addition, Kortjass (2012) describes seven categories of teacher knowledge necessary for effective implementation of inclusive education, viz.: knowledge of content; knowledge of pedagogy; knowledge of curriculum; knowledge of learners and learning; knowledge of contexts of schooling; pedagogical content knowledge; and knowledge of educational philosophies, goals, and objectives. However, some studies found that teachers have a shallow understanding of inclusive education and resist the invitation to develop more inclusive schooling by pointing to a lack of knowledge about teaching students with special educational needs (Jenkins & Ornelles, 2009). This highlights the tensions between the knowledge desirable for inclusive education teachers and teachers' lack of knowledge in reality.

Hence, teacher education programmes that prepare teachers to work in inclusive settings need to expose all its teacher candidates to the basic principles and philosophies of inclusive education. In this regard, LePage et al. (2010) argue that initial teacher education programmes should provide teachers with essential knowledge organised in a way that would enable them to develop deep understandings of teaching and learning in inclusive settings. Such knowledge refers to not only content knowledge, but to professional knowledge, knowledge of cross-cutting and emerging issues, as well as the practical understanding that one needs in order to perform his or her duties as a teacher (Tabot & Osman, 2017). Areas of knowledge in inclusive education are therefore imperative for a teacher trainee in the general teacher education curriculum, which should supply them with the knowledge and competencies for developing inclusive classroom activities and to be knowledgeable about a child's disability so as to promote his/her personal and social adjustment (Operti, 2010).

Nowadays, the challenges of preparing quality teachers are an important priority in many developing countries, including Ethiopia. The success of what the international community hopes to achieve in inclusive education depends on the quality of their teachers. Thus, competent and effective teachers are needed in order to build a strong system of education. Supporting this

idea, Ahsan et al. (2012) noted that ensuring the quality of teachers is a response to provide a means of quality assurance for inclusion. In this regard, Sharma et al. (2011) argue that teachers' knowledge and understanding regarding inclusion have a significant impact on its successful implementation. Similarly, Jordan et al. (2009) reveal that effective teaching in an inclusive classroom depends on teachers' knowledge about disabilities and their responsibilities for students with special educational needs. Further to this, Reynolds (2009) states that it is the knowledge and understanding of teachers that are brought to bear in creating an effective learning environment for all children, making the teacher a critical influence in education for inclusion and the development of inclusive schools. To conclude, Forlin et al. (2009) note that if the knowledge and understanding of teachers are not addressed during initial teacher education, they may continue to hamper the progress of inclusive education efforts in schools.

3.5.2. Practical Skills and Abilities Related Competency

In addition to teachers' knowledge, teachers who become comfortable and competent with inclusive education practices ought to develop a set of key inclusive skills. Mul et al. (2015) suggest that adequate preparation and updating of teachers in instructional and management skills are needed to provide an appropriate education for a diverse student population in inclusive schools. In this regard, Idol (2006) reported three skill areas necessary for effective inclusion of students with disabilities, which include the adaptation of instruction, modification of curriculum, and student discipline, and classroom management, as rated by teachers participated in the study. Similarly, Fisher et al. (2003) articulated six highly prioritised skills for inclusive practices, namely collaborative teaming and teaching; curricular and instructional modifications and accommodations; personal support; assistive technology; positive behavioural support; and literacy instruction. Further, Bocala et al. (2010) recommended the essential skills necessary in inclusive education for general education teachers working in an inclusive classroom. These skills highlighted the ability to adapt, differentiate, accommodate, or modify instructional methods; to acquire field experiences with students with disabilities; to prepare, implement, or evaluate individualised education programmes; to seek support or collaboration to assist students with disabilities; and to identify students' learning differences (Darling-Hammond, 2006).

Research has shown that the optimum time to help teachers gain the necessary skills in inclusion is during initial training (Ajuwon et al., 2012). Initial teachers' perceptions of preparedness are associated with skills and abilities gained during the training as well as their responsibilities as inclusive teachers (Gorski et al., 2012). In this regard, the practical skills teachers acquired during their initial training will help to teach their students better, spending additional time planning lessons, and working with students to address individual needs; and these types of teaching behaviors are exactly the types of outcomes necessary to successfully manage an inclusive classroom (Schunk et al., 2008). Similarly, Mukhopadhyay et al. (2009) note that, given that inclusive teachers are the service providers in teaching students with diverse educational needs in an inclusive classroom, their skills and abilities in inclusion are a contributing factor to their success or failure. Teachers who are ill-prepared in terms of basic skills necessary for inclusion may pass that discontent onto the students, which in turn can undermine the confidence and success of those students. Conversely, teachers who gained the basic skills necessary for inclusion can provide a comfortable learning environment for students with special educational needs (Jordan et al., 2009). In brief, the literature considers collaboration, student management and support, and instructional accommodation to be particularly important practical skills needed for inclusive education teachers (Liakopoulou, 2011).

New teachers, who find themselves struggling with the complex demands and challenges of the inclusive classroom often cite a lack of basic skills and abilities to handle an inclusive classroom as one source of their frustration (Sosu et al., 2010). In support of this, Darling-Hammond (2006b) outlined three fundamental skill-related problems associated with learning to teach inclusively, namely: (1) the problem of the apprenticeship of observation, where new teachers must understand teaching in ways different from and more complex than their own experiences as students; (2) the problem of enactment, where new teachers must not only learn to think like a teacher, but also to act as a teacher; and (3) the problem of complexity, where new teachers must learn to understand and respond to the dense and multifaceted nature of the classroom. To address these concerns, teacher preparation programmes must design courses that help prospective teachers appreciate environmental, social, and cultural contexts of learning,

behaviour, and teaching, and be able to practice these understandings in inclusive classrooms serving diverse students during their practicum (Alur & Timmons, 2009).

3.5.3. Attitudes Related Competency

On top of this, teachers' attitudes towards inclusion and students with disabilities seem to be an important factor in creating inclusive schools and communities. In this regard, Forlin (2010) stated that teachers' attitudes towards inclusion have been proven to be of utmost importance for promoting inclusive practices. In addition, Albarracín et al. (2008) noted that attitudes are important, because they shape teachers' perceptions of the social and physical world and influence overt behaviours. Further to this, Chambers and Forlin (2010) define attitude as a learned, evaluative response about an object or an issue, noting that attitude is a cumulative result of personal beliefs. These beliefs influence individual behaviour and are perpetuated by the experiences the individual gets. Supporting this idea, Johnson and Howell (2009) highlight that attitudes are made up of three related aspects, namely cognitive (idea or assumption upon which the attitude is based), affective (feelings about the issue), and behavioural (predisposition toward an action that corresponds with the assumption or belief) that has the power to influence individual behaviours.

Subsequently, the development of positive attitudes of initial teachers is an important area of educational research in preparing teachers for inclusive education. This means that positive teachers' attitudes create conducive learning environments, give a sense of belonging, and are critical for the successful implementation of inclusion in education (Sepadi, 2018). In this regard, Ainscow (2006) states that teaching will be ineffective if the environment that teachers are taught in perceives them as needing to be fixed or deficient. Loreman et al. (2013) also maintain that initial teacher education is a context in which changes in attitude towards inclusion do occur. Similarly, Rouse (2010) notes that interventions during pre-service teacher education that aim to help teachers understand and implement inclusion in their classrooms need to address not only knowledge about and skills in inclusion, but also attitudes towards inclusion and children with diverse educational needs. This implies that affecting teachers' attitudes is of great importance, and it is more favourable to do so during their initial teacher education programme (Tubele, 2008).

In this regard, Pearson (2007) notes that the complexity of inclusive education should be accommodated by the inclusion of work that positively changes the attitudes of teachers during initial teacher education programmes. Supporting this view, Muyungu (2015) notes that for pre-service teachers to develop a positive attitude towards inclusivity there must be a gap between theory and practice. This means that teacher training programmes should provide opportunities that will allow teacher trainees to interact with diverse learners, policies, and legislation related to inclusive education (Chaitaka, 2012). Johnson and Howell (2009) also add that attitudes are amenable to change through a course and an assignment that involve the analysis of case studies in inclusive education, particularly when the course is comprehensive, well-structured, and hands-on. Training that is designed in such a way that will benefit not only learners with diverse educational needs, but also the education system as a whole to build an inclusive society (Sepadi, 2018). This has significant implications in the sense that, if the negative attitudes of teachers are not addressed during their initial teacher education, they may continue to hamper the progress of inclusive education efforts in schools.

To conclude, taking into account that having negative and determinist attitudes about children's worth and abilities can prevent teachers from new ways of thinking about inclusive pedagogy (Galović et al., 2014), a great deal of research has been made concerning teachers' attitudes towards inclusion. While some studies point out that trainee teachers' attitudes to inclusive education are typically positive, other studies revealed that trainee teachers' attitudes towards inclusion are negative, because of several factors which include training regarding teaching students with a disability, class size, trainee teachers lacking the confidence to include students with disabilities, previous experience teaching students with disabilities, and support from administrative staff (Sharma et al., 2012). This implies that it is important to examine teacher education programmes that have been focused on preparing and affecting teachers' attitudes towards inclusion and students with diverse educational needs (Richert, 2016). Therefore, in order to enable the teacher education programme to properly address the issue of inclusion, it is critical to provide accurate ways to measure the impact of teacher training programmes on the development of more positive attitudes and feelings towards children with diverse educational needs and reduced concerns about inclusive education (Tiwari et al., 2015).

3.5.4. Competency Related to Values and Beliefs

In addition, there has been growing interest in competencies related to values and beliefs. This is because the way initial teachers feel about inclusion will impact how successful they are in upholding inclusive principles in their future classrooms (Kraska & Boyle, 2014). In this regard, Booth (2011) describes values as fundamental guides that give a sense of direction and underpin actions towards others. Since the key values and principles underpinning inclusive education are constantly questioned, discussed, and developed; initial teacher education programmes are focused on challenging values in society to enable education reform for better outcomes for all children at inclusive school (Mergler et al., 2016). When seeking to develop an inclusive environment in education, it is important that teachers are clear about the relationship between values and actions, that they make inclusive values explicit, and that design educational activities that uphold inclusive values. In doing so, inclusion becomes a philosophy and a way of life that is based on respect for all (Carrington et al., 2012).

As a result, for teachers to uphold the ideals that underpin inclusive education, their values must align with inclusive values and principles (Donnelly, 2010). A range of studies indicated that initial teachers do commit to enhancing those values that align with inclusive education, such as making a positive difference to the lives of students, helping students to become more aware of their needs, abilities and goals, shaping and supporting students, and caring for students (Balyer & Ozcan, 2014). Thus, it appears that globally, many teachers come to the profession with values that reflect those needed for inclusive education. In this regard, Booth (2011) outlined a key component of effective inclusion involving developing mutually sustaining relationships between teachers, students, school, and their communities. Similarly, Sanches-Ferreira (2012) identified caring and respect as essential values that teachers must demonstrate to develop meaningful relationships with students during their initial training.

Further, teachers who work in an inclusive classroom will teach diverse students who come from different cultures, have different abilities, and live with families from a range of socioeconomic situations (Mergler et al., 2016). This requires an inclusive approach to education underpinned by a philosophy of acceptance in which all people are valued and treated with respect. While initial teachers might indicate values that align with these ideas, the practice of inclusive

education in the classroom is not as expected (Booth, 2011). Initial teachers in many countries find inclusive education challenging, and it has been indicated in several research findings that they do not feel adequately trained during their initial teacher education to successfully support the diverse needs of all children (Winter, 2006). To provide initial teachers with a greater awareness of diversity and skills to support students with a range of differing needs, some universities have embraced the notion of inclusive values in their initial teacher education curriculum (Mergler et al., 2016), since beliefs and values developed during the training influence teachers' attitudes towards inclusion, which, in turn, influences their intentions and behaviours (Chambers & Forlin, 2010).

Pearson (2009) stated that initial teacher education programme is a context in which change in beliefs and values do occur towards the teaching profession. In this regard, Killoran et al. (2014) contend that the most significant shift in the development of values towards inclusion comes at an emotional level, where teachers have to believe that these children belong, that they have a place in the classroom, that children with special needs can form relationships with others, and that, as teachers, they can facilitate this process. Similarly, Rioux and Pinto (2010) note that the inclusion of students with diverse needs into regular schools is a matter of human rights, whereby access to quality education is coupled with respect and equity in the learning environment. They further emphasise the necessity for respect for student diversity and the importance of meaningful participation in education for all learners. In support of this, Berry (2010) and Ryan (2009) claim that successful and equitable inclusive classrooms necessitate the presence of committed, competent, and adaptable teachers as well as those who feel confident in their ability to promote and value inclusivity in their classrooms. As a result, Chong and Cheah (2009) have recommended the value framework expected to be included in the curriculum of teacher education programs that includes the belief that all children can learn; that care and concern for all children; that appreciate individual differences and respect diversity; and that commit and dedicate to inclusive teaching.

To conclude, inclusive values are concerned with issues of equality, rights, participation, learning, community, respect for diversity, trust and sustainability, compassion, honesty, courage, and joy (Booth & Dyssegaard, 2008). Seeing values as fundamental guides and prompts

to moral action, Booth and Dyssegaard further state that in education, an understanding of the values which give rise to our actions is essential if we are to do the right thing. Supporting this, Alexander (2007) identifies three original values concerned with that most fundamental human question, the relationship of humans to each other, and to the communities and societies, they inhabit individualism, community, and collectivism. Similarly, Carini (2001) suggests that humanness and the valuing of humanness is the starting point for inclusive education. This implies that the development of inclusion requires us to make explicit values that underlie actions, practices, and policies, and initial teacher education needs to develop literacy, think about, discuss and act on these inclusive values. Therefore, there is not only a need to provide teachers with the knowledge and skills for developing inclusive teaching practices, but also a need to negotiate the tensions around existing values, beliefs, and attitudes to ensure the full participation of all students in the curriculum and culture of the general education setting (Singal, 2008).

Finally, in addition to the conceptual tools and framework discussed above concerning the basic components and indicators of effective teacher education for inclusion, the study also focused on the basic principles and values of inclusive pedagogy that advocate reforms in initial teacher education for inclusion (Florian & Black-Hawkins, 2011). As clearly discussed in Chapter Two of this study, inclusive pedagogy is informed by three basic concepts associated with the development of inclusive practices gained through teacher education programmes for inclusion. These are the concepts that inclusive practice is to respect and respond to human differences; the concept that teachers should work to extend what is ordinarily available to all; and the concept that teachers ought to work for and support lessons and learning opportunities that enable all children to participate in the regular classroom (Pantic & Florian, 2015), which practically coincide with the basic competencies expected of teachers in practicing inclusive education, namely knowledge, attitudes, practical skills, and inclusive values and beliefs.

The interrelationship of the three basic concepts stated above underpins the theoretical framework of inclusive pedagogy and is practically expressed as the interaction of teachers knowing, doing, and believing (Rouse, 2008). This practical expression was mapped into the conceptual tools and framework of teachers' professional competencies as the apprenticeships of

the 3Hs, namely, the head (knowledge), the hand (skill or doing), and the heart (attitudes, values, and beliefs) for this study. This means that the practice of inclusive education requires teachers to account for the diversity of children as an essential component of child development in any conceptualisation of learning (knowing). In addition, teachers are expected to believe and be convinced that they are qualified and capable of teaching all children (believing). Further, teachers are expected to adopt innovative strategies for working in collaboration with other stakeholders (doing), which further connects the current study with the basic principles enshrined in the theoretical framework of inclusive pedagogy (Pantic & Florian, 2015).

In support of this idea, Rouse (2007) suggests that developing effective inclusive practice is not only about extending teachers' knowledge; it is also about encouraging them to do things differently and getting them to reconsider their attitudes and beliefs. In other words, it should be about knowing, doing, and believing that addresses the professional competence of teachers concerning knowledge about, attitudes towards, and practical skills in inclusive education. Similarly, Shulman (1986) claims that teacher training for inclusion should have three essential elements, which he refers to as the three apprenticeships. The first is the apprenticeship of the head, by which he means the cognitive knowledge and theoretical basis of inclusive teaching; the second is the apprenticeship of the hand, which includes the technical and practical skills that are required to practice inclusive teaching; and the third is the apprenticeship of the heart, which includes the ethical and moral dimensions and attitudes and beliefs that are crucial for inclusive teaching and its ways of working (Rouse, 2008). Thus, introducing the above competencies into initial teacher education programmes for inclusion helps to prepare teachers who have better knowledge and understanding about, positive attitudes and beliefs towards, and practical skills and abilities to successfully implement inclusion.

However, questioning the extent to which university-based teacher education programmes are effective in equipping initial teachers with the necessary competencies so that they can practice inclusion successfully is important, because teachers are expected to believe that they are qualified and capable of supporting all children in their teaching; boosting the capacity of all children to learn; knowing about socio-cultural perspectives on learning as well as theoretical, policy, and legislative issues of inclusion; and working to create adequate conditions for all

children in an inclusive context. In this regard, the researcher adopted the framework developed by Rouse (2008) about ‘knowing’, ‘believing, and ‘doing’ concerning inclusion; and by Florian and Spratt (2013) concerning the basic principles of inclusive pedagogical approaches that include ‘understanding learning’, ‘social justice, and ‘becoming an active professional’, so as to check whether the teacher education programme conducted in Ethiopia (PGDT) support and equip the trainee teachers with the competencies necessary to implement inclusion in the Ethiopian secondary school context, as indicated in **Table 3.2** below.

Table 3.2: Conceptual Framework Employed: Key Competence Dimensions and Competence Areas

Key Competence Dimensions	Competence Areas
Knowledge, apprenticeship of the head, and understanding learning	Knowing about teaching strategies; how children learn; what children needs to learn; classroom organisation and management; where to get help when necessary; identifying and assessing difficulties; assessing and monitoring children’s learning; the legislative and policy context of inclusion; and the principle that difference must be accounted for as an essential aspect of human development.
Attitudes, apprenticeship of the heart, and social justice	Believing that all children are worth educating; that all children can learn; that they can make a difference in children’s lives; that such work is their responsibility and not only a task for specialists; and that they are capable of teaching all children.
Skills, apprenticeship of the hand, and becoming an active professional	Doing requires turning knowledge into action; moving beyond reflective practice; using evidence to improve practice; learning how to work with colleagues as well as children; becoming an activist professional; teachers to continually develop creative new ways of working with others.

Source: Rouse (2008), Black-Hawkins and Florian (2012), and Florian and Spratt (2013).

3.6. Chapter Summary

In order to have successful inclusion, the professional preparation of teachers aligned with the philosophy of inclusive education is imperative. However, the way in which teachers are prepared for the successful implementation of inclusive education has yet to be established in many countries around the globe, including Ethiopia. This chapter reviewed important international literature related to teacher education for inclusion, particularly the historical move towards teacher education for inclusion; international perspectives regarding teacher education for inclusion; basic components and indicators of effective teacher education for inclusion; and the professional competencies necessary to successfully implement inclusion in education. The next chapter (Chapter Four) will address the review of Ethiopian literature related to teacher education for inclusion.

CHAPTER FOUR: REVIEW OF ETHIOPIAN LITERATURE RELATED TO TEACHER EDUCATION FOR INCLUSION

4.1. Introduction

The preceding chapter reviewed relevant literature on teacher preparation for inclusion so as to fully understand how teachers are prepared to become inclusive practitioners via their initial training in both developed and developing nations around the globe. This chapter (Chapter Four) examines key Ethiopian literature and policy documents related to secondary teachers' training for inclusive education at Ethiopian universities. Therefore, in this chapter, issues regarding the historical development of the teacher education system and its effectiveness; the move towards inclusive education and its impact on the development of teacher education for inclusion; the development of the Postgraduate Diploma in Secondary School Teaching (PGDT) and its role in producing graduates ready for the challenges of inclusive education; and the national professional standard for secondary school teachers in line with the theoretical framework underpinning the study will be reviewed and discussed in detail.

4.2. The Development of Teacher Education System in Ethiopia

In the large body of literature, education is universally recognised as a critical component in the process of national development. This is particularly true for unlocking human potential, helping individuals better understand the world in which they live, and assuming responsibility for creating a sustainable future (Manas, 2013). Supporting this view, the constitution of Ethiopia states that education is a fundamental human right, and key to sustaining economic growth and reducing poverty (World Bank, 2013). With a clear understanding of the importance of education to transform society in general and the country in particular, Ethiopia has been working towards expanding education at all levels, including pre-primary, primary, secondary, technical, vocational, and tertiary education, since 1994 (ETP, 1994). Further to this, the Education and Training Policy (ETP) of 1994 has clearly articulated concerns related to access, equity, quality, and efficiency, as well as the relevance of the curriculum for the local community and the disadvantaged at the national level (EMoE, 1994), which the Ethiopian government has sought to address through teacher development programmes. As a result, in Ethiopia, teacher education issues have evolved as one of the pressing agendas to meet the expanding and rapidly changing

need for education in the last decades and, hence, passed through different reforms and improvements to strengthen the quality of teaching at all levels (EMoE, 2018).

Thus, for decades, effective teaching and the effectiveness of teacher education programmes in producing high-quality teachers have become topics of great importance, including in Ethiopia (APA, 2014). In this regard, a plethora of literature has argued that, without competent and professionally equipped teachers, learning cannot be of high quality. Recent studies have also emphasised strategies that teacher education programmes could utilise to demonstrate that the candidates who complete their programmes are well prepared to support student learning (UNESCO, 2013). Along this line, in order to develop professionally well-equipped teachers who can ensure educational quality, Ethiopia's teacher education system has undergone significant reforms in the past few decades. These continuous reforms are an important means by which to adjust to a wide range of emergent situations in the country, including political, social, economic, and cultural contexts (Sintayehu, 2017), as well as to make teaching a profession of choice in Ethiopia (ESDPV, 2015). This implies that Ethiopian teacher education is aimed at producing teachers with the necessary academic knowledge, professional skills, exemplary citizenship attitudes and skills, and ethical and democratic values enshrined in the country's constitution (EMoE, 2009).

In general, teacher education programmes see prospective teachers gaining a foundation of knowledge about pedagogy and subject matter as well as early exposure to practical classroom experience (Mekonnen et al., 2014). Teachers' education is also a part of the professional development of teachers that a teacher achieves as a result of gaining increased experience and systematically examining his or her teaching (UNESCO, 2005). In order to improve the quality of teachers in particular and education in general, the Ethiopian Ministry of Education has introduced various teacher education programmes and development initiatives, since the times of the Coptic Church to the present (Shoeb, 2013; Semela, 2014). This section of the chapter will briefly review key developments related to the Ethiopian teacher education system from 1900 to the present in chronological order to fully understand the contributions of those developments to the move towards inclusive teacher education in an Ethiopian secondary school context.

Ethiopia's first modern school was established in 1905 and made available to the public in 1908, during the regime of Emperor Menelik II. There was no teacher education system or organised teacher training facilities in place at the time, so Western teachers and principals dominated the schools (EMoE, 1973), but some church educators contributed to teaching local languages and moral education (Amera, 2016). In Ethiopia, the modern teacher education system did not begin until September 1944, when the first primary teacher education programme was established in a single room on the campus of Menelik II School and accepted trainees from Grade Six onwards. However, in 1946–47, the first proper training institute was built on a site in Gullele, Addis Ababa, during the time of Emperor Hailassilassie (Marew et al., 2000). In 1951–52, the first seed of secondary teacher education was planted. It originated as a single unit within Addis Ababa University College, which grew into a Department of Education. It grew into a faculty of education three years later, in 1961–62. The Prince Bede Mariam Laboratory School, also known as the Lab School, was founded a few years later and served as the Faculty of Education's main feeder school.

The Faculty of Education was also able to start two units over time, namely elementary education and secondary education. The former was primarily in charge of training trainers for teacher training institutes (TTI) with a focus on theoretical issues and a teacher-centred approach in delivery, while the latter was in charge of training secondary school teachers (EMoE, 2006). The years between 1966 and 1974 were characterised as the period when teacher education underwent significant changes, which included the development of teacher training guides by the Ministry of Education and Arts (Kelemu, 2000). The policy guided the teacher training in a uniform manner in its admission, curriculum, duration of the training, and certification. In this regard, Teklehimanot (2000) remarked that preparation for secondary school teaching, though a short-lived programme was progressed through Bede Mariam Laboratory School as a preparatory centre for secondary teachers' trainees. It was a successful programme that recruited high calibre candidates from Grade 11, to enroll in the Faculty of Education after a one-year (Grade 12) preparatory scholarship.

From 1974 to 1991 (during the Derg Regime), teacher education saw several changes. Candidates were expected, for example, to support a Marxist-Leninist doctrine. There was a

uniform curriculum, certification, and training time in this era (Teklehimanot, 2000). Around 17 disciplines, including English, Amharic, mathematics, social sciences, science, education, and others, are required. Within ten months of training, psychology, sport, music, and other vocational disciplines were delivered in teacher training institutes (TTI), and this appears to be quite vague, unclear, and unmanageable. As a result, the training remained theoretical, teacher-centred, and focused on covering a broad range of topics (Reda, 2008). At the same time, a significant number of untrained teachers were employed to serve as teachers. In 1982, the Derg argued that the education policy of the Imperial regime was elitist (favoring some regions and urban areas) and that the curriculum did not take into account the concrete conditions of the country (Tekeste, 1996). As a result, the government launched a reform study called the Evaluative Research of the General Education System of Ethiopia in 1983. Accordingly, new curricula that reflected the new policy were developed (Temechegn, 2002), and the teachers and educators during the Derg regime were increasingly Ethiopians rather than foreigners (Amare, 1998).

After Prince Bede Mariam Laboratory School closed, there was no clear demarcation between secondary and primary school teachers' training until 1997. During this time, some higher education institutions under the auspices of the Ethiopian Ministry of Education had commenced training secondary school teachers (Kelemu, 2000). Thus, regional teacher education colleges and federal universities, including Addis Ababa University, Kotebe Teachers' College, Bahir Dar Teachers' College, Dilla Teachers' College, Haramaya Teachers' College, and others, had been engaged in training secondary school teachers at the diploma and bachelor degree levels (Amera, 2016). Following the overthrow of Derge in 1991, a variety of initiatives have been launched, particularly the Education and Training Policy (ETP), which aimed at improving society via education in general, and the teacher education system in particular (Tekeste, 1996). Since the introduction of the ETP in 1994, among the areas of special attention and prioritised action have been teacher training and the overall development of teachers. There was a policy that the teachers are expected to have the ability, diligence, professional interest, and physical and mental fitness appropriate for the profession (ETP, 1994). In addition to making revisions in the secondary education curriculum, including teacher education, agreements have been reached to

make the teaching-learning process active, innovative, reflective, practice-oriented, and student-centred (Teshome, 2003).

In order to facilitate the implementation of the policy in the areas of teacher education, a task force was formed to study the teacher education system implemented previously under the title Quality and Effectiveness of the Teacher Education System in Ethiopia (EMoE, 2003). The study recommended a major reform, which came to be known as the Teacher Education System Overhaul (TESO). As a result, the Ethiopian Ministry of Education launched the TESO programme in 2003, to be implemented by teacher education institutes (TEIs) in the country, including colleges and universities. The main objective of this programme was to strengthen teachers' professional competencies, improve students' performance, and bring about a paradigm shift in the Ethiopian teacher education system as a whole (Semela, 2014). It is worth noting at this juncture that the EMoE was not the only player in the new reform process. Instead, international actors were visible change agents in the drafting and implementation of TESO. Apart from sponsoring the background study and drafting the curriculum, the implementation process was generously financed by the European Union; while experts who would train and mentor change agents were airlifted from countries such as the UK and the Netherlands (Tessema, 2007b).

TESO consists of a national framework for teacher education and a curriculum guideline for the initial teacher education programme. In this regard, Tessema (2007) explained that with the emergence of the discourse of TESO, teacher education in Ethiopia has been struggling to change rhetoric and practice by reaffirming a managerially driven reform performance. The terrain is now characterised by globally dominant reform mottos and change agendas, such as paradigm shift and system overhaul. TESO focuses on five programmes on a priority basis, with emphasis placed on the recruitment, training, and education of teachers. Further, TESO sets out five competencies for secondary teachers to be exhibited in the professional context of teaching, namely competence in producing responsible citizens, subjects and content of teaching, the classrooms, areas relating to the school and the educational system, and the value, attributes, ethics, and abilities essential to professionalism in upholding professional ethics (Reda, 2015). It also concentrates on school-based and student-centred learning, practice-oriented training, and

self-preparedness for the teaching profession (Shoeb, 2013). For six consecutive years, TESO was implemented with great hope to improve the quality of teachers and students outcomes in Ethiopia, although the desired results have not been achieved (Semela, 2014).

Some six years after the launching and implementation of the TESO programme and right after the graduation and deployment of its first graduates to the teaching force, there appeared some doubts and complaints by the society that teachers' competence had not shown improvement (Solomon, 2017). In support of this, Ayetenew (2019) argues that the termination of TESO is due to the government's belief that the low competence of graduates, inadequate professional commitment and work ethic, inadequate self- and student behaviour management, and insufficient practice of active learning methods were the result of TESO policy reform. Consequently, after a series of debates, the Ministry of Education introduced another programme called the Postgraduate Diploma in Teaching (PGDT), which followed a different modality of teacher preparation from that of its predecessor. The rationales for launching the PGDT partly emanated from similar problems that necessitated the introduction of TESO and partly from the side of the Ministry of Education to reorient the teacher education system towards pragmatic and reflective perspectives (Amera, 2016).

The EMoE started implementing the PGDT programme in 2011. The design and introduction of the Postgraduate Diploma in Secondary School Teaching (PGDT) into the Ethiopian teacher education system held some merit, where following three points are worth noting: the designing and preparation of the programme were participatory, as they involved academics from major teacher education faculties; the process of programme development drew on the experiences of other countries such as the UK and South Africa; and unlike TESO, there was no rush to implement PGDT since sufficient time was spent (between 2008 and 2011) for the study and preparation (Solomon, 2017). Then, the implementation of the PGDT began in 2011 as a programme preparing secondary school teachers in ten selected universities in Ethiopia and has been sustained up to now. The details of the PGDT programme will be addressed separately in the next section of this chapter (Section 4.4).

To sum up, in its history of just nearly seven decades, teacher education in Ethiopia underwent a series of reforms largely associated with the change of regime. It can, therefore, be argued that the educational reforms were, for the most part, politically driven, with a significant degree of intervention or aid from international actors. The most likely explanation for this comes from the conflict paradigm of social and educational changes, where educational reforms are the results of instability and competition over resources and control over the political structure. Based on the analyses of the teacher education development in Ethiopia, one can understand that commonalities cut across historical periods and state ideologies, including the mutual failure to learn from the weaknesses of past reforms, and the lack of willingness to build on existing strengths while envisaging new ones. In this regard, the researcher also believes that even the PGDT programme will be terminated soon, and replaced with another new programme, due to the change in the political landscape in Ethiopia since 2018 in the advent of the prosperity regime of Dr. Abiy.

Further, programme follow up and review, graduate quality monitoring, and accreditation strategies are not in place in previous teacher education programmes, which are expected to be conducted regularly. In addition, there has been less preparation (on programme inputs, curriculum alignment, programme design, resources, and others) on the part of the colleges and universities offering teacher education programmes. The commitment on the part of regional and federal governments was not up to the magnitude of the requirement. The priority is to undermine the role of teacher education in building effective teacher capacities in particular, and transforming the nation in general (Hailu & Michael, 2018). Generally, several teacher education reforms have taken place in Ethiopia, but the directives, extent, and methodological approaches remain debatable. Thus, it is possible to conclude that the Ethiopian teacher education system is characterised by a terrain of persistent contradictions, challenges, and chaos, engrossed in and obsessed with the rhetoric of system overhaul and reform (Semela, 2014), which in turn hamper the effectiveness of teachers' preparation in general and the move towards inclusive education in particular.

4.3. The Move Towards Inclusive Education in Ethiopia and its Impact on Teacher Preparation for Inclusion

In Ethiopia, education is expected to increase respect for democratic values like equality and human rights. As a fundamental human right, education is seen as one of the main factors in reducing poverty and improving socio-economic conditions. Thus, education is all about people being able to learn what they need and want throughout their lives, according to their potential (EMoE, 2012). In an Ethiopian context, inclusive education is defined as an education system that is open to all learners, regardless of economic status, gender, ethnic background, language, learning difficulties, or impairments. This implies that inclusive education involves identifying barriers that hinder learning, reducing or removing these barriers in schools, vocational training, higher education, teacher education, education management, and workplaces, and adjusting learning environments to meet the needs of all learners (EMoE, 2012). Furthermore, inclusive education refers to an on-going process aimed at offering quality education for all, while respecting diversity and the different needs, abilities, characteristics, and learning expectations of the students and communities and eliminating all forms of discrimination in order to meet diverse students' needs and abilities in regular classrooms (UNESCO, 2008). Thus, implementing inclusive education is supposed to overcome the challenges of the 21st century that have been created due to complex social, political, economic, and educational changes that are in turn related to ever-changing global situations, including Ethiopia (Bitew, 2019).

The acceptance of the philosophy and principles of inclusive education in almost all countries around the world, including Ethiopia, is due to its numerous benefits and contributions, which include: exercising educational rights for all citizens and building a democratic society; providing quality education for all in regular classrooms; developing a positive attitude towards human differences; and achieving psychosocial, academic, and other benefits for students with and without special educational needs (Mitchell, 2015). Beyond this, inclusive education is believed to expand the role of people with special educational needs' in economic development, and serves as an instrument to break down the barriers that separate general and special education and make students with diverse needs and abilities valued and respected as members of a given society (Melese, 2019). Furthermore, unlike integration, which is based on learners adapting to the schooling system, inclusive education involves radical changes to the education system, including adjustments to classrooms, support, and training, and challenging norms

against which students are judged and labelled throughout the world, including Ethiopia (Ginja & Chen, 2021).

In line with the rest of the world, the government of Ethiopia has committed to making education accessible to all citizens and accepted international legal and policy frameworks linked to inclusive education such as the Universal Declaration of Human Rights (1948); the Declaration on the Rights of Persons with Disabilities (1975); the Convention on the Rights of the Child (1989); the World Declaration on Education For All (1990); the Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1983); the Salamanca Statement and Framework for Action on Special Needs Education (1994); the World Education Forum (2000); the Convention on the Rights of Persons with Disabilities (2006); the Millennium Development Goals (2000); and the Sustainable Development Goals (2015) (Tirussew, 2005). The endorsement of these international legal and policy frameworks has supported Ethiopia's move towards inclusion, and thus, the practice of inclusive education has emanated from the above international legal and policy frameworks. Inclusion is the foremost issue and is becoming an emerging pedagogy in diverse academic and research institutions, such as teacher education colleges and universities in Ethiopia (Aemiro, 2020).

As a result, the international agreements mentioned above influenced the country to recognise education as a fundamental human right that should be accessible to all citizens. In addition to that, the country's policy, strategy, programme, plan, and documents considered the human rights approach to education. Consequently, the inclusion of all children in education is vividly articulated in all the legal and policy frameworks of the country, as discussed below in detail (EMoE, 2017). The first kind of document is the Constitution. The Federal Democratic Republic of Ethiopia's (FDRE) Constitution is the country's supreme law. It declared that all international treaties that the country has ratified are part of the country's legal system. All legislative, executive, and judicial bodies are responsible for upholding and enforcing the law according to human rights principles. The right to equitable access to publicly supported social services, including education, is clearly stated in the Constitution. It further stated that the government has a responsibility to allocate ever-increasing resources to offer education and other social services to individuals with disabilities, orphans, and the elderly (FDRE, 1995). As a result, the Ethiopian

Constitution stipulates that everyone has the right to equal access to education. It also strongly agreed on the importance of promoting equity in the educational system and the commitment to provide help to children with disabilities and special educational needs (UNESCO, 2009).

The second issue to be addressed is the educational policies that supported the move towards inclusive education in Ethiopia. In this regard, the Education and Training Policy of 1994 has set the highest and most broad policy direction for the education system of the country. It calls for the expansion of basic education and training for all people, as well as the development of individuals' physical and mental potential and problem-solving capacity, including children with disabilities, according to their prospective needs. By valuing diversity, the policy has demonstrated its commitment to meeting the needs of all children. It further noted that children with disabilities will receive special education and training, and it also underlined the significance of preparing and using support inputs for inclusive schooling. In general, the ETP of 1994 has paved the way for the expansion of the country's education sector, and in particular, it recognises that basic education is both a necessity and a fundamental human right for all people.

The Education and Training Policy of 1994 also addressed the issues of improving access to educational opportunities as well as recognising the right of children with disabilities and gifted learners to quality education to enable them to learn at their pace. In addition to the Education and Training Policies of 1994, the Health Policy of 1996 has been designed to promote and encourage the early utilisation of available health care facilities for the management of common childhood diseases. Further to this, the Social Welfare Policy of 1996 affirmed that all efforts should be made to implement all international conventions and legal instruments concerning the rights of children. The policies of health, education, and social welfare intersect at the point of promoting the holistic development of the child by protecting the child from any form of disabling disease and physical and psychological abuse and creating an environment conducive to the child's optimal development within an inclusive classroom (Tirussew, 2010; EMoE, 2012).

The third is the proclamation. Since the stage of development of the country's higher education requires legal direction and guidance to enable it to become efficacious and ensure and promote its positive contributions through relevant and quality education for all, the government of

Ethiopia has declared Higher Education Proclamation No. 650/2009. This proclamation has indicated the necessary and feasible academic assistance, as well as guidance to be provided for all learners, specifically for children with disabilities and special educational needs. It also guaranteed that learners with disabilities would be supported through sign language, accessible facilities and programmes, relocated classes and accessible environments, alternative testing procedures, and educational auxiliary aids (FDRE, 2009). Hence, the Proclamation has considered the needs and learning interests of all learners, including students with disabilities, in higher education institutions that address management, accommodation, teaching, learning, and training at a higher level.

Another issue that should be addressed is programme designed to promote inclusive education practices in Ethiopia's education system. The government of Ethiopia embarked in 1997 on a 20-year programme of education reform called the Education Sector Development Programme (ESDP), consisting of five consecutive programmes (ESDP I, II, III, IV, and V). The ESDP I and II do not have a role in supporting the practices of special needs and inclusive education in the education system. Due attention was given to the expansion of educational opportunities for children with special educational needs through ESDP III (2005–2010). ESDP III emphasised the expansion of educational opportunities for children and young people with disabilities to achieve the Education For All (EFA) goals. It considered special needs and inclusive education as cross-cutting issues in the education system of the country. It also focused on the need for special-needs education to be included in planning, budgeting, and reporting from the federal level to the school level (EMoE, 2006). Thus, ESDP III has paved the way for the start of the inclusion of all children with special education in the Ethiopian education system.

In addition, ESDP IV (2011–2015) has indicated special needs education as providing services for the individual child and inclusive education as a change of the whole system and the school environment to the needs of the individual child. It focused on enhancing the number of special-needs educators, increasing the enrollment of learners with disabilities, and improving the institutional capacity of schools to address the academic and social needs of learners with special educational needs (EMoE, 2010). ESDP IV, therefore, has greatly contributed to ensuring access and quality education for all children and young people with disabilities. Furthermore, ESDP V

(2016–2020) ensured that special needs and inclusive education would be fully mainstreamed as cross-cutting issues within priority programmes, ensuring joint accountability of all implementing bodies. It assigned the priority of equal opportunities and participation for all children, with special attention to disadvantaged groups, and the delivery of quality education that meets the diverse learning needs of all children. It also stated clear targets for the establishment of inclusive education support systems to include children with various disabilities (EMoE, 2015). This indicates that ESDP V directs the implementation and development of inclusive education in the Ethiopian school system.

Finally, since 2009, the Ethiopian government has started designing and implementing a programme called the General Education Quality Improvement Programme (GEQIP) in collaboration with multiple donors to strengthen the education system and realise it for all children. GEQIP introduced equity as one of its main result areas and aimed to move towards more holistic and programmatic planning and implementation of inclusive education across the country. The programme envisaged supporting the creation of adequate learning conditions for all learners through allocating school grants for the establishment of resource centres in inclusive schools. The allocated grants have been planned to be used to organise awareness-raising and training events; purchase reference materials and equipment for assessing needs; provide educational resources for children with special educational needs; and ensure an accessible learning environment for all (World Bank, 2013). As a consequence, this programme is targeted to reduce barriers in schools and create a welcoming school environment for the benefit of children and youth with disabilities and special educational needs.

The fourth issue to be considered is the different national development plans formulated to enhance the implementation of inclusive education in Ethiopia. For example, the Growth and Transformation Plan I (2011–2015) is a national five-year developmental plan that was designed to improve the country's economic well-being and work towards eradicating poverty. This plan is intended to ensure the quality of education and achieve the Millennium Development Goals in the social sector. It placed an important priority on the quality, equity, and efficiency of education at all levels. It also clearly stated that an education strategy would be implemented to meet the learning needs of children and youth with disabilities and special educational needs

(MoFED, 2010). In addition, the Growth and Transformation Plan II (2016–2020) is a continuation of the first one. The plan aimed to give special attention and assistance to children and youth with disabilities, as well as children with special educational needs, in order to help them start and continue schooling. Its goal is to take steps to reduce barriers to movement for disabled children and youth, as well as children with special educational needs, in schools (National Planning Commission, 2016). Hence, the Growth and Transformation Plans have been dedicated to transforming the education sector as one of the directions, and this implies that children and youth with disabilities as well as children with special educational needs are considered to benefit.

Furthermore, in 2016, the Ministry of Education of Ethiopia introduced a ten-year plan called the Master Plan for Special Needs and Inclusive Education in Ethiopia (2016–2025). The plan is a complete policy that serves to guide the provision of special needs and inclusive education. It aimed to lend more visibility to special needs and inclusive education implementation and strengthen the structures and environment that enable the practices of inclusive education in Ethiopia. It is built on six major strategic pillars, which form the basis for inclusive education in the country until 2025 (MoE, 2017). The preparation of this plan indicates the commitment of the country to move towards the development of inclusive education to actualise lifelong learning opportunities for all, including children with various forms of disabilities and special educational needs, and to create an inclusive school system and an inclusive society in Ethiopia at the end of the day.

Another very important issue to be considered is the strategic documents that have been developed in Ethiopia to promote inclusion in education. Although Ethiopia has attempted to implement a special needs education programme since 2005, it has been carried out in a fragmented and arbitrary manner. This was primarily due to the absence of a nationally governing strategy for the programme. To address this problem, the Ministry of Education of Ethiopia launched the first Special Needs Education Strategy in 2006 based on the country's Constitution and ETP (EMoE, 2006). The strategy was focused on the promotion of inclusive education to meet the education for all goals, and it was also aimed at an education system that is open to all children. It stated that all children can learn and many of them need some form of

support in learning (EMoE, 2006). Hence, this strategy indicated the future directions of special-needs education in Ethiopia, which had been targeted until 2011. As a result, the strategy has triggered the major development of special needs education in Ethiopia since 2006.

In addition, in 2012, another strategy document called the Special Needs and Inclusive Education Strategy was introduced in the country that encompassed more of the philosophy, values, and principles of inclusive education at all levels of the Ethiopian school context. This strategy acknowledged education as a human right, accepted in the principle of UPE and EFA goals by 2015, to which Ethiopia was committed. Its overall objective was to build an inclusive education system that would provide quality, relevant, and equitable education and training to all children, youth, and adults with special needs and ultimately enable them to fully participate in the socio-economic development of the country (EMoE, 2012). This strategy has been instrumental in mainstreaming inclusive education issues at all levels of the education system, including pre-primary, primary, secondary, and vocational and higher education institutions such as colleges and universities.

As stated above, Ethiopia is one of the countries that accepted international conventions, declarations, legislation, and policies supporting the move towards inclusive education as well as developed its own in line with the international treaties to get the best out of inclusion. All the legal and policy frameworks and the prevailing efforts arising from them have been attributed to equal educational opportunities for all, with particular emphasis on children with special educational needs at all educational levels. In addition, all the conventions have been focusing on compulsory education for all and calling for comprehensive help and inclusive child-centred pedagogy. As a result, the government of Ethiopia has been concerned with the educational accessibility of all learners since 1994, irrespective of their disability, gender, language, socio-economic status, religion, and other differences. This concern is manifested through the moves and efforts made to realise the principle of education for all and inclusion in education in the country; although its implementation is unsatisfactory, particularly at the secondary school level (EMoE, 2018). This is because a larger proportion of young children entering secondary education makes the range of students' aspirations and abilities more diverse in Ethiopian secondary school classrooms (World Bank, 2013).

Among the several factors that contribute to the unsatisfactory implementation of inclusive education and the difficulties encountered in meeting the needs of all children in the Ethiopian school context, is the lack of well-trained teachers who conceptualise inclusive education and correctly apply the inclusive pedagogical approaches to teaching has been a major concern (Temesgen, 2018; Bitew, 2020; Meskerem, 2017). This means that, although there is widespread support for inclusion at the national, regional, and school levels, a common concern is that teachers lack the necessary knowledge and skills to educate students with disabilities and special educational needs in inclusive environments. However, we have to keep in mind that all students have the right to a quality educational experience in an inclusive classroom. For this to become a reality, there is a need to have teachers who respect and appreciate diversity and are capable of creating inclusive educational experiences that support diverse students' learning needs, including students with various disabilities (Adjei-Boateng & Cobbinah, 2019).

Thus, to meet the diverse educational needs of all children and achieve the ultimate goal of inclusive education in Ethiopia, general secondary school teachers are expected to have basic knowledge about inclusion and its policies, develop a positive attitude towards the principles and philosophy of inclusion, and acquire the basic practical skills needed to implement inclusive education (World Bank, 2013). Moreover, general secondary school education teachers need to have the knowledge and skills that help them to: support students with special educational needs in their classroom; consult special education professionals when they encounter problems; work in close collaboration with parents of students with special educational needs; conduct action research to mitigate barriers to learning in a classroom situation; identify and assess students' individual abilities, learning, and environmental barriers so that they can plan to remove the barriers and assist their students; and use inclusive pedagogical approaches to meet the needs of all children in an inclusive school and classroom (EMoE, 2012).

Though teachers are considered the primary resource for supporting inclusion in Ethiopia, many teachers have found it difficult to accommodate and support the diverse learning needs of all children due to inadequate preparation in their initial teacher education programmes (EMoE, 2018). Some of the pedagogical challenges facing teachers who are teaching in an inclusive classroom are that, for instance, they do not have adequate knowledge and skills to make

teaching individualised and interesting (Hankebo, 2018). They predominantly use rigid lesson plans and teaching methods, rigid curricula, inappropriate teaching strategies, and teacher-centred classroom methods. As a result, individualised teaching is not in the picture at all (Tefera et al., 2015). Besides this, they have no trends or practices to prepare individualised educational plans for learners with special educational needs, and they also have no consideration of differentiated educational support for the learners' needs (Mitiku et al., 2014). In addition, many teachers do not give much attention to explaining and demonstrating practical activities for learners with different disabilities, particularly for children with vision problems and with physical disabilities (Kassaw et al., 2017). Furthermore, there is an extreme shortage of special educators and assistant professionals, particularly at the secondary school level (Dano, 2018).

The Ethiopian government also expresses concern at a perceived deterioration in the quality of schooling as evidenced by an overall decline in the Grade 10 and Grade 12 national examination attainment, and of those children with disabilities attending school, a majority frequently drop out within a few months or years, where only a few children with disabilities complete their primary education (World Bank, 2013). Then, the concerns for quality schooling have been addressed through a teacher development programme that makes the qualification of teachers a focal point, particularly at the secondary school level (EMoE, 2018). In response to this, ESDP V listed the development of initial teachers as first among its priorities for improving the quality of secondary education and the implementation of inclusive education. This priority is consistent with international experience that shows teacher performance to be one of the major determinants of student learning achievement (World Bank, 2013). In other words, to improve the quality of learning and teaching, teachers should actively extend their knowledge and skills, so as to better prepare students for learning outcomes. As a result, the country has started to conduct teacher training for special needs and inclusive education since the 1990s based on the provision of the service within the existing structure and in the framework of special needs and inclusive education (EMoE, 2018). Before that, the move towards inclusive education was based on the assumption that teachers were willing to admit students with disabilities into regular schools and classes and be responsible for meeting their diverse educational needs (EMoE, 2006).

In Ethiopia, until the early 1990s, only short-term training was offered to teachers to meet the demands of children with special educational needs, which did not lead to lasting changes in the education system. For the most part, the training was financed by bilateral partners or international non-governmental organisations (NGOs). However, given the scope of the problem, small-scale donor-financed interventions did not seem to yield the desired improvements in the teaching and learning processes (Lewis, 2009). In 1992, however, a six-month course was developed at the Adama Teacher Training Institute, principally due to financial contributions from the Finnish government, which had managed to attract some degree of attention to inclusive education. The training was aimed at developing teacher capacity to support the existing special schools and special classes, as well as the inclusion of more learners within mainstream classes. This was followed by Finnish funding for courses at Addis Ababa University and the establishment of the Sebeta Special Needs Teacher Training Centre in 1995. Though the initiative was far from adequate in terms of its scope and contribution to the move towards inclusion, the activities triggered the emergence of a legal policy framework in the country (Semela, 2014).

The education and training policy of 1994 also emphasised teachers' training in special needs education by stating that teacher training for special needs education is provided in regular teacher training programmes (ETP, 1994). In addition, the Ethiopian government declared Education for All Goals (EFAs) as one of its main aims to be accomplished in the education system, accompanied by special education teacher training for ten months (EMoE, 1996). Further, in 1998, a degree programme leading to a Master of Arts in Special Needs Education was founded at the Department of Psychology, Faculty of Education of Addis Ababa University, in cooperation with the University of Oslo (Tirussew, 2010). In this way, Ethiopia took the first steps away from the minor, isolated training of teachers in an apprenticeship programme within different special schools, towards a holistic teacher training programme and the higher education of special-needs educators (Johnsen & Teklemariam, 2006). Furthermore, under the teacher education programme (TESO) designed by the Ethiopian Ministry of Education in 2003 to overhaul teacher education, teacher training institutes and colleges are required to give future teachers a course in special needs education with the assumption that this undertaking will

facilitate the inclusion of children with disabilities and special educational needs into the Ethiopian school system (Lewis, 2009).

In summary, the shift towards inclusive education in Ethiopia has created the opportunity for a greater number of children with disabilities and special educational needs to have access to education in the regular schools in their neighborhoods or nearby communities. That means that regular schools have opened their doors for children with special educational needs and given them the right to be educated with their peers. This has encouraged and motivated parents of children with disabilities to send their children to school instead of leaving them at home (Franck & Joshi, 2017). This being the case, however, the successful implementation of inclusive education in schools usually requires a substantial and often radical change in policy, programme, practice, and culture, as well as strategies. This in turn requires a whole-school developmental approach (Ainscow et al., 2006), and also relies very heavily on the skills, knowledge, and beliefs of teachers (Ekins & Grimes, 2009). As such, all teachers need to be equipped with the necessary knowledge and skills to effectively teach and address the learning needs of all students in an inclusive classroom (Šiška et al., 2019). Thus, teachers require a wide range of pedagogical approaches and techniques; particularly the pedagogy of inclusion, to help them match their teaching to individual learning styles and needs (EMoE, 2015).

Towards this view, many studies reveal that the teachers' roles and responsibilities in implementing inclusive education are highly correlated with the quality of initial training they have received (Hiwot, 2011; UNESCO, 2019). In this regard, Zelalem (2007) notes that teachers are not only required meeting the needs of regular education students, but also those of students with special educational needs. As a result, the skills and knowledge of teaching approaches and strategies acquired by the teachers during their initial preparation determine their ability to meet the needs of all children in an inclusive classroom. Furthermore, it enables teachers to plan instructions in more flexible ways, taking into consideration differences within learners through adapting learning goals, contents, and the learning environment to accommodate students with special educational needs (Lewis, 2009).

Thus, preparing teachers with the necessary knowledge, attitudes, and practical competencies constitutes a vital aspect of ensuring that inclusive education is successfully implemented in Ethiopia. For nearly three decades, Ethiopia's education system has developed a favorable policy context and legal framework in which to fully implement inclusive education. However, there is a need to examine the realities of how teachers are prepared for inclusive education 'on the ground'. To this end, this study answers the question as to whether the teacher preparation that has been done so far has kept pace with Ethiopia's move towards inclusive education, and whether Ethiopian universities are effectively preparing teachers for the successful implementation of inclusive education, as well as proposes a model on how teachers should be trained in the future to successfully implement inclusion in the Ethiopian secondary school context.

4.4. The Role of Postgraduate Diploma in Secondary School Teaching in Producing Graduates Ready for Inclusive Teaching in Ethiopia

Secondary school education is an important component of the educational structure of many nations, including Ethiopia. Secondary schools in Ethiopia serve as a link between primary education and college or university education and also prepare youth for the world of work. These schools include the teenagers and adolescent population of Ethiopia, who are diverse in terms of race or ethnicity, linguistics, culture, gender, socio-economic background, learning styles, learning rates, disability, and others (EMoE, 2011; World Bank, 2013). For purposes of equity and inclusivity, it is important that every student, irrespective of his or her characteristics, can benefit from the secondary school education system (EMoE, 2012). For the issues of equity and inclusion to be fully addressed in the secondary education system, a nation should have effective and quality secondary school teachers ready to implement inclusive education successfully. Supporting this view, Asare and Nti (2014) stated that the teacher is central to the educational enterprise of inclusion. This implies that the role of the teacher in successfully implementing inclusive education is so crucial that no nation can afford to ignore it, and this is no exception in Ethiopia.

Beyond this, quality secondary education cannot be achieved without well-prepared teachers. This means that teachers' ability to engage with diversity and practice inclusion is highly dependent on how well they are prepared during their initial teacher education training (Garibay,

2014). In support of this, Hollins (2011) claimed that inclusive teaching is a complex and multidimensional process that requires deep knowledge and understanding in a wide range of areas and the ability to synthesise, integrate, and apply this knowledge in different situations, under varying conditions, and with a wide diversity of groups and individuals. Thus, preparing teachers who believe in inclusive education and adapting appropriate inclusive practices in secondary school classrooms demands conscious effort. This implies that secondary teacher preparation for inclusion calls for: the development of inclusive pedagogical approaches; teachers who can competently deliver effective instruction in an inclusive classroom; teachers who can support students with disabilities and have greater contact with them within preparation programmes; and improved practicum experiences and strong collaboration between actors to develop competence and raise levels of confidence in initial teachers (Naraian, 2016).

In the secondary schools of today's Ethiopia, every classroom is made up of children with diverse backgrounds, behavioural difficulties, and challenges. As a consequence, teacher preparation must include techniques that will prepare secondary teachers to effectively manage not only children with visible disabilities but also children with emotional and behavioral issues (Semela, 2014). In other words, teacher preparation should train teachers who will be able to bring inclusivity to their lesson delivery so that every child can benefit, not just some. As suggested by Schmidt et al. (2011), preparing highly qualified teachers is a matter of concern and public policy in every society that sponsors public education, including Ethiopia, since there is a connection between teacher quality and student learning outcomes and experiences. This being the case, however, Ethiopian secondary teacher education has neglected issues of equity and inclusivity over the years, even though their importance is stated in so many policy documents in the country (Tefera et al., 2015). Therefore, it is important to examine the processes through which secondary school teachers are prepared for inclusive education in Ethiopia.

In Ethiopia, secondary school teachers have traditionally been trained at public universities in four-year degree programmes that combined educational coursework and practicum experience with academic courses in various disciplines such as mathematics, physics, chemistry, biology, sport science, English, Amharic, geography, history, civic and ethical education, and others (EMoE, 2009). In 2011, the degree changed from a four-year integrated bachelor's degree to a

three-year degree course in a major field plus an additional year of professional teacher training (an add-on) to obtain PGDT. PGDT as a secondary teacher education programme was designed to confront several problems of the old teacher training programmes, particularly TESO, which included inadequate subject-matter competence on the part of teachers; insufficient and improper active learning methods in the classroom; insufficient professional commitment and work ethic among teachers; a lack of teacher interest in following up and assisting students with special educational needs; and poor school-community relationships (EMoE, 2012).

Conscious of the above problems, it is believed that reforming the structure and content of the secondary teacher education programme is in order. Here, it is important to note that the PGDT programme is not designed to prepare teachers for traditional schools and classrooms, but to become the forerunner of a new teaching approach that imparts the scientific method and creativity as well as higher-order (metacognitive) skills based on pragmatism and reflective practices (EMoE, 2012). The EMoE (2011) further emphasised that PGDT as a teacher training programme should model strategies for both dealing with variations in students' learning styles and promoting active learning and reflection that go with the philosophy and principles of inclusive education. In addition, the PGDT programme proposed that different instruments should be used to assess student learning progress than in the past with teacher education programmes like TESO, with regular monitoring, recording, and providing feedback to students and parents. Furthermore, teachers are expected to learn to identify their own learning needs, manage their professional development, and continuously update their subject-matter knowledge as well as pedagogical content knowledge, which lead to the implementation of inclusive pedagogy (EMoE, 2012).

The one-year professional education programme, called the Postgraduate Diploma in Secondary School Teaching, consists of training in educational foundations, pedagogy, subject area methodology, language, and school-based practicum courses with a total of 40 credit hours (EMoE, 2011). The duration of the training is ten months. This training time is divided into three terms, with each term having three-month duration. These terms will allow one to maintain the sequence and integration of the courses in the programme. Students will get the chance to take those foundation courses well ahead of those courses that deal with the specifics of teaching.

Similarly, courses that complement one another will be offered in the same term. It will also minimise the interruptions caused by practicums on the courses (EMoE, 2009b; World Bank, 2013; Manus, 2013). PGDT was supposed to be given in a regular programme in three terms, taking a total of ten months. However, to cope with the teacher shortage, the programme was launched in July 2011 (from July to September); since there were no teachers education graduates in the 2011 academic year throughout the country. The summer basis continues until the end of the 2014–2015 academic years. But the situation was ruined, and the regular basis started in the 2015–2016 academic year in addition to the summer programme.

Table 4.1: Curriculum Framework for training Secondary School Teachers in Ethiopia (PGDT)

Terms	Courses	Credit Hours
I	1. School and Society	3
	2. Psychological Foundations of Learning and Development	3
	3. Secondary School Curriculum & Instruction	4
	4. English for Secondary School Teaching and Learning	3
	5. Teaching in a Multicultural Setting	2
II	6. Subject Area Method I	4
	7. Teachers as Reflective Practitioners	3
	8. Assessment & Evaluation of Learning	3
	9. Inclusive Education for Secondary School Teachers	3
	10. Instructional Technology	2
III	11. Practicum	4 with one month practice
	12. Subject Area Method II	4
	13. Action Research Project	2
Total		40

Source: Curriculum Framework for Secondary School Teacher Training in Ethiopia (EMoE, 2009)

As can be seen from the table above, the PGDT programme consists of a single course entitled Inclusive Education (PGDT-442), with three credit hours. The major focus of the course is to assist regular classroom teachers to better understand diversity, and thus to teach learners with special needs more effectively in a regular classroom. Learners with special needs are meant to include all those whose educational needs are not effectively met through the use of the usual or standard curriculum (EMoE, 2009). It considers principles, ideas, and techniques that promote more effective instruction for diverse learners regardless of exceptionality (EMoE, 2009). It is a

foundational and compulsory course that is delivered to all initial teachers admitted to the programme. The course is delivered to the candidates in the second term (January–March) by the staff members of the Department of Special Needs and Inclusive Education at 10 universities offering a PGDT programme. The course has a practical attachment part (30% of the credit hours) that helps to link the candidates with the surrounding secondary schools in addition to the practicum course (EMoE, 2009).

In summary, the major objectives of the PGDT programme as stated in the secondary teacher education policy reform document include: equipping trainees with the knowledge, skills, and dispositions required to become effective secondary school teachers; enabling trainees to become reflective practitioners who can analyse, evaluate, and act to improve their practice and develop further professional knowledge and skills; developing an understanding of the nature of teacher professionalism, the responsibilities of teachers, and the professional values and ethical practice expected of them; creating awareness that a central characteristic of teaching as a career is engagement in a lifelong process of professional learning and development; and developing trainees' capacity to engage in research to inform and develop their practice (EMoE, 2009). In addition, PGDT is expected to provide teacher trainees with the theoretical and practical experience they need to achieve all the standards and competencies set for Ethiopian secondary school teachers (Ayetenew, 2019).

Nowadays, issues related to teachers and their professional development effectiveness have received increased attention by researchers, authorities, and stakeholders in the area, as teachers are important on their own and the role they play in advancing the practices of inclusive education is critical (Hailu & Michael, 2018). In support of this, UNESCO (2009) argues that teachers are both the subjects and the objects of changes in implementing new educational reforms such as inclusive education. Similarly, Mitchell (2010) states that teachers are both duty bearers and rights holders within the framework of the right to education, and their empowerment to meet diverse students' needs and abilities and ensure quality education for all students. This implies that inclusive education can be realised when teachers are actively involved in implementing the policy of inclusion, accept the philosophy and practice of inclusion, take responsibility for adjusting schools to fit students' diverse needs and abilities, create a conducive teaching-learning environment for all, and adjust the methods and materials

they use to meet the diverse learning needs and abilities of their students (Bitew, 2020). The researcher also believes that the role of teachers is among the leading and critical variables for the successful implementation of inclusive education in Ethiopia.

Thus, in order to fulfill the above roles, teachers should obtain appropriate training that helps them gain the knowledge and skills necessary to implement inclusive education effectively as well as develop positive values and attitudes towards inclusion and children with special educational needs (Malak, 2013); if not, they become a major barrier to the successful implementation of inclusive education (Shelile & Hlalele, 2014). It has been argued that when teachers gain the necessary training, they can better support students with diverse educational needs, and this can be best addressed through initial teacher education for inclusion (Kurniawati et al., 2014). In line with this view, the government of Ethiopia launched the PGDT programme in 2011 to produce graduates who strive to ensure equity and quality of education in the Ethiopian secondary school system (EMoE, 2009). In general, teacher education for inclusion helps teachers enter a profession that accepts individual and collective responsibility for improving the learning and participation of all children, which in turn paves the way for the successful implementation of inclusive education as a field, including in Ethiopia (Tonegawa, 2019; Franck & Joshi, 2017; Olkaba et al., 2019).

Even though many studies have been conducted worldwide concerning the importance of teacher education for inclusion over the past three decades, little is known about its effectiveness in producing graduates for the challenges of inclusive education, and this has no exception in the Ethiopian secondary school context. In this regard, Hailu and Michael (2018) state that an effective teacher education programme is critical, not only for children with disabilities, but also to maintain the quality of education in general and to improve learning outcomes for all learners in particular. One of the goals of education in Ethiopia is to improve the quality of education in order to provide students with the knowledge, skills, and values necessary to become productive and responsible citizens. However, the intended improvement in the quality of learning and teaching has not yet been achieved in the Ethiopian secondary school context (EGRA, 2014). One of the major factors that researchers (Bitew, 2020; Aemiro, 2020; Ginja & Chen, 2021) have identified is the lack of effectiveness of the teacher education system in producing graduates ready for the challenges of 21st-century inclusive teaching in Ethiopia.

For instance, insufficient or lack of teacher training was identified as a factor that has negatively impacted teachers' attitudes towards the inclusion of students with disabilities in regular schools in southern Ethiopia (Ginja & Chen, 2021). The result suggests that preparing teachers for inclusive education is perhaps one of the greatest challenges for the implementation of inclusive education in Ethiopia. Since the integration of inclusive education is a policy directive in the Ethiopian teacher education system, this finding has further implications for examining the effectiveness of teacher education reforms and initial teachers' preparation for inclusion in Ethiopia. In addition, the research findings of Aemiro (2020) revealed that teachers teaching in regular primary schools in Addis Ababa encountered difficulty accommodating and supporting all learners because of their inadequate preparation during their pre-service training programme. He further stated that the majority of teachers teaching in inclusive classrooms lack ability, creativity, and inclusive pedagogical knowledge. As a result, these teachers do not perceive themselves as having adequate preparation and skills to meet the instructional needs of all learners.

Similarly, the study conducted by Bitew (2020) revealed that primary school teachers in the Amhara region had a low level of knowledge about the concept of inclusive education, students' diversity, and meeting diverse students' needs and abilities in inclusive classrooms. He further stated that the training of primary school teachers is not in line with equipping the trainees with the necessary knowledge and skills about and attitudes towards inclusive education to implement it successfully. He suggests that primary teachers ought to be trained to have the knowledge and skills of inclusive pedagogical approaches that will help them implement inclusive education in line with its principles and practices. In addition to this, in their survey of inclusive education implementation status, Tefera et al. (2015) revealed that the main actors in practicing inclusion, particularly teachers, are not sufficiently trained, except for attending some orientation programmes or short-term training in primary schools in Addis Ababa. They further stated that teacher training institutions are not well equipped with the relevant resources, and experts that help prepare teachers with skills to facilitate the education of children with disabilities and special educational needs.

According to the above findings, therefore, preparing teachers who are ready to practice the philosophy of inclusion and develop a more inclusive education system is critical. Teacher education programmes that prepare teachers for inclusion play an important role in this regard. The question is, however, as to how well secondary teachers in Ethiopia are prepared for inclusive teaching. From the researcher's readings and experiences so far, studies that show how the philosophy and principles of inclusive pedagogy are integrated into secondary teacher education programmes like PGDT, making the education system different from the traditional segregation approach; and how initial teachers that are prepared to meet the needs of students with special education needs, including students with disabilities were rare in Ethiopia. This encouraged the current examination as to how effective the PGDT programme is in preparing secondary school teachers for inclusion in Ethiopia, underpinned by the theoretical framework of inclusive pedagogy. It also aimed to propose a model (an alternative strategy) for how future teachers can be prepared for the successful implementation of inclusive education in Ethiopia.

As stated above, the study anticipates investigating the effectiveness of the PGDT programme in preparing inclusive teachers for secondary school teaching in Ethiopia. Thus, the issue of effectiveness was treated in terms of what the PGDT programme accomplished as a whole in order to promote inclusion in the Ethiopian secondary education system through impacting secondary school teachers. To this end, the effectiveness of the PGDT programme was examined in two ways. First, in terms of the basic components used to analyse effectiveness, i.e., the extent to which the PGDT programme components meet their obligations in preparing the graduates to successfully implement inclusive education. Second, in terms of the core competencies expected to be developed by the trainee teachers, i.e., the extent to which the PGDT programme graduates feel adequately prepared to develop the core competencies necessary to successfully implement inclusive education, which in turn influences the performance of trained teachers in their post-training engagement.

4.5. Chapter Summary

This chapter reviewed the Ethiopian literature related to secondary teachers' preparation for inclusive education. As a result, it addressed issues concerning the historical development of teacher education programmes in Ethiopia and their effectiveness; the move towards teacher

education for inclusion together with policy documents supporting inclusive education in Ethiopia; the Postgraduate Diploma in Teaching (PGDT) programme; and the secondary teachers' professional standards in Ethiopia in line with the theoretical framework underpinning the study, namely the pedagogy of inclusion. In doing so, teacher education development from the 1900s to the present was discussed in chronological order to fully understand the contributions of those developments to the move towards inclusive education in Ethiopia. In addition, constitutional issues, educational policies, proclamations, educational programmes, educational development plans, and educational strategies that impacted the move towards inclusive education in general and teacher education for inclusion in particular were addressed. Furthermore, the historical development of the PGDT programme, its objectives, curriculum framework, implementation practices, and a conceptual framework measuring its effectiveness based on the theoretical framework of inclusive pedagogy were discussed in detail. The next chapter (Chapter Five) of this study will deal with the research methodology and design of the study, including the research paradigm, approach, and design; population, sample, and sampling procedures; data collection and data analysis methods; validity, reliability, and trustworthiness of the study; as well as ethical considerations.

CHAPTER 5: RESEARCH METHODOLOGY AND DESIGN

5.1. Introduction

This chapter explains how the research was conducted, with whom, and where to fulfil its purposes. It presents the research paradigm and methods of the study in detail. It begins with the description and justification of the research paradigm that underpins the study to help the reader understand the researcher's view of reality and how it can be understood, including the research approach and design. Then, it moves on to discuss the research sites, population, samples, sampling procedures, and data collection and analysis methods. The second-to-last section covers the ethical issues considered in the study to protect the rights of participants. The last section of this chapter presents the mechanisms that were used in the study to enhance the quality of the data and the findings, namely validity, reliability, and trustworthiness.

5.2. Research Paradigm

A paradigm is defined as the assumptions, beliefs, or models of research, and data gathering, and analysis applied to research (Creswell, 2014). Mertens (2005) also defines a paradigm as a way of looking at the world that is composed of certain philosophical assumptions that guide and direct the thinking and action of the researcher. Similarly, Neuman (2006) sees a paradigm as a general organising framework for research that includes basic assumptions, key issues, models of quality research, and methods for seeking answers. In addition, Denzin and Lincoln (2009) view a paradigm as a net that holds a researcher's epistemological, ontological, and methodological premises that determine the scope of the necessary philosophical grounding of a given study. In line with this view, ontology is concerned with the search for the essence of reality; epistemology is concerned with the course, nature, possibility, and limits of knowledge; and methodology focuses on how a research study should be planned, structured, and executed to gain knowledge (Cohen et al., 2011). In support of this, Mertens (2005) notes that ontology answers questions related to the nature of reality; epistemology answers questions related to the nature of knowledge and the relationship between the knower and the would-be known; and methodology answers questions related to how the knower goes about obtaining the desired knowledge and understandings.

Concerning the choice of research paradigm, Cameron (2011) stated that the debate surrounding research paradigms are irrelevant since the struggle is for the primacy of one paradigm over others, where each paradigm in fact harbours its own merits. In this regard, Creswell (2012) noted that, on the one hand, there are purists who assert that paradigms and methods should not be mixed. On the other hand, there are situationalists who believe that certain methods can be used in specific situations. There is also a middle path taken by pragmatists who observe a false dichotomy between qualitative and quantitative research paradigms. This implies that pragmatists believe in the efficient use of both qualitative and quantitative approaches, which leads them to use mixed-methods research approaches. Supporting this view, Migiro and Magangi (2011) state that pragmatism values both objective and subjective knowledge, where the truth refers to what works best for the understanding of a particular research problem. The researcher chose to take the middle path between the paradigms and, therefore, based his research on the pragmatist paradigm as a philosophical position on qualitative and quantitative data that understands these as more useful in conjunction rather than pitting the competing ontological, epistemological, and methodological dimensions of one true reality against multiple socially constructed realities (Creswell, 2014).

Creswell (2014) has mentioned that pragmatism is a philosophy that permits mixing paradigms, assumptions, approaches, and methods of data collection and analysis. Pragmatism as a research paradigm is oriented towards solving practical problems in the real world rather than being built on assumptions about the nature of knowledge (Creswell, 2012). The researcher adopts the pragmatist's position within the research paradigm to freely accept or reject any of the ideas and assumptions that are usually clustered under one paradigm, and pragmatism leads to an action-oriented research procedure for which the training of secondary school teachers for inclusion in Ethiopia can serve as but one example. Consequently, the pragmatic framework permits the researcher to employ a multitude of empirical research tools to best answer the research questions stated in Chapter One of the study. In this regard, Armitage (2007) argues that the pragmatist paradigm can be adopted for educational research purposes, because it suits the mixed methods approach taken within the predisposition of practitioner-based research. The researcher found pragmatism relevant to this study, which is educational in nature, as it focuses on

investigating the effectiveness of secondary teachers' preparation for inclusion in Ethiopia, and thus on the researcher's educational training experience.

Hays and Singh (2012) define ontology as the perception of reality—the extent to which a research paradigm believes reality can be studied objectively, subjectively, or both. In terms of ontology, pragmatists believe in external reality. They do not believe in the possibility of fully determining certain concepts such as truth and reality, which they view as having caused endless and useless discussion and debate (Mertens, 2005). Teddlie and Tashakkori (2009) contend that effectiveness, according to pragmatists, needs to be used as a criterion for judging the value of research rather than the correspondence of research findings to what he perceive to be 'some true condition in the real world. Furthermore, effectiveness is seen as establishing that the research results work for the research problem the researcher is seeking to resolve. To this end, pragmatists argue that only results count (Creswell, 2012).

In addition, Hays and Singh (2012) explain epistemology as the process through which knowledge is acquired. In terms of epistemology, pragmatists believe that either subjective or objective meanings can provide facts for a research question. The focus ought to be on practical application to issues by merging views to help interpret data (Creswell, 2014). Consequently, the researcher chose to use the mixed methods research approach, as it made it possible to merge quantitative and qualitative data to resolve issues of the effectiveness of secondary teachers' preparation for inclusion in one Ethiopian public university, equipping initial teachers and qualifying them for 21st century inclusive teaching in the Ethiopian secondary school context.

The pragmatists' research paradigm contends that a methodology used in research ought to be based on mixed or multiple methods (Creswell, 2014). This means that quantitative and qualitative methods are compatible with the pragmatic paradigm. Hence, the method to be used is determined by the purpose of the research. Pragmatists view mixed methods as offering a practical solution to the paradigm wars in the research community concerning the use of quantitative or qualitative methods (Mertens, 2005). The researcher chose to consider the pragmatist paradigm by using the mixed methods approach, as this enabled him to mix both quantitative and qualitative data to address the research questions regarding the degree of

effectiveness of secondary school teacher preparation for inclusion in Ethiopia. The combination of these approaches can help the researcher gain more insight into pertinent issues concerning the teacher education programme (PGDT) in Ethiopia. To this end, Creswell (2014) correctly notes that the pragmatic paradigm places the research problem at the centre and applies all approaches to understand the problem. Thus, the data collection and analysis methods chosen by the researcher can provide insights into the problem using a mixed-methods approach (Mackenzie & Knipe, 2006).

To summary, mixed methods approaches are premised on pragmatism ontologies and epistemologies. It advocates the pragmatic method of classical pragmatists like John Dewey as a way for researchers to think about the traditional dualisms that have been debated by purists. Taking a pragmatic and balanced or pluralist position will help improve communication among researchers from different paradigms as they attempt to advance knowledge. Pragmatism adopts a methodologically eclectic, pluralistic approach to research, drawing on positivistic and interpretive epistemologies based on the applicability, and regarding reality as both objective and socially constructed (Johnson and Onwuegbuzie, 2004). Research is driven by the research questions rather than the methodological preference of the researcher. Methodology follows from the purposes and questions in the research. Bryman (2007) suggests that mixed methods researchers must write up their research in such a way that the quantitative and qualitative components are mutually illuminating. Mixed methods approaches enable a more comprehensive understanding of the phenomenon than single method approaches, combining particularity with generality, patterned regularity with contextual complexity and inside and outside perspective. Onwuegbuzie and Leech (2005) argue that mixed method recognizes similarities between different philosophies and epistemologies, rather than the differences that keep them apart. Mixed method research addresses both the 'what' (quantitative) and how or why (qualitative) types of research questions.

5.3. Research Approach

A research approach is a plan and procedure for research that spans the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation (Creswell, 2014). Ivankova et al. (2012) describe three approaches to the procedures for conducting research,

namely quantitative, qualitative, and mixed methods. They further state that quantitative and qualitative approaches to research are well established in the educational sciences, while mixed methods approaches continue to grow in prominence. Cameron (2011) also notes that mixed-methods research has witnessed a rapid rise in popularity in the last few decades. Similarly, Bryman (2012) contends that interest in employing mixed methods for educational research purposes has grown recently. Moreover, Ivankova et al. (2012) posit that each of the three approaches to research has its own purposes, methods of conducting the research, strategies for collecting and analysing data, and criteria for judging quality. They also contend that the choice of an approach depends to a great extent on the researcher's philosophical orientation and the type of knowledge sought, which could be objective, factual, subjective, based on personal experience, or a combination of these aspects.

In line with a pragmatist paradigm, the study adheres to a mixed-methods research approach that involves collecting, analysing, and mixing both quantitative and qualitative research and methods in a single study (Tashakkori & Creswell, 2007). The central premise of a mixed research method is that the use of quantitative and qualitative approaches in combination provides a better understanding of the research problem than either approach alone (Creswell & Clark, 2011). In addition, mixed-method research is an approach to research that combines quantitative and qualitative strategies within one study; collects both numeric and text data concurrently or in sequence; chooses variables and units of analysis that are most appropriate for addressing the purpose of the study; and finds answers to the research questions, taking advantage of the strengths of each (Bryman, 2012). Moreover, Terrell (2012) notes that mixed-method research approaches have emerged from the paradigm wars between qualitative and quantitative research approaches and have become a widely used mode of inquiry in educational research areas.

Similarly, Creswell (2014) defines mixed methods approaches as relevant to studies that are products of the pragmatic paradigm and that combine qualitative and quantitative approaches within different phases of the research process. In support of this view, Ihuah and Eaton (2013) note that the choice of a mixed methods approach is highly dependent on the research questions, where the use of either quantitative or qualitative approaches does not completely address the

research problem when used independently of one another. The rationale behind using a mixed research approach in the study is that one research approach might not be sufficient to understand how secondary teachers are trained for inclusion in Ethiopia and how effective the training is in supporting them to develop the core competencies necessary for the successful implementation of inclusive education in the Ethiopian secondary school context. As a result, the data collected through a questionnaire (quantitative approach) was justified by the data collected through a semi-structured interview (qualitative approach) in order to better conceptualise the research problem. This aligns with the view of Creswell and Plano Clark (2011), who state that the mixed methods approach makes use of qualitative and quantitative approaches in rapport as a way of providing a better understanding of the research problem, as compared to the use of either qualitative or quantitative approaches alone.

Supporting this view, Teddlie and Tashakkori (2009) contend that using the mixed-methods approach, the researcher combines quantitative and qualitative strategies within one study. The researcher collects both numerical data and text concurrently or sequentially and chooses variables and units of analysis that are most appropriate for addressing the study's purpose and finding answers to the research questions. Mixed-methods research fits into the pragmatic paradigm, which has practical consequences, and it also makes use of inductive and deductive strategies to achieve understanding and explanation (Johnson & Onwuegbuzie, 2004). Similarly, Grace (2014) observes that mixed-methods inquiry offers important pragmatic opportunities to build upon the complementary strengths of qualitative and quantitative data to best answer relevant research questions. The above view reflects the complexity of using mixed methods as a research approach and also highlights its potential value (Harwell, 2011). The researcher employed a mixed-methods research approach for the study to gain insight into and investigate the effectiveness of secondary school teachers' preparation for inclusion in one purposefully selected public university in Ethiopia.

5.4. Research Design

Research design refers to how a research idea is transformed into a research project that can then be carried out in practice by a researcher (McMillan & Schumacher, 2010). Bless et al. (2006) also view a research design as an operation to be performed in order to test a specific hypothesis

under a given condition. In addition, Welman et al. (2009) see research design as the overall plan of research activity. The definitions above show that research design constitutes the blueprint or plan for conducting research. Thus, research design refers to a detailed plan according to which research is undertaken. Its main function is to enable the researcher to move from underlying philosophical assumptions to making appropriate research decisions in terms of selecting respondents, data collection, and data analysis techniques. The mixed methods research approach has various designs, including explanatory sequential, exploratory sequential, embedded, concurrent triangulation, and concurrent nested (McMillan & Schumacher, 2010).

The study employed a sequential explanatory design, which is one type of mixed-methods research approach. It is a type of mixed methods research design known for collecting and analysing first quantitative and then qualitative data in two consecutive phases within one study, and it is perhaps the most popular form of mixed methods research design in educational research (Creswell, 2014). This design is characterised by a two-phase process in which the researcher collects quantitative data in the first phase and analyses the results to plan the second, qualitative phase. Thus, the qualitative study depends on quantitative results (Creswell & Plano Clark, 2011). In this regard, Ivankova et al. (2012) state that explanatory sequential design is the most straightforward of the mixed-methods research designs. Further to this, Creswell (2014) contend that this design is most appealing to those researchers who have a strong quantitative background or to those from fields relatively new to qualitative approaches. It involves the collection and analysis of quantitative data, followed by the collection of qualitative data. Thus, it is characterised by a two-phase process in which the researcher collects quantitative data in the first phase, and analyses the results to plan the second qualitative phase.

Using this design, the researcher first collects and analyses the quantitative (numeric) data. The qualitative (text) data is collected and analysed second in the sequence, and helps explain or elaborate on the quantitative results obtained in the first phase. In this sense, the quantitative data and their subsequent analysis provide a general understanding of the research problem, and the qualitative data and their analysis refine and explain those statistical results by exploring participants' views in more depth (Creswell & Plano Clark, 2011). The rationale behind choosing this design for the study was to first obtain a general understanding of trainee teachers'

sense of preparedness for inclusion, and the components that contributed to their preparedness using a closed-ended questionnaire. Then, the experiences of trainee teachers as well as the gaps observed during the training were explored in greater depth, using the semi-structured face-to-face interviews to explain the quantitative results.

According to Creswell and Plano Clark (2011), in this design, the qualitative study depends on quantitative results. This means that, usually, quantitative data collection is the priority, implying that first the quantitative data is collected and analysed. The researcher will then identify specific quantitative results that need additional explanation and then design qualitative results (Creswell, 2014). Ivankova et al. (2012) state that the word "explanatory" in this design suggests that the qualitative findings help explain the quantitative results obtained from the first phase. The participants in this design ought to be those who participated in the quantitative study, and the qualitative study should make use of a smaller sample than that of the quantitative study (Creswell, 2014). Further to this, the interpretation is based on connected results, and the conclusion reached concerns whether the follow-up qualitative data provides a better understanding of the research problem than simply the quantitative results (Creswell, 2014). In line with this view, the researcher used trainee teachers who had participated in the quantitative study for a qualitative study conducted in the second phase using semi-structured face-to-face interviews. The interpretation was done on connected results, and the conclusion reached concerned whether the follow-up qualitative data provided a better understanding of the research problem than simply the quantitative results alone.

5.5. Description of Research Site

According to the institutional fact bulletin of 2020–2021, the higher learning institution selected as a research site for the study was established in 1952, as a result of the agreement signed between the Imperial Ethiopian Government and the Government of the United States of America. But it has gone through several phases of transformation and changes to its name since its establishment. When it was founded on May 15, 1952, it was named the College of Agricultural and Mechanical Arts, and the College became a chartered member of Addis Ababa University as the institution offering a B.SC Degree in General Agriculture. Due to the great need for trained manpower in other areas, additional programmes, including a diploma in

Science Teachers' Training and Continuing Education Programmes, were launched in 1978 and 1980, respectively.

After its transformation to a full-fledged university on May 27, 1985, it worked as the main higher learning institution in Ethiopia and conferred many undergraduate and postgraduate degrees in different disciplines. Furthermore, the university went through another phase of transformation during the 1995–96 academic years by launching new programmes in the field of teacher education under the Faculty of Education. In the last few years, the university has witnessed tremendous expansion in terms of fields of study by reorganising its previous faculties into nine colleges. Among them, the College of Education and Behavioural Sciences (CEBS) is one that has been responsible for training teachers for Ethiopian secondary schools through the PGDT programme since 2011.

Accordingly, the research site is the College of Education and Behavioral Sciences found at this university, which is located in the eastern part of Ethiopia, 512 kilometers from the capital Addis Ababa. The selected university is an internationally recognised university situated in the rural context of Eastern Ethiopia, but draws students from across the whole country as well as internationally, particularly from Sudan and Somalia. The university can be said to be an inclusive educational institution, because its students are comprised of all walks of life, such as students who were previously marginalised, as well as students living with disabilities. The selected university has been running a PGDT programme since 2011 under the College of Education and Behavioural Sciences. Although the purpose of the PGDT programme is to produce effective, practicing secondary school teachers, its effectiveness in terms of producing graduates ready for the challenges of 21st-century inclusive teaching has not been studied. Thus, the study was intended to investigate the effectiveness of secondary teachers' preparation for inclusion in Ethiopia, based on the views of trainee teachers who attended the PGDT programme at the selected university.

The university and the college were selected due to the researcher's ample experience, as the researcher has been directly involved in the training and supervision of secondary school teachers attending the PGDT programme and has a better understanding of the settings and the

community of Eastern Ethiopia. In addition, the university and the college are accessible, and the request for permission to conduct research is readily approved (Bryman, 2012). The selected university is also the preferred institution for the study because it is the oldest and biggest public tertiary institution in Ethiopia, and has better resources and a good track record in training teachers for secondary schools, particularly in the eastern part of Ethiopia (EMoE, 2018).

5.6. Population, Sample, and Sampling Procedures

To best attain the major objectives and to achieve the best results, the researcher considered a rationale for identifying the appropriate population, sample, and sampling procedures for this particular study. Creswell (2012) states that population refers to a group of individuals that have one or more universal features that are of concern to the researcher in order to gain appropriate data and draw conclusions. Mertens (2005) also contends that the population is the group to whom the researcher wants to apply the results of a study. Thus, "population" refers to all members that meet a set of specifications and from whom the researcher wishes to gain information. These members can also be referred to as the target population. Further to this, a population is a group of individuals that possess one characteristic that distinguishes them from other groups (Creswell, 2012). The population is, therefore, that group of individuals who are the focus of the study, and to whom research results would be generalised (Kothari, 2004). Moreover, Walliman (2011) sees the meaning of the term "population" as not limited to the number of people the study wants to cover, but as a word that explains the total quantity of cases of the type that are the subject of your study.

In the context of the above definitions, then, the population of the study consists of all trainee teachers (232 graduates) who attended PGDT training at the selected university, qualified for secondary school teaching, and are now teaching in 12 secondary schools surrounding the selected university. Qualified teachers are chosen due to the proximity of their schools to the researcher, and also because they are now teaching in secondary school classrooms where they are expected to apply the inclusive pedagogical approaches with which they were equipped during their training in the college of education and behavioural sciences selected as a research site.

According to Mertens (2005), a sample refers to the group that the researcher has chosen from the population from which to collect data. Creswell (2012) also posits that a sample is a group of elements or a single element from which data is obtained. Further, Kothari (2004) states that sample is a group of participants in a study selected from the target population to which the researcher generalises the findings of the study. Similarly, Onwuegbuzie and Collins (2007) view sampling as an important step in any research process, because it helps to inform the quality of inferences made by the researcher, which emanate from the underlying findings. They further state that in both qualitative and quantitative studies, researchers must decide the number of participants to select from the ones who form the sample size, and researchers also need to decide how these participants will be selected for any given study. The main reason for sampling is, therefore, feasibility, which deals with taking into consideration factors such as cost, effort, and time. Likewise, it would be difficult to process, analyse, and interpret the large scale data produced if the population was too sizable, in which case it would be more feasible to study only a portion of the population (Strydom, 2005).

According to Vijilakshmi (2009), in mixed-methods research, making decisions about selecting the participants is made more complicated because the researchers need to make sample schemes for both the qualitative and quantitative research components of their studies. In addition, Onwuegbuzie and Collins (2007) state that sampling procedures for qualitative and quantitative research components differ, and are generally divided into two main groups, viz. probability and non-probability sampling. At its core, probability sampling aims to achieve a greater breadth of information from a larger sample, while non-probability sampling aims to achieve a greater depth of information from a smaller sample (Onwuegbuzie & Collins, 2007). Mixed-methods sampling entails selecting samples for research using both probability sampling (to increase external validity) and non-probability sampling (to increase transferability) strategies (Teddlie & Yu, 2007).

Probability sampling is mainly used in quantitative studies to achieve representativeness, which refers to the degree to which the sample is representative of the entire population. It involves selecting a relatively large number of units from a population or specific subgroups (strata) of a population in a random manner, where the probability of inclusion for every member of the population is determinable (Vijilakshmi, 2009). Probability sampling techniques include three

basic types, namely: random, stratified, and cluster sampling (Teddlie & Yu, 2007). Non-probability sampling is mainly used in qualitative studies and involves deliberately choosing individuals, groups, or institutions for specific purposes linked to research questions. There are three broad categories of non-probability sampling techniques: sampling to achieve representativeness or comparability, sampling special or unique cases, and sequential sampling (Teddlie & Yu, 2007).

In this study, the researcher used mixed-methods sampling, which involves both probability and non-probability sampling techniques. The researcher chose to use these sampling techniques because they allowed him to collect complementary sets of data that give both depth and breadth of information concerning the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia. The techniques also enabled the researcher to acquire both numeric and narrative data to best answer the research questions stated in Chapter One of the study. In collecting quantitative data, the researcher employed random probability sampling, intending to generalise the findings of the study to the population (Onwuegbuzie & Collins, 2007). A simple random sampling technique was used to select 152 (67% of the total population) teachers from 12 secondary schools (one from each departments) that have been trained and qualified for secondary school teaching and assigned to the secondary schools surrounding the selected university in the eastern part of Ethiopia. The participants were selected to enable the researcher to maximise the information collected about their views regarding the effectiveness of the training they received at the selected university.

According to Vijilakshmi (2009), qualitative sampling employs non-probability sampling techniques such as purposive sampling. He further explains that purposive sampling means that the participants are selected with a specific purpose based on the researcher's judgment. Further to this, Creswell (2012) observes that in purposive sampling, the sample is made up of participants who have the most typical or representative attributes of the population based on the researcher's judgment. The study used purposive sampling, in which the participants were identified because they would be capable of contributing meaningfully to the research questions and willing to participate in the study. The study purposefully selected seven trainee teachers with gender balance (three females and four males), who were willing to respond to face-to-face,

semi-structured interviews based on the experiences and awareness they have about inclusive education and students with disabilities. This was done to obtain appropriate information on their views regarding the effectiveness of the training they received at the selected university. Additionally, to get insights into the inclusive pedagogical approaches with which were equipped to deal with the challenges of inclusive teaching in the Ethiopian secondary school context. Below is the summary of demographic characteristics of the respondents for both the first and second phase of the study.

Table 5.1 Shows demographic characteristics of respondents by Sex (n=152)

Sex	f	%
Male	109	72
Female	43	28
Total	152	100

The first section of the questionnaire sought to establish the demographic characteristics of the respondents, such as sex, age, acquaintance (familiarity) with students with disabilities, prior training and awareness about students with disabilities and inclusive education, and experience teaching students with disabilities during practicum placement. From among the respondents, 109 (72%) were males and 43 (28%) were females, as reflected in Table 5.1 above. From this, one can understand that male teachers are more numerous than female teachers among those graduates who attended the teacher education programme in the selected university in Ethiopia. The wider gender gap among respondents may be due to historical gender inequality in access to education in Ethiopia (MoE, 2015).

Table 5.2 Shows demographic characteristics of respondents by Age (n=152)

Age	f	%
20-25	126	83
25-30	23	15
30-35	3	2
Above 35	-	-
Total	152	100

Table 5.2 above shows that most of the graduates are in the age range of 20-25 (83%), followed by those in the range of 25-30 (15%), while three (2%) are between 30-35, and there is no

graduate above the age of 35 in this particular study. As the students join PGDT programme immediately after completing their undergraduate degree, it is not surprising to see that the vast majority of the graduates are less than 30 years old. The results above show that the graduates are mature in terms of age, which may influence the way in which they handle students with disabilities and implement inclusive education in the Ethiopian secondary school context. Furthermore, Berger (2008) noted that the age range of 20-30 in human development is a time during which early adults strive for more education and change. Therefore, it is a better opportunity to expose these people to new ideas, changes, and innovations.

Table 5.3 Characteristics of respondents in terms of acquaintance, prior training, and experience of teaching students with disabilities (n=152)

R.N	Demographic Variables influencing the knowledge, attitude, and practical skills of the respondents	Yes	%	No	%
1.	Acquaintance (familiarity) with students with disability	125	82	17	18
2.	Prior training (awareness) about students with disabilities and inclusive education	75	49	77	51
3.	Experience of teaching students with disabilities during practicum placement	88	58	64	42

Table 5.3 above shows that most of the graduates (82%) have an acquaintance (familiarity) and interaction with students with disabilities prior to attending the PGDT programme; 77 (51%) did not have prior training (awareness) about students with disabilities and inclusive education; and 88 (58%) of the graduates have experienced teaching students with disabilities during practicum placement. The above demographic variables have an influence on how the teacher education programme equips the graduates with the competencies (knowledge, attitudes, and practical skills) necessary to implement inclusive education effectively, which is addressed in Chapter Six (see section 6.4) of this study.

In addition to the one stated above, below is the biographical information of the seven (7) trainee teachers (four males and three females) who participated in the semi-structured face-to-face interview of the study. The teachers were graduates of the selected university who passed through the teacher education programme (PGDT) and were assigned as teachers in secondary schools surrounding the selected university. They have been coded using pseudonyms

"Participant Teacher A-G," which means PT-A, PT-B, PT-C, PT-D, PT-E, PT-F, and PT-G, to guarantee their anonymity and confidentiality, as indicated in Chapter 5 Section 5.9.3 of this study.

Table 5.4: Biographical information of interview participants

Participant Teacher Name	Sex	Age	Professional Qualification Before PGDT Training	Modality of Teacher Education Programme Attended
PT-A	Male	25	BSC in Sport Science	PGDT-Regular
PT-B	Female	23	BSC in Biology	PGDT-Regular
PT-C	Male	26	BSC in Mathematics	PGDT-Regular
PT-D	Female	22	BA in Geography and Environmental Studies	PGDT-Regular
PT-E	Male	27	BSC in Physics	PGDT-Regular
PT-F	Female	25	BA in English Language	PGDT-Regular
PT-G	Male	24	BSC in Chemistry	PGDT-Regular

According to Table 5.4 above, four of the seven teachers who participated in the qualitative phase of the study were males (PT-A, PT-C, PT-E, and PT-G), and three were females (PT-B, PT-D, and PT-F). Table 5.4 above also shows that the participants ranged from 22 to 27 years of age. Further, their undergraduate degree before the teacher education training (before PGDT) includes a Bachelor of Science degree in sport science, mathematics, biology, chemistry, and physics, as well as a bachelor of arts degree in geography and environmental studies and English language teaching. In addition to that, all of them have passed through the regular mode of the teacher education programme, namely the Postgraduate Diploma in Teaching (PGDT), at the selected university in eastern Ethiopia.

5.7. Methods of Data Collection

Data collection refers to the process of gathering and measuring data on variables of interest in an established, systematic fashion that enables one to answer the stated research questions (McMillan & Schumacher, 2010). This implies data collection as the vehicle with which researchers collect information to answer research questions and defend conclusions and recommendations based on the findings of the study. The sequential explanatory mixed research design used in the study necessitated two separate and sequential data collection phases (Creswell & Plano Clark, 2011). The first phase of the study collects quantitative data from the randomly sampled 152 trainee teachers using a structured questionnaire, and the second phase of

the study collects qualitative data from the seven purposively sampled trainee teachers using an in-depth semi-structured, face-to-face interview. In support of this view, Creswell (2012) states that for an explanatory mixed methods research design, the researcher should ask questions as to how the qualitative follow-up data helps him or her better understand the quantitative first phase results.

5.7.1. Questionnaire

As stated above, the data collection instruments used in the study are the structured questionnaire and the face-to-face semi-structured interview. According to Tshuma and Mafa (2013), a questionnaire is a document that contains questions that are designed to obtain information from sampled respondents and is widely used in survey research. The collection of data through questionnaires is quite popular, particularly in the case of large inquiries. It is being adopted by private individuals, research workers, private and public organisations, and even governments (Kothari, 2004). There are various types of questionnaires, viz. structured, unstructured, and semi-structured. A structured questionnaire is one composed of closed questions, which can be referred to as fixed items; an unstructured questionnaire is made up of open-ended questions, which allow participants to write ad hoc and are more word-based; while a semi-structured questionnaire is composed of both closed and open-ended questions (Kothari, 2004).

For this study, a structured questionnaire developed from literature with a Likert scale form was used in the first phase of the study to solicit the necessary quantitative data concerning the effectiveness of secondary teachers' preparation for inclusion in Ethiopia. The structured questionnaire is a widely used and useful instrument for collecting numerical data and is comparatively straightforward to analyse (Creswell, 2012). The structured questionnaire enabled the researcher to collect large quantities of data over a relatively short period (Tshuma & Mafa, 2013). It also made it possible for the participants to share information more easily as they enjoyed the freedom to respond to questions due to anonymity. To that end, the fact that the researcher administered the questionnaire personally makes it cost- and time-effective (Best & Kahn, 2006). Furthermore, the closed-ended questions make it easier for the researcher to analyse the data as the responses are quick to code (Tshuma & Mafa, 2013). In support of this, Kothari (2004) states that structured questionnaires are simple to administer and relatively

inexpensive to analyse. The provision of alternative replies, at times, assists in understanding the meaning of the question clearly.

The researcher personally administered the questionnaire with the support of a data collector (enumerator). The questionnaire had three important parts that are related to the stated research questions in Chapter One of the study. Part one is concerned with demographic variables; part two is related to components (quality indicators) used to analyse how secondary teachers are prepared for inclusion in Ethiopia (research question number one); and part three deals with research question number two, which is related to the competencies developed by trainee teachers as a result of the PGDT programme, namely knowledge, attitude, and practical skills necessary to effectively implement inclusive education in the Ethiopian secondary school context. Following from this, the quantitative data collected through the structured questionnaire was analysed using a quantitative data analysis methodology, including both descriptive and inferential statistics (Patel, 2009). This can provide the researcher with more insights into the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia.

5.7.2. Face-to-Face Semi-Structured Interviews

A face-to-face semi-structured interview is a data collection process in which the researcher asks questions and records answers from only one participant at a time (Creswell, 2012). According to Gill et al. (2007), there are three fundamental types of research interviews, namely: structured, semi-structured, and unstructured. These authors further postulate that structured interview refer to verbal questionnaires that have predetermined questions that are posed to participants. These questions have little or no variation, and there is no scope for follow-up questions on the responses given. On the other hand, unstructured interviews do not reflect any preconceived ideas and are performed with little or no organisation. Unstructured interviews may start with an opening question from the researcher that triggers a discussion. The unstructured interview gives the researcher room for probing and asking follow-up questions for further elaboration.

The study used the semi-structured interview, which, according to Gill et al. (2007), consists of several key questions that help the interviewer determine the areas to be explored and allow the interviewer and/or the interviewee to diverge in detail. Nieuwenhuis (2007) agrees with this view

by stating that the semi-structured interview requires the interviewee to answer a set of predetermined questions and allows for the probing and clarification of answers. Gill et al. (2007) argue that semi-structured interviews are more flexible when compared to structured interviews. This allows for the discovery or elaboration of information that is important to participants but may not have previously been thought of as pertinent by the researcher. Further, Bryman (2016) adds that in a semi-structured interview, the researcher has a list of questions or fairly specific topics to be covered, which can also be referred to as an interview guide. He further states that the interviewee has significant leeway with regards to how to respond to these questions. This implies that the interview's semi-structured nature allowed for the exploration of trends, unexpected results, and significant findings that emerged during the first phase of data analysis.

In addition, Harrell and Bradley (2009) state that a semi-structured interview collects detailed information in a somewhat conversational style. In support of this, Bryman (2016) posits that questions that are not included in the interview guide may be asked, as the interviewer picks up on aspects raised by the interviewees. Using semi-structured interviews was helpful for the researcher in that it enabled him to explore the effectiveness of secondary teachers' preparation for inclusion in Ethiopia. This was possible as the researcher could seek clarity, depth, and validity by posing probing questions and asking for further information. The use of semi-structured interviews also helped the researcher create rapport with the interviewees, as the interviews are more like conversations (Marshall & Rosman, 2011). Semi-structured interviews helped the researcher clarify complex questions and issues. In this study, semi-structured interviews were conducted with seven trainee teachers, and the interviews were audiotaped. This made it easy to playback the recording over and over to pick up pertinent issues regarding the main research questions of the study. This means that the interview guide was adapted to include questions that explain and support the findings of the questionnaire in the first phase of the study (Creswell & Plano Clark, 2011).

Furthermore, Hugh-Jones (2010) states that semi-structured interviews entail pre-planning interview questions, while allowing research participants to raise issues not anticipated by the researcher. In line with the qualitative orientation, the interview questions are open-ended, which

leads to the collection of expansive data (Smith, 2004). The semi-structured interview was deemed appropriate for the study because it allowed participants to respond to questions liberally while giving the researcher ample opportunity to gather participants' additional insight on the topic of the study (Morgan, 2014). All the participants shared their views in the semi-structured interviews that lasted for approximately one hour each at their respective schools. The researcher used interview schedules that involve open-ended questions derived from the objectives of the study as a way to: stimulate an in-depth discussion on secondary school teachers' preparation for inclusion in Ethiopia; gain narratives of inclusive education within the PGDT programme; and also gain insights into what transforms existing ideas and practice to become inclusive teachers in the Ethiopian secondary school context.

5.8. Methods of Data Analysis

After the collection, the data has to be processed, analysed, and interpreted carefully to answer the research questions stated (Creswell, 2012). Data analysis is the process that enables the researcher to make sense of the data by consolidating, reducing, and interpreting what the research would have said and what the researcher would have observed and recorded (Merriam, 2009). Similarly, Neuman (2006) notes that data analysis is the process whereby the researcher brings structure and order to the vast amount of data collected and looks for patterns in the data to make sense of it, leading to interpretation and meaning-making. Cohen et al. (2011) explain that data analysis involves organising raw data into a system that reveals the basic results of the research. Thus, data analysis has the potential to reveal key findings reflected in the patterns of information provided by research participants (Kothari, 2004).

In mixed-methods research, data analysis relates to the types of research designs chosen for data collection (Creswell & Plano Clark, 2007). Because this is a sequential explanatory mixed methods study, the data processing and analysis are divided into two phases, viz.: quantitative analysis in the first phase and qualitative analysis in the second (Creswell & Plano Clark, 2011). In the first phase, quantitative data collected using a questionnaire was analysed quantitatively by exporting the data to the Statistical Package for Social Sciences (SPSS) programme version 26. Then, descriptive (frequency, percentage, mean, and standard deviation) and inferential (multiple regression) statistical analyses were undertaken and a demographic profile was compiled. This

allowed the researcher to summarise and display all research results in an easy-to-read format (Cohen et al., 2007). Multiple regressions is a statistical technique that can be used to analyze the relationship between a single dependent variable and several independent variables. The objective of multiple regression analysis is to use the independent variables whose values are known to predict the value of the single dependent value (Kothari, 2004).

In the second phase, qualitative data collected through the in-depth semi-structured face-to-face interview was analysed separately by transcribing the audiotaped interviews and then coding the data concerning the research questions. This means that the interviews were transcribed verbatim, categorised, and analysed according to themes in a way that aligns with the research questions of the study (Creswell & Plano Clark, 2011). The goal of a thematic analysis is to identify themes, i.e. patterns in the data that are important or interesting, and use these themes to address the research or say something about an issue. This is much more than simply summarising the data; a good thematic analysis interprets and makes sense of it (Creswell, 2012). This enabled the researcher to find meaning in a great deal of data and ensure the focus of the analysis remains on answering the research questions in a way that explains the findings of the questionnaire in the first phase of the study (Creswell, 2014). According to the study design, the separate analyses of quantitative and qualitative data are integrated into the discussion section in such a way that the qualitative data provides a better understanding of the research problem than the quantitative result alone (Creswell & Plano Clark, 2011). This helped the researcher propose a model (an alternative strategy) that could enhance the effectiveness of secondary teachers' preparation for inclusion in Ethiopia and forward recommendations and suggestions for future study.

5.9. Ethical Considerations

Research ethics involves the application of fundamental ethical principles to a variety of topics involving scientific research. It is concerned with right and wrong, good and bad, as well as procedural issues to be considered in doing research (Creswell, 2012). Conducting research would not be possible without the help and cooperation of directly or indirectly involved people. If researchers expect people to help them, they ought to treat them with honesty and respect (Cohen et al., 2007). Further, Cresswell (2014) argues that researchers need to anticipate ethical

issues that may arise during their studies. Similarly, Mertens (2005) observes that ethics in research should not be viewed as an afterthought or a burden, but as an integral part of the research planning and implementation process. Hence, researchers need to protect their research participants, develop trust with them, promote research integrity, and guard against misconduct and impropriety. To this end, Creswell (2014) suggests that any researcher needs to consider codes of ethics and obtain necessary permissions before carrying out a research study. As the study is guided by the UNISA Research Ethics Policy, ethical clearance (permission), confidentiality, anonymity, informed consent, beneficence, and honesty were considered in the best interest of the participants.

5.9.1. Permission: the first stage in this study thus involves gaining permission to undertake one's research in the target community (Cohen et al., 2007). In this study, firstly, ethical clearance (permission) was secured from the Research and Ethics Committee (REC) of the College of Education at the University of South Africa. Then, permission was granted from the College of Education and Behavioral Sciences (CEBS) of the selected university to use the site as a research site. A research clearance certificate from UNISA College of Education REC was attached as an appendix at the end of the study.

5.9.2. Confidentiality: researchers must respect research participants' right to confidentiality (Cohen et al., 2007). Individuals' privacy was protected because the data they provide was handled and reported in such a way that it cannot be associated with them personally (Mertens, 2005). In this study, the participants were assured that the information they provided would not be made available to anyone, and they were not required to write their names on the questionnaire. The researcher guaranteed participants' confidentiality by promising them that he would not, in any way, reveal their identity or the information revealed to him by the participants to anyone.

5.9.3. Anonymity: anonymity implies that the information provided by participants should in no way reveal their identity (Cohen et al., 2007). Anonymity means that no uniquely identifying information is attached to the data, and thus no one, that is, not even the researcher, can trace the data back to the individual providing it (Mertens, 2005). In this study, the anonymity of the

participant was assured by not using the participant's name or any other means of personal identification. The researcher used pseudonyms for the participants to adhere to anonymity.

5.9.4. Informed consent is a procedure in which individuals choose whether to participate in particular research after being informed of the facts that would be likely to influence their decision (Cohen et al., 2007). This implies that prospective research participants must be fully informed about the purpose of the study, procedures, and risks involved. Further, the necessity for informed consent, according to King (2010), requires researchers to provide appropriate information to research participants regarding the study, the risks and/or benefits of participating, and that the information be communicated in simple and clear language. Similarly, Bryman (2014) notes that informed consent forms have the advantage that they give participants the opportunity to be fully informed of the nature of the research and the implications of their participation at the outset. In this study, participants were informed about the objectives, importance, procedures, and risks involved, if any, in the study. Then, they were given the choice of participating or not participating and asked to sign consent forms. Finally, all participation in any part of this study was voluntary, and participants were also informed that they had the right to withdraw from the study at any time.

5.9.5. Beneficence is defined as doing good for research participants so that they and/or their community gain from the findings of the study (Hays & Singh, 2012). Participants were not offered payment for their participation, as this would conflict with ethical issues such as willingness to participate, and would taint the credibility of the research findings. Rather, the researcher explained to each participant how the outcome of the study could pave the way for the effective preparation of secondary school teachers for inclusion in Ethiopia. The study was intended to explore the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia and propose a model (an alternative strategy) that enhances its effectiveness. The major findings of the study were communicated to the concerned bodies, including the university community, to enhance the quality of secondary school teachers' preparation for inclusion in Ethiopia.

5.9.6. Honesty: in this study, under no circumstances was the researcher fabricating data or information to support a particular conclusion. Further, the researcher fully acknowledged any use of ideas or words by any individual in the study (Creswell, 2012).

5.10. Validity, Reliability, and Trustworthiness

Creswell and Plano Clark (2011) and Creswell (2014) reason that mixed-methods research improves the validity, reliability, and trustworthiness of theoretical propositions and allows for a more complete picture of the phenomenon under study than is possible with a single methodological approach. Thus, validity, reliability, and trustworthiness are mechanisms through which research quality was assured in a mixed-methods research approach.

5.10.1. Validity refers to the appropriateness, meaningfulness, and usefulness of the inferences a researcher makes. It is the degree to which evidence and theory support the interpretation of test scores entailed by proposed uses of the test (Cohen et al., 2007). In this study, the validity of the instrument (questionnaire) in the first phase of the study was improved through careful sampling, appropriate instrumentation, and appropriate statistical treatment of the collected data. Beyond this, the content and face validity of the questionnaire were addressed by the supervisor of the study. Further, a pilot study was done to increase the validity of the instrument (the questionnaire) at one public university running a PGDT programme. The pilot study helped the researcher to ascertain the feasibility of a study, identify and rectify logical and procedural difficulties in the main study, identify difficulties in the main study data analysis, and establish and ensure that the collected data answers the research questions of the study (Creswell, 2012).

5.10.2. Reliability in quantitative research is essentially a synonym for dependability, consistency, and replicability over time, over instruments, and across groups of respondents. Reliability refers to the extent to which research results are consistent over various forms of the same research instrument or occasions of data collection (Cohen et al., 2007). In this study, the reliability of the instrument (questionnaire) for the first phase of the study was checked and enhanced through a measure of consistency (test-re-test) over time and across similar groups in a pilot study that was conducted at one university running a PGDT programme. Reliability coefficients were calculated for reliability using the formulae of Pearson product-moment

correlation. Then, the re-test and post-test scores were correlated to establish the reliability of the self-administered questionnaire. Finally, the necessary modifications were made before the presentation of the questionnaire to the main sample of the study.

5.10.3. Trustworthiness is a method of ensuring rigour in the second phase of qualitative data collection and analysis without sacrificing relevance in the current study (Creswell, 2012). The term "trustworthiness" in qualitative research refers to the extent to which the results of a study reflect an accountable means of acquiring and developing data (Shaw, 2010). This means that trustworthiness is concerned with ensuring that research findings are accurate and detailed from the perspectives of the researcher, participants, and readers. In qualitative research, trustworthiness was established by ensuring the credibility, transferability, dependability, and conformability of the findings of the study (Bryman, 2014). The second phase of the study used all these techniques so as to ensure the trustworthiness of the second phase of the study, which were explained as follows.

5.10.3.1. Credibility: Trochim (2006) holds the view that credibility involves a determination of whether the results of qualitative research are believable from the point of view of the participants in the study being carried out. Further to this, Bryman (2014) concurs that credibility means that the researcher ensures that the research is carried out according to the principles of good practice and that the research findings are submitted to the participants for confirmation that the researcher has correctly understood their social world. In order to ensure the credibility of the second phase of the study, in-depth and sufficient information was collected from the participants by deploying face-to-face semi-structured interviews, and a prolonged period was spent with them (Creswell & Plano, 2011). Further to this, the researcher collected qualitative data from the seven participants, transcribed it, and categorised them in the way that they answered the research questions of the study.

5.10.3.2. Transferability: Marshall and Rossman (2011) observe that in qualitative research, transferability refers to the degree to which the results of a study can be generalised or transferred to other contexts or settings that may be problematic. Similarly, Bryman (2014) contends that since qualitative research refers to the intensive study of a small group of individuals who share the same characteristics, findings tend to be oriented to their particular context. To meet the criterion of transferability in this study, the researcher provided a detailed description of the population, sample, sampling procedures, and methods that were applied to

conduct the second phase of the study. Furthermore, in order to obtain transferability in this study, the researcher presented the qualitative findings in the form of thick descriptions and reported the findings verbatim.

5.10.3.3. Dependability is defined as a study's ability to account for the constantly changing context in which the research takes place (Trochim, 2006). In other words, there must be consistency in all phases of the research study, which include problem formulation, selection of research participants, fieldwork notes, interview transcripts, data analysis decisions, and others (Bryman, 2014). In an attempt to achieve dependability in this study, data and method triangulation were used by letting the data and their context speak for themselves; therefore, actual quotes of participants were used verbatim to express their unspoiled views concerning the issues under study. This means that the researcher achieved dependability through the use of various data collection instruments and used academic peers as auditors of all the research processes.

5.10.3.4. Conformability refers to the extent to which the findings are free from bias (Creswell, 2014). Furthermore, Hays and Singh (2012) define conformability as the degree to which study results reflect the subjective opinions of research participants. To reduce bias in the second phase of the study, the researcher recorded personal field notes about his attitudes, feelings, and reactions during the face-to-face, semi-structured individual interview. The meaning of body language, non-verbal communication, and the feelings and emotions of the participant were also taken into consideration. Therefore, the researcher made a clear distinction between the actual statements, and views of participants and his or her own reflections or likely conclusions.

5.11. Summary of the Chapter

The chapter focused on discussing the research methodology and design used in the study, including the research paradigm, research approach, research design, description of the research site, population, sample, and sampling procedures, methods of data collection, methods of data analysis, ethical considerations, and validity, reliability, and trustworthiness (quality assurance mechanisms) within the context of mixed research methods in detail. The next chapter of this study (Chapter Six) addresses the presentation of the quantitative findings of the study.

CHAPTER SIX: QUANTITATIVE RESULTS

6.1. Introduction

The study investigated the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia with the intention of proposing a model (an alternative strategy) that would enhance its effectiveness. The previous chapter discussed the research methodology and design. This chapter presents the results of the quantitative data gathered through a questionnaire. The quantitative data collected through a questionnaire was analysed quantitatively by exporting the data into SPSS version 26 and performing descriptive and inferential statistical analyses such as frequency, percentage, means, standard deviation, and multiple regressions. This allowed the researcher to summarise and display the results in an easy-to-read format and report the results in accordance with the research questions stated in Chapter One of the study. As a result, certain efforts have been made to generate data that addresses the main and sub-research questions of the study.

The main research question was as follows:

How effective is the teachers' preparation for inclusion in Ethiopian universities?

The sub-research questions were:

How are teachers trained for inclusion in Ethiopian universities?

How does the training support teachers in developing the core competencies necessary for inclusion in Ethiopian universities?

What model (an alternative strategy) can be put in place to enhance the effectiveness of teachers' preparation for inclusion in Ethiopian universities?

6.2. Training Teachers for Inclusion in Ethiopian Universities

As stated in the background of the study, the broader measures of effectiveness of teacher education programmes for inclusion ought to cover all the domains of education systems in general and teacher education systems in particular, within the context of a given country (Seidel & Shavelson, 2007). For this study, the experiences of graduates during their initial training and the components that contributed to their preparedness were addressed in this section. In this regard, conditions and institutional inputs that promote inclusion, components of university-

based teacher education programmes, and the effectiveness of the process of teachers' pedagogical skill development within the programme were given attention as per the quantitative data collected from the respondents through a questionnaire.

To this end, facilities and services related to the teacher education programme, the status of the teacher education college, the modality and approach of the teacher education programme, the programme structure and curriculum, the integration of the inclusive education learning area in the teacher education programme, the teacher education pedagogies, the teacher education university and school partnership, the teachers' qualification requirements, the teachers' national competence standard, and the induction of newly deployed teachers are respectively presented. In order to do so, the results were organised into tables, and frequency, percentage, and multiple regressions were computed to analyse the results. In addition, to compute the frequency and percentage, the aggregate of strongly disagree and disagree was taken as disagree, and the aggregate of agree and strongly agree was taken as agree. Thus, the analysis has three categories: disagree, undecided, and agree.

6.2.1. Facilities and Services Related to the Programme

Table 6.1: Facilities and services related to teacher education programme

R.N	Facility and services related to the teacher education programme	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	There are adequate library facilities	61	40	7	5	84	55
2	Library facilities were effectively utilised	93	61	16	11	43	28
3	There are adequate laboratory facilities	81	53	27	18	44	29
4	Laboratory facilities were effectively utilised	77	51	22	14	53	35
5	There are adequate Information Communication Technology (ICT) facilities	59	39	11	7	82	54
6	ICT facilities and other instructional media were effectively utilised	77	51	24	16	55	36
7	Guidance and counseling services are available	82	54	18	12	52	34
8	Overall orientation regarding the programme was given clearly	52	34	16	11	84	55
9	Expected outcomes of the programme were clearly communicated	53	35	21	14	78	51

In conducting proper teacher education for inclusion, the quality of facilities and related services is important for trainee teachers attending the programme, which in turn influences the success of inclusive education implementation. Issues regarding the availability of facilities and related

services and their use were addressed, and the results are presented in Table 6.1 above. The facilities outlined were the library, laboratory, and ICT, whereas the services included guidance and counselling services, orientation about the programme, and awareness about the expected outcomes of the programme. The results presented in Table 6.1 above affirmed that there were adequate library facilities (considered by 55%), but 61% stated that the library was not effectively utilised. In terms of laboratory facilities, 53% agreed that they were inadequate, and 51% agreed that the available laboratories were underutilised. Concerning ICT, 54% confirmed that ICT facilities were available, but 51% stated that ICT and instructional media facilities were underutilised. For guidance and counselling services, 54% of the respondents declared that they were ineffective or not available. Orientation regarding the teacher education programme was given to trainee teachers (considered by 55%), and regarding the expected outcome of the teacher education programme, 51% confirmed that it was communicated by the programme coordinators and well organised in terms of communicating the goals of the programme. This shows that the facilities, services, and instructional resources of the teacher education programme (PGDT) were not in a position to provide sufficient academic, psychosocial, and emotional support for trainee teachers.

6.2.2. The Status of Teacher Education College

Table 6.2: The status of the teacher education college in the selected university

R.N	The status of the college in the university	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	The college offering the training was in a better position compared to similar colleges in the university in terms of faculty involved	32	21	24	16	96	63
2	The teacher educators were full timers that belonged to the college	48	32	24	16	80	53
3	The assignment of teacher educators was based on their fields of specialisation	31	20	25	17	96	63
4	Short-term and refreshment training was available for teacher educators offering courses in the programme	45	30	25	16	80	54
5	Higher Diploma Programme (HDP) was mandatory for teacher educators participating in the programme	33	22	23	15	96	63

The status of the teacher education college and the faculty involved in the teacher education programme play a critical role in attracting high-performing candidates into the teaching

profession. Issues regarding the status of the teacher education college in general and the belongingness, assignment, training, and experiences of the faculty, as well as their Higher Diploma Programme (HDP) certification to participate in the teacher education programme, were presented in Table 6.2 above. The results revealed that the college that prepares secondary school teachers for inclusion was in a better position when compared to other sister colleges in terms of the quality and number of faculty involved, which was considered by 63% of the respondents. Teacher educators (teachers of teachers) offering courses in the programme were full-timers (considered by 53%) and belonged to the college of teacher education, and the assignment of teacher educators offering courses in the programme was based on their fields of specialisation, as confirmed by 63% of the respondents. In terms of short-term and refresher training for teacher educators, 54% of college graduates confirmed the availability of such training, particularly on teacher education management, which was not directly related to inclusive education. Over and above this, 63% of respondents confirmed that HDP was mandatory for teacher educators participating in the teacher education programme.

6.2.3. The Modality of the Teacher Education Programme

Table 6.3: The modality of the teacher education programme

R.N	Modality of the programme	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	The modality and approach enabled the preparation of competent teachers in terms of subject matter	38	25	19	12	95	63
2	The modality and approach were practice (activity) oriented	103	68	19	12	30	20
3	Modules and courses within the programme modality were interrelated (integrated)	36	24	23	15	93	61
4	The modality enabled the preparation of competent teachers by employing active learning (student-centered) methods	91	60	20	13	41	27

In Table 6.3 above, the modality and approach of the teacher education programme are presented. Modality and approaches refer to how the Postgraduate Diploma in Teaching (PGDT) programme is offered (the mode of delivery) in Ethiopian universities, which include regular (pre-service) and summer (in-out-in) modalities. In this study, the regular (pre-service) modality that took ten months' time was considered. Aspects considered include: (a), subject matter and active learning methods competence; (b), a practice-oriented aspect of the programme; and (c)

the interrelatedness of modules and courses in the programme. The result presented in Table 6.3 above revealed that the regular modality of the PGDT programme enabled the preparation of competent teachers in terms of the subject matter they teach (general subjects they trained for such as mathematics, biology, geography, etc.), which was considered by 95 (63%) of the respondents (Item 1). To the contrary, 91 (60%) of the respondents disagree with the idea that the teacher education programme enabled the preparation of competent teachers who could employ different active learning methods (Item 4). Regarding the practice (activity) orientation of the teacher education programme, 103 (68% of the respondents) confirmed that the teaching and learning process of the teacher education programme was not practice (activity) oriented (Item 2). As to the interrelatedness (integration) of modules and courses within the teacher education programme (Item 3), the result presented in Table 6.3 above revealed that 93 (61% of the respondents) agreed with the statement that modules and courses within the programme were interrelated.

6.2. 4. Structure and Curriculum

Table 6.4: The structure and curriculum of the teacher education programme

R.N	Structure and curriculum of the programme	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	The duration of the training is adequate to prepare quality teachers for secondary school inclusive teaching.	45	30	24	15	83	55
2	The curricula allow the understanding of the nature of students.	28	18	18	12	106	70
3	The curriculum allows the mastery of content knowledge.	28	18	21	14	103	68
4	The curriculum allows the mastery of pedagogical knowledge.	107	70	28	18	17	12
5	The curriculum is aligned with secondary school curricula and the broader context of inclusive teaching.	41	27	24	16	87	57

Since 2011, Ethiopia has endorsed the Postgraduate Diploma in Teaching (PGDT) programme as a means of bridging content and pedagogical gaps identified in previous Teacher Education System Overhaul (TESO) programme structures and curricula. In order to be effective, teacher development programmes ought to have a curriculum and structure that produce teachers who are knowledgeable, reflective, empathetic, and responsive, as well as understand inclusive

teaching within the new paradigm. Table 6.4 above addresses the appropriateness of the programme's duration, how the curriculum allows trainees to understand the nature of the students they will teach, the appropriateness of the curriculum in boosting trainees' content and pedagogical knowledge (inclusive teaching), and the alignment of the programme's curriculum with the country's secondary school curriculum. In response to the programme's duration and adequacy, 83 (55% of the respondents) agreed that ten months' time was adequate to prepare trainee teachers for secondary schools' inclusive teaching. As to the understanding of the nature of students, 106 (70%) of the respondents agreed that the curriculum and structure of the teacher education programme supported them in understanding the nature of the students they were going to teach in Ethiopian secondary school contexts.

Table 6.4 also included responses to the usefulness of the teacher education programme in mastering subject-specific content knowledge. In response to this item, 103 teachers (68%) confirmed that the programme was useful and helpful in promoting teachers' capacity to master subject-specific content knowledge. With regard to the mastery of pedagogical knowledge appropriate for secondary school inclusive teaching, 107 (70%) of the respondents believe that the programme was not helpful in promoting teachers' pedagogical content knowledge necessary to teach in secondary school inclusive classrooms. Finally, the findings of Item 5 regarding the alignment of the teacher education programme's curricula with secondary school curricula and the broader context of secondary school inclusive teaching in Ethiopia were presented in Table 6.4 above. In response, 87 (57% of respondents) agreed that the curriculum through which they were trained to be secondary school teachers was well aligned with the national secondary school curriculum they would be using.

6.2.5. Teacher Education Pedagogies

Table 6.5: The teacher education pedagogies

R.N	Program Pedagogies	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	The pedagogies used in the programme is aligned with the key pedagogies (practicum ,micro-teaching; the use of performance assessments and portfolio; analysis of teaching and learning; case methods; teacher inquiry; autobiography; action research) emphasised in the secondary school curriculum framework.	93	61	17	11	42	28
2	The pedagogies used in the programme promote inclusiveness.	109	72	13	9	30	19
3	Pedagogies of teaching students with special needs is emphasised in the programme.	107	71	17	11	28	18
4	The pedagogies used in the programme allow the understanding of the nature of students.	38	25	71	47	43	28
5	The programme allows the understanding of inclusive pedagogy.	117	77	15	10	20	13
6	Pedagogies used in the programme are adequately accommodated students with disabilities.	102	67	20	13	30	20
7	Pedagogies used in the programme are adequately addressed diversity and gender issues.	97	64	12	8	43	28

In conducting proper teacher education for inclusion, the pedagogies employed by teacher educators during the training are critical, as there is a strong link between teachers' pedagogical preparation and the educational quality they are going to deliver. To provide quality education for all, teacher education programmes must adjust themselves in such a way that the graduates can accommodate a greater diversity of learners in today's inclusive settings. Issues concerning the inclusive pedagogical approach and its application in training, as well as how the training assisted trainees in promoting inclusive practices were addressed in this section and the results are presented in Table 6.5 above. The results presented in Table 6.5 above suggest that the pedagogies used in the programme are not aligned with the key pedagogies emphasised in the secondary school curriculum framework (Item 1), which was considered by 93 (61%) respondents. Regarding the pedagogies used in the programme to support and promote inclusiveness (Item 2), 109 (72%) respondents reported that they disagreed with the statement that the pedagogies used in the teacher education programme were not in a position to support and promote inclusiveness.

The results on Table 6.5 revealed that pedagogies for teaching students with special needs (item 3), students with disabilities (Item 6), and diversity and gender issues (Item 7) were not

prioritised in the teacher education programme, as reported by 107 (71%), 102 (67%), and 97 (64%), respectively. With regard to Item 4, which stated that the pedagogies used in the teacher education programme allow for an understanding of the nature of the students the graduates are going to handle, 71 (47%) of the teachers responded that they were undecided. Finally, the results presented in Table 6.5 above suggest that the teacher education programme did not allow for the understanding of inclusive pedagogy (Item 5), which the graduates are expected to implement in the Ethiopian secondary school context. The highest percentage of the respondents (117, or 77%) reported that the training they have gone through did not give them the opportunity to understand, practice, and value the inclusive pedagogical approaches, considered a key ingredient in the preparation of initial teachers for inclusive teaching.

6.2. 6. Integration of Inclusive Education Subject in the Teacher Education Programme

Table 6.6: The integration of inclusive education in the teacher education programme

R.N	The integration of the inclusive education learning area	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	The course objectives are meeting by the contents delivered during the training.	33	22	19	12	100	66
2	The organisation of the course is effective in balancing the theory and practice dimensions.	105	69	15	10	32	21
3	The course contents are effective in producing inclusive secondary school teachers.	31	20	12	8	109	72
4	The teaching strategies of the course are effective in delivering the course contents and exemplary.	111	73	11	7	30	20
5	The instructors of the course are servicing as role models of inclusive practices during the training.	104	68	18	12	30	20
6	The teaching practice has given enough opportunity for teachers to link the theory with practice.	103	68	20	13	29	19
7	The teaching practice allows the teachers to understand students' diversity and their learning.	108	71	21	14	23	13

In addition to the inclusive pedagogical approaches employed in the teacher education programme, evaluating how well the inclusive education learning area is integrated into the teacher education programme in terms of its course organisations, course objectives and contents, teaching strategies, and the way teacher educators manage the course proves important. The teacher education programme (PGDT) studied consists of a single course entitled *Inclusive Education for Secondary School Teachers*. This is a foundational and compulsory course that considers the principles, ideas, and techniques that promote effective instruction for diverse

learners as its contents. The course also has a practical attachment component that helps to link the candidates with the surrounding secondary school community and culture. The results presented in Table 6.6 above confirmed that the course objectives have the potential to meet the overall objectives of inclusive education (Item 1) and that the contents of the course were effective in fulfilling the objectives of the course (Item 3), as considered by 100 (66%) and 109 (72%) respondents, respectively.

In contrast, the results revealed that the organisation of the course was not effective in balancing the theory and practice dimensions (Item 2), as 105 (69%) of the respondents disagreed with the statement; the teaching strategies employed in the course were not effective in delivering the stated course contents (Item 4), as perceived by 111 (73%) of the trainee teachers; and the instructors of the course were not serving as role models of inclusive practices during the training (Item 5), as 104 (68%) of the respondents reported disagreement with the statement. In this regard, the curriculum framework for secondary school teachers' preparation published in 2009 stated that one of the primary objectives of integrating inclusive education into teacher education programmes was to assist teachers to better understand inclusive education and thus teach learners with diverse educational needs effectively in an inclusive classroom.

In addition, the trainee teachers reported that the teaching practice has not given them enough opportunity to link theory with practice during the training (Item 6), nor has it allowed them to understand students' diversity and their learning in the Ethiopian secondary school context (Item 7), which were considered by 103 (68%) and 108 (71%) of the respondents, respectively. However, one of the objectives of the curriculum framework for secondary school teacher preparation published in 2009 in Ethiopia is to provide trainee teachers with theoretical and practical experience, as well as expose them to an environment where they can truly understand students' diversity and their learning.

6.2.7. Partnership and Collaboration

Table 6.7: Partnership and collaboration among stakeholders

R.N	Partnership and collaboration between the teacher education college and secondary schools	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	The college and secondary schools are collaborating on teaching, staff development and action research.	30	20	25	16	97	64
2	School principals are supporting the trainee teachers in developing collaborative skills.	40	26	18	12	93	62
3	The collaborative learning experience has given adequate period of time during the teaching practice.	101	66	21	14	30	20
4	Experienced instructors are selected to guide the trainee teachers' collaborative learning.	31	21	20	13	101	66
5	Collaboration learning with different professionals in supporting the trainee teachers to develop the necessary collaborative skills is successful.	90	59	23	15	39	26

Establishing partnerships and collaboration among different stakeholders is among the important ingredients for preparing effective secondary school teachers, which in turn influences the success of inclusive education implementation. Under this section, issues related to the collaboration between colleges of teacher education and secondary schools, the roles of school principals in supporting the trainee teachers in developing collaborative skills, the adequacy of time for collaborative learning experiences during the teaching practices, the availability and experience of school teachers in supporting the mentoring process and collaborative learning, and the success of collaborative learning in supporting the trainee teachers in developing the necessary collaborative skills are presented. The results presented in Table 6.7 above indicate that the college of education at the university and the surrounding secondary schools are collaborating on teaching, staff development, and action research during pre-service teacher training, as 97 (64% of the respondents) agreed with statement (Item 1). Regarding school principals' support (Item 2), 93 (62% of the respondents) reported that the secondary school principals within the catchment area of the selected university were supportive towards developing collaborative skills, particularly during the teaching practices.

In addition, experienced school teachers were selected to guide trainee teachers in collaborative learning, particularly during practicum placement, as 101 (66% of the respondents) agreed with the statement (item 4). However, the respondents disagree that the time allocated for collaborative learning experiences is inadequate, as considered by 101 (66%) of the respondents, which is one of the most important ingredients in boosting the collaborative skills of trainee teachers (Item 3). Concerning the success of the collaboration (Item 5), the trainee teachers were

not satisfied with the collaborative learning practices held with different professionals. They expected more, as 90 (or 59%) of the respondents disagreed with the statement. But inclusion requires collaborative skills, which require trainee teachers to work collaboratively with other professionals to provide support for students with diverse educational needs in an inclusive classroom. In this regard, the curriculum framework for secondary school teachers in Ethiopia published in 2009 suggests that collaborative learning is important to: generate knowledge; enhance active participation in learning; develop problem-solving skills; enhance teamwork; strengthen relationships; and share experiences.

6.2.8. Exit Requirements

Table 6.8: Qualification requirements of the teacher education program

R.N	Qualification requirements of PGDT programme	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	Exit exam ensure certification of competent secondary school teachers.	38	25	22	14	92	61
2	Exit exam systematically link the components of teacher education programme with the requirement of secondary school teaching.	30	18	21	14	101	66
3	Exit exam is necessary for ensuring the quality of teacher education programme.	38	25	12	8	102	67
4	The given exit exam is relevant to the demands and needs of my teaching career.	37	24	19	13	96	63
5	The time given for graduates to prepare for exit exam is sufficient.	48	32	14	9	89	59

So as to ensure the quality of the teacher education programme, providing an exit exam at the end of the training so that the trainees are certified to teach in the Ethiopian secondary school context was stipulated in the curriculum framework for secondary school teacher preparation published in 2009. The exit requirements included scoring 50% or above on an exit exam related to foundation courses, subject area courses, aptitude, and English language prepared nationally by the Ethiopian Ministry of Education. In addition to the exit exam, passing all the courses (no "F"); scoring at least "C" in subject methodology areas I and II as well as the practicum; and presenting a portfolio that demonstrates trainee teachers' development throughout the training are the mandatory requirements to become a secondary school teacher in Ethiopia (EMoE, 2009).

Table 6.8 above revealed that the exit exam ensures certification of competent graduates, connects the components of the teacher education programme with the requirements of secondary school teaching, is necessary for ensuring the quality of the teacher education programme is relevant to the demands and needs of the teaching career, and the time given to graduates to prepare for the exit exam is sufficient, as reported by 92 (61%), 101 (66%), 102 (67%), 96 (63%), and 89 (59%), respectively. This suggests that the graduates were satisfied with the appropriateness of the requirements set for certifying the would-be teachers to teach in an Ethiopian secondary school context. In addition, the respondents had a positive view of the way in which the exit exam systematically links the components of the teacher education programme with the requirements of secondary school teaching and the importance of the exit exam in ensuring the quality of the teacher education for inclusion in the Ethiopian secondary school context.

6.2.9. National Professional Standards for Secondary School Teachers

Table 6.9: Standards set for secondary school teachers

R.N	Standards set for secondary school teachers	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	The programme allows the teachers to know the students and how they learn.	36	23.7	16	10.5	100	65.8
2.	The programme allows the teachers to know the content and how to teach it.	38	25	16	10.5	98	64.5
3.	The programme allows the teacher to plan for and implement effective teaching and learning.	100	65.8	18	11.8	34	22.4
4.	The programme allows the teachers to create and maintain supportive and safe learning environments.	105	69.1	13	8.5	34	22.4
5.	The programme allows the teachers to assess, provide feedback and report on student learning.	96	63.2	19	12.5	37	24.3
6.	The programme allows the teachers to know the professional code of ethics of teaching profession	31	20.4	18	11.8	103	67.8
7.	The programme allows the teachers to engage professionally with colleagues, parents/caregivers, and the community.	32	21	10	6.6	110	72.3

The main purpose of the national professional standard is to improve educational quality at the national level, define the work of teachers, and make explicit the elements of high-quality, effective teaching for the demands of 21st-century education. In this regard, the Ethiopian Ministry of Education (EMoE, 2012) has designed the national professional standard for

Ethiopian secondary school teachers that consists of seven basic elements, which include knowing students and how they learn, knowing content and how to teach it, planning for and implementing effective teaching and learning, creating and maintaining supportive and safe learning environments, assessing, providing feedback, and reporting on student learning, knowing the professional code of ethics of the teaching profession, and engaging professionally with colleagues, parents/caregivers, and the community. The results in Table 6.9 above show that 100 respondents (65.8%) reported that the teacher education programme allows them to know the students and how they learn (Item 1), but 36 respondents (23.7%) reportedly disagreed that the teacher education programme did not allow them to know the students and how they learn during the training. Further, 98 (or 64.5% of the respondents) reported that the teacher education programme allows them to know the contents and how to teach them (Item 2). However, 38 (25% of respondents) disagreed that the teacher education programme did not prepare them to know the content and how to teach it. The first two items (Items 1 and 2) pertain to the professional knowledge domain of the competence standard for secondary school teachers in Ethiopia.

The results in Table 6.9 above also revealed that the respondents disagreed with the statements that the programme allowed them to plan for and implement effective teaching and learning (Item 3); create and maintain supportive and safe learning environments (Item 4); and assess, provide feedback, and report on student learning (Item 5), with scores of 100 (65.8%), 105 (69.1%), and 96 (63.2%), respectively. Here, items 3, 4, and 5 belong to the professional practice domain of the competence standard for secondary school teachers in Ethiopia. The results in Table 6.9 above also show that 103 (67.8%) of respondents agreed that the teacher education programme provides them with knowledge of the professional code of ethics of the teaching profession in Ethiopia (Item 6). Further, 110 (72.3%) of the respondents reported that they agree with the statement that the teacher education programme allows them to engage professionally with colleagues, parents or caregivers, and the secondary school community at large (Item 7), particularly during practicum placement. The final two items (Items 6 and 7) are from the professional engagement domain of the competence standard for secondary school teachers in Ethiopia.

6.2.10. Induction Programme at School Level

Table 6.10: The practices of induction programme at school level

R.N	Induction programme and its practices	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	There was induction programme in secondary school I was assigned.	47	30.9	16	10.5	89	58.6
2	Teachers have a responsibility for their own continuous professional development.	26	17.1	22	14.5	104	68.4
3	Induction programme was successful in bridging my transition from college to secondary school context.	27	17.8	17	11.2	108	71
4	Induction programme is important in refreshing the knowledge and skills I acquired during the training.	30	19.7	16	10.6	106	69.7
5	Experienced and competent teachers were selected for induction programme to guide the newly assigned teachers.	33	21.7	15	9.9	104	68.4

In order to avoid the trauma of the transition from being a student teacher to being a teacher, there must be effective induction programmes and professional support for beginning teachers. Such programmes or arrangements are the shared responsibility of major stakeholders as well as senior teachers in a particular secondary school (EMoE, 2009). According to the results in Table 6.10 above, a higher-than-average number of trainee teachers (89, or 58.6%) reported that they had experienced induction training and a professional support programme at their respective secondary schools (Item 1). Further to this, in terms of teachers' responsibility for their own continuous professional development (Item 2), the success of the induction programme in bridging the transition (Item 3), the importance of the induction programme in refreshing the knowledge and skills necessary for secondary school teaching (Item 4), and the assignment of experienced and competent teachers for the induction programme (Item 5) were positively considered by the majority of respondents, as reported by 104 (68.4%), 108 (71%), 106 (69.7%), and 104 (68.4%), respectively. This indicates that a larger than average number of graduates were satisfied with the appropriateness and usefulness of the induction programmes held at their respective secondary schools. This suggests that an induction programme is one that bridges the gap between the teacher education programme and the real world of work and boosts the effectiveness of on-going teachers' professional development practices, which in turn promote the success of the implementation of inclusive education in the Ethiopian secondary schools.

6.3. Developing of Core Competency for Inclusion

It was imperative to examine whether teacher education training develops the core competencies of inclusive teaching, namely, knowledge, attitudes, and practical skills and abilities. These competencies were found to be strong predictors for the successful implementation of inclusive education policies (Johnstone & Chapman, 2009). The curriculum framework for secondary school teachers' preparation in Ethiopia requires that teacher education employ pedagogies that support and promote inclusion as well as equip trainees with the necessary competencies that help them implement inclusive education successfully (EMoE, 2009). The study employed inclusive pedagogy as a framework to investigate the influence of the teacher education programme on teachers' knowing (knowledge), believing (attitude), and doing (skills and abilities) so that they implement inclusive education successfully. Therefore, under this section, the extent to which the graduates feel adequately prepared to develop the core competencies required to successfully implement inclusive education, which in turn influences teachers' performance in their post-training engagement, is presented quantitatively. To compute the frequency and percentage, the aggregate of strongly disagree and disagree was taken as disagree, and the aggregate of agree and strongly agree was taken as agree. Thus, the analysis has three categories: disagree, neutral, and agree.

6.3.1. Knowledge Related Competency

Table 6.11: Knowledge related competency developed by the trainee teachers as a result of teacher education programme

R.N	Knowledge related competency: The teacher education programme supported me to...	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	...know the international policies and legal frameworks that promote inclusive education.	36	23.6	14	9.2	102	67.2
2	...know the principles and methods of teaching students with disabilities.	32	20	17	11.2	103	67.8
3	...understand the psychological and behavioural characteristics of students with disabilities.	20	13.1	17	11.2	115	75.7
4	...know how to assess my teaching of students with disabilities.	26	17.1	16	10.5	110	72.3
5	...know the practices and implementations associated with inclusive education.	27	17.7	14	9.2	111	73
6	...understand the theories and principles guiding the implementation of inclusive education.	24	15.8	15	9.9	113	74.4

7	...know the national policies, legal frameworks and local institutional regulations to implement inclusive education.	26	17.1	18	11.8	108	71.1
8	...understand how to address diversity in Ethiopian secondary school curriculum implementation.	29	19.1	19	12.5	104	68.4
9	...understand that all students have the capacity to learn and develop if properly supported.	26	17.1	18	11.8	108	71
10	...know how to actively negotiate with educational leaders at various levels to support the implementation of inclusive education.	28	18.5	13	8.6	11	73

Teachers' professional competency, particularly their knowledge of inclusive education and diversity, is regarded as one of the most critical aspects necessary to implement inclusive education successfully across the globe. Thus, teacher education programmes that prepare teachers to work in an inclusive setting need to expose their trainees to the principles, values, and philosophies of inclusive education, with the essential knowledge of students' diversity, organised in such a way as to enable them to develop deep understandings of inclusive teaching. Recognising the importance of teachers' professional competencies, as well as analysing how the teacher education programme in Ethiopian universities supported and equipped the graduates with the necessary knowledge for the successful implementation of inclusive education, is therefore critical.

Table 6.11 shows that 102 (67.2%) and 108 (71.1%) of the respondents reported that the training equipped them with knowledge of international policies and legal frameworks, as well as national policies and local institutional regulations that respectively help promote and implement inclusive education successfully (Items 1 and 7). With regard to knowing the principles and methods of teaching and understanding the psychological and behavioural characteristics of diverse students, 103 (67.8%) and 115 (75.7%) of the respondents agree with the statements (Items 2 and 3), respectively, which suggests that the teacher education programme supported the trainee teachers in gaining knowledge about the principles, methods of teaching, and psychological and behavioural characteristics of diverse students.

In addition, items 4, 5, and 6 of Table 6.11 deal with the reflective knowledge of trainee teachers on how to assess their teaching of students with diverse educational needs, know the practices and associated issues of inclusion, and understand the theories and principles guiding the implementation of inclusive education, where 110 (72.3%), 111 (73%), and 113 (74.4%) of the

respondents respectively perceived that the training supported them in developing knowledge and understanding related to inclusive education as well as the learning needs of diverse students. Furthermore, the results revealed that 104 (68.4%), 108 (71%), and 111 (73%) of the respondents respectively reported that the training equipped them with knowledge of addressing diversity, with the understanding that all children have the capacity to learn if properly supported, and with the knowledge of collaboration with various stakeholders that support the implementation of inclusive education (Items 8, 9, and 10).

In addition to the above results, the scores were divided into three categories, based on Bowen and Power's (2005) cut points for the respondents' knowledge level that used a Likert scale: a score of less than 60% is considered low knowledge; a score between 60% and 79% is considered moderate knowledge; and a score of 80% and above is considered higher knowledge. The above results suggest that the teacher education programme, namely the PGDT programme, is moderately effective in terms of equipping the graduates with the necessary knowledge, since the percentage score of all the items was between 60% and 79 percent.

6.3.2. The Impact of Background Characteristics on Knowledge Related Competency

Table 6.12: Results of multiple regression analysis conducted to predicting trainee teachers knowledge based on their background characteristics

Model	<i>R</i>		Coefficients			
	<i>R</i>	<i>R</i> ²	USC		SC	
	<i>0.120</i>	<i>0.014</i>	B	SE	Beta	Sig.
1.Constant			39.603	3.866		0.00
Sex			-.401	1.607	-.021	0.803
Acquaintance			1.465	1.845	.066	0.429
Prior training			-.447	1.458	-.026	0.759
Experience of teaching			-1.478	1.282	-.099	0.251

Dependent Variable: Knowledge

Table 6.12 above shows the impact of trainee teachers' background characteristics on their knowledge development as measured by the regression correlation coefficient (39.603). The predictor variables (sex, acquaintance, prior training, and experience of teaching) contributed

only 1.4% towards the criteria variable (knowledge), as represented by the coefficient of determination R^2 . Other factors, particularly the teacher education training, accounted for approximately 98.6% of their knowledge development. This result means that 1.4% of the variation in the dependent variable is accounted for by the variation in the independent variables. In addition to this, the result of multiple linear regression in Table 6.12 above shows that all the background characteristics of the respondents were not significant predictors of the criteria variable, since the P values of all four predictor variables were greater than 0.05, respectively.

6.3.3. Attitude Related Competency

Table 6.13: Attitude related competency developed by the graduates as a result of teacher education programme

R.N	Attitude related competency: After the teacher education training, I believe that...	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	...students with disabilities are entitled to receive quality education.	41	27.0	11	7.2	100	65.8
2	...inclusive education makes students with disabilities more confident.	24	15.8	25	16.4	103	67.8
3	...inclusive teaching provides good opportunity to students with disabilities.	32	21.1	18	11.8	102	67.1
4	...inclusive education helps students with disabilities to socialise with others.	22	14.5	14	9.2	116	76.3
5	...inclusive schools and classrooms help to reduce social discrimination against students with disabilities.	27	17.7	9	5.9	116	76.3
6	...through inclusive education, students with disabilities can have the opportunity for learning improvement.	27	17.8	16	10.5	109	71.8
7	...inclusive education helps teachers to pay closer attention to differences amongst individual students in an inclusive classroom.	34	22.4	13	8.6	105	69.0
8	...inclusive education urges school reform and improves education quality for all students.	26	17.1	15	9.9	111	73.0
9	...inclusive education requires all teachers to work in teams/in groups.	29	19.1	9	5.9	114	74.0
10	...inclusive teaching requires parental and community support.	29	19.1	12	7.9	111	73.0

Teacher education should not only impart knowledge about inclusion; it should also develop trainees' attitudes towards inclusion and diverse children, including those with disabilities. This important aspect is recognised by EMoE (2012) as promoting inclusive practices that may contribute towards inclusion in classrooms, schools, and their entire society. In this regard, the

results presented in Table 6.13 above showed that 100 (65.8%) and 102 (67.1%) of respondents believe that students with disabilities have a right to receive quality education in an inclusive setting (Item 1) and that inclusive teaching provides a good opportunity for students with disabilities (Item 3), respectively. Regarding the social benefit of inclusion for students with disabilities (Items 2, 4, and 5), 103 (67.8%), 116 (76.3%), and 116 (76.3%) of the respondents reported positive views on the statements. This suggests that the training developed positive attitudes towards learning environments that are conducive and promote a sense of belonging for students with disabilities. Such environments are critical for the successful implementation of inclusive education.

Trainee teachers' beliefs that inclusive education improves the learning of students with disabilities (Item 6), assists teachers in paying closer attention to differences among individual students in an inclusive classroom (Item 7), encourages school reform and improves education quality for all students (Item 8), requires all teachers to work in teams or groups (Item 9), and necessitates parental and community support (Item 10) were noted, as evidenced by the respondents' responses of 109 (71.8%), 105 (69%), 111 (73%), 114 (74%), and 111 (73%), respectively, and Johnson and Howell (2009) pointed out that teachers' attitudes are made up of three related aspects, namely: cognitive (the idea or assumption upon which the attitude is based); affective (feelings about the issue); and behavioural (a predisposition towards an action that corresponds with the assumption or belief).

Cognitive and affective aspects have a high probability of being influenced by the initial teacher education programme, as shown in Table 6.13 above, whereas the behavioural predisposition towards an action has a lower probability of being influenced by the initial teacher education programme due to the gap between theory and practice, which was revealed in Table 6.13. Therefore, the teacher education programme can be said to be moderately effective in terms of positively influencing trainee teachers' attitudes towards inclusion, since the percentage score of all the items was between 60% and 79 percent. Based on Bowen and Power's (2005) cut points for the respondents' attitude development that used a Likert scale, a score less than 60% is considered low; a score between 60% and 79% is moderate; and a score of 80% or above is high in terms of influencing trainee teachers' attitudes.

6.3.4. The Impact of Background Characteristics on Attitude Related Competency

Table 6.14: Results of multiple regression in predicting teachers attitudes and background issues

Model	<i>R</i>		Coefficients			
	<i>R</i>	<i>R</i> ²	USC		SC	
	<i>0.078</i>	<i>0.006</i>	B	SE	Beta	Sig.
1.Constant			36.184	4.023		0.00
Sex			.191	1.672	.010	0.909
Acquaintance			.499	1.920	.022	0.795
Prior training			1.167	1.517	.066	0.443
Experience of teaching			-.609	1.334	-.039	0.649

Dependent Variable: Attitude

Table 6.14 above shows the impact of trainee teachers' background characteristics on their positive attitude development as measured by the regression correlation coefficient (36.184). The predictor variables (sex, acquaintance, prior training, and experience of teaching) contributed only 0.6% towards the criteria variable (attitude), as represented by the coefficient of determination R^2 . Other factors, particularly teacher education training, accounted for approximately 99.4% of their positive attitude development. This result means that 0.6% of the variation in the dependent variable is accounted for by the variation in the independent variables. In addition to this, the result of multiple linear regression in Table 6.14 above shows that all the background characteristics of the respondents were not significant predictors of the criteria variable, since the P values of all four predictor variables were greater than 0.05, respectively. This suggests that the above-mentioned background characteristics of the respondents did not predict their positive attitude development, but rather their teacher education training, namely the PGDT programme.

6.3.5. Practical Skills and Abilities Related Competency

Table 6.15: Practical skills and abilities related competency developed by the graduates as a result of teacher education programme

R.N	Practical skills and abilities related competency: the teacher education programme enabled me to...	Disagree		Undecided		Agree	
		f	%	f	%	f	%
1	...make students with and without disabilities help and learn from each other.	41	27.0	22	14.4	89	58.6
2	...conduct differentiated teaching for students with disabilities.	33	21.78	41	27.0	78	51.3
3	...work collaboratively with other teachers and professionals to teach students with disabilities.	44	28.9	24	15.8	84	55.3
4	...design flexible coursework and individual assessment for students with disabilities.	47	30.9	29	19.1	76	50.0
5	...adjust teaching objectives according to the characteristics of students with disabilities.	33	21.7	40	26.3	79	51.9
6	...arrange group discussion and collaborative learning to help students with disabilities.	37	24.3	16	10.5	99	65.2
7	...conduct effective behavioural management for students with disabilities.	35	23.1	39	25.6	78	51.3
8	...work effectively with parents to help students with disabilities.	46	30.3	25	16.4	81	53.3
9	...work effectively with the communities to help students with disabilities.	39	25.7	30	19.7	83	54.6
10	...use various teaching and learning materials to help students with disabilities.	35	23.1	40	26.3	77	50.6

Practical skills and abilities gained during their initial teacher education training are important determinants of teachers' perceptions of their preparedness for inclusive teaching. EMoE (2012) note that such skills help teachers teach their students better by spending additional time planning lessons and working with students to address individual needs and successfully manage inclusive classrooms. The results of how effectively a university-based teacher education programme equipped teacher trainees with the necessary practical skills and abilities are presented in the table above. The results presented in Table 6.15 above demonstrate that the graduates have developed the skills that help them to: make their students with and without disabilities help and learn from each other (Item 1); and conduct differentiated teaching for students with disabilities at the minimum level (Item 2), which was considered by 89 (58.6%) and 78 (51.3%) respondents, respectively.

In terms of practical skills that help to work collaboratively with other teachers and professionals to teach students with disabilities, 84 (55.3%) of the respondents agreed with the statement that the training they have taken has supported them in this regard. Concerning the skills necessary to design flexible coursework and create individual assessments for students with disabilities, only

half of the respondents (76, or 50%) confirmed the teacher education programme they have gone through has helped them develop the stated skill. Regarding the skills necessary to adjusting teaching objectives (Item 5), arranging group discussion, and collaborating to help students with disabilities according to their needs (Item 6), 79 (51.9%) and 99 (65.2%) of the respondents confirmed that the training they have taken has supported them moderately or minimally in developing the above-stated skills.

The result in Table 6.15 above also shows that conducting effective behavioural management (Item 7) and working effectively with parents (Item 8) to help students with disabilities are the skills the graduates developed minimally as a result of the teacher education training and were considered by 78 (51.3% of respondents) and 81 (53.3% of respondents), respectively. Further, the results in Table 6.16 above affirmed that the graduates who have passed through the teacher education training have minimally developed skills that help them to work effectively with communities (Item 9) and use various teaching and learning materials (Item 10) to help students with disabilities, which were considered by 83 (54.6% of respondents) and 77 (50.6% of respondents), respectively. Based on the percentage score of less than 60% on all items, it can be suggested that the teacher education programme does not adequately equip graduates with the necessary practical skills and abilities for inclusion. According to Bowen and Power (2005), a score less than 60% is considered low; between 60% and 79% is considered moderate; and a score of 80% or above is considered high.

6.3.6. The Impact of Background Characteristics on Practical Skills Related Competency

Table 6.16: Results of multiple regression analysis conducted to predicting trainee teachers knowledge based on their background characteristics

Model	<i>R</i>		Coefficients			
	<i>R</i>	<i>R</i> ²	USC		SC	
	<i>0.072</i>	<i>0.005</i>	B	SE	Beta	Sig.
1.Constant			39.052	3.800		0.00
Sex			.046	1.580	.002	0.977
Acquaintance			1.200	1.814	-.055	0.509
Prior training			-.002	1.433	.000	0.999
Experience of teaching			-.612	1.261	-.042	0.628

Dependent Variable: Practical skills and abilities

Table 6.16 above shows the impact of trainee teachers' background characteristics on their practical skills and abilities development, as measured by the regression correlation coefficient (39.052). The predictor variables contributed only 0.5% towards the criteria variable (practical skills and abilities), as represented by the coefficient of determination R^2 . Other factors, particularly teacher education training, namely the Postgraduate Diploma in Teaching (PGDT), accounted for approximately 99.5% of their practical skill and ability development. This result means that 0.5% of the variation in the dependent variable is accounted for by the variation in the independent variables. In addition to this, the result of multiple linear regression in Table 6.16 above shows that all the background characteristics of the respondents were not significant predictors of the criteria variable, since the P values of all four predictor variables were greater than 0.05, respectively. This suggests that the above-mentioned background characteristics of the respondents did not predict their practical skills and abilities development, but rather their teacher education training, namely the PGDT programme.

6.4. Chapter Summary

The chapter presented the findings of the quantitative study in three parts: (a) training teachers for inclusion in Ethiopian universities, answered by framing the components that illustrate the preparation of secondary school teachers for inclusion in Ethiopia. This includes facilities and services related to teacher education programme, the status of the teacher education college in the selected university, the modality and approach of the teacher education programme, the structure and curriculum of the teacher education programme, the teacher education pedagogies, the integration of inclusive education in the teacher education programme, partnership and collaboration among stakeholders, the qualification requirements of the teacher education programme, standards set for secondary school teachers and the teacher education programme, and the practices of induction programme at school level; (b) developing of core competency for inclusion, which includes knowledge related competency, attitude related competency, and practical skills and abilities related competency; and (c) the impact of background characteristics of the competencies required for inclusion. The next chapter (Chapter Seven) presents the qualitative findings of the study.

CHAPTER SEVEN: FINDINGS OF QUALITATIVE DATA

7.1. Introduction

In the second phase, the qualitative data collected through the in-depth, semi-structured face-to-face interview was analysed qualitatively following verbatim transcription of the audiotaped interviews. The data was categorised and analysed according to themes in a way that aligned with the research questions of the study. This enabled the researcher to find meaning in a great deal of data, as well as to ensure the focus of the analysis remains on answering the research questions in a way that explains the findings of the quantitative analysis in the first phase. As a result, this chapter presents the findings of the qualitative study thematically, using headings derived from the sub-research questions as an organising framework. In addition to the direct quotations from the face-to-face, semi-structured individual interviews, the Ethiopian national policy documents that guide and influence the case at hand, namely the Inclusive Education Strategy published in 2012 and the Curriculum Framework for Secondary School Teachers Preparation published in 2009, were reviewed and presented for illustrative purposes. The participants have been coded using pseudonyms "Participant Teacher A-G," which means PT-A, PT-B, PT-C, PT-D, PT-E, PT-F, and PT-G, to guarantee their anonymity and confidentiality, as indicated in Chapter 5, Section 5.9.3 of this study.

7.2. Conceptualisation of Inclusion and Diversity

The first question posed to the participants was how they would define inclusion based on their understanding of the concept from their teacher education training. Three out of the seven respondents replied that they were aware of what inclusive education entails. In fact, inclusive education is both a process as well as a broader concept. Therefore, it can be conceptualised from different perspectives, namely, from an equity, diversity, and accessibility perspectives in education. For instance, **PT-E** noted that:

The education of all children in schools regardless of their learning capabilities, I mean learners with disabilities having challenges with learning, should also be included into regular schools.

According to the Inclusive Education Strategy of Ethiopia published in 2012, inclusive education entails acknowledging that all children can learn and that all need some sort of support. Moreover, it stated that inclusive education is about changing how teachers conceptualise inclusion in order to meet the needs of all learners in an inclusive setting. **PT-C** also noted that:

Inclusive education is whereby every child allowed having access to education without discrimination, I mean, because of certain disabilities they have, they should not be deprived the opportunity to receive appropriate education.

This response shows awareness of the fact that inclusive education is against discrimination and exclusion of learners based on disability of any kind, and hence, the call to educate every learner in their local secondary schools is promoted. This suggests that the graduates benefitted from their initial training, as they properly understood one of the basic principles of inclusive education that helped them handle discrimination and exclusion of learners based on disability in the Ethiopian secondary school context (EMoE, 2012). In addition, **PT-G** replied that:

I understand inclusion as educating all learners whether they have disabilities or not. Another thing is that it is educating learners so as to achieve their full potential because everyone has a limit and, it is up to teacher to help each and every one to achieve their full potential. That is the understanding I have about inclusive education.

This response is in line with one of the requirements stated in the Inclusive Education Strategy of Ethiopia published in 2012, which states that inclusive education focuses on overcoming barriers in the system that prevents it from meeting the full range of learning needs. This demonstrates the critical role that teacher education programmes play in raising awareness about inclusion among the trainees so that, after training, they are equipped to support all learners in order for them to reach their full potential in inclusive environments. On the other hand, even though all of the interviewees have graduated from similar teacher education programmes with similar modules and contents, they conceptualised inclusive education differently. For example, **PT-A** described that:

Inclusive education is teaching both students with disability and non-disabilities together.

PT-D also added that:

Inclusive education is to teach the abnormal children with normal children, I mean that inclusive education is about teaching normal children with those who have health problem.

According to studies conducted in various countries around the world, teachers' proper conceptualisation of inclusion is primarily dependent on the initial teacher education programmes and the processes they have passed through during the training (El-Ashry, 2009). Thus, analysing graduates' perspectives is important in this regard to identify teachers' proper conceptualisation of inclusion as well as factors that influenced it and to determine whether or not the current teacher education programme, namely the Postgraduate Diploma in Teaching (PGDT) in Ethiopia, is aligned with the objectives and expectations of teachers' preparation for inclusion.

The second issue to which participants were asked to respond under this theme was how trainee teachers' conceptualised diversity and how this was addressed in the teacher education programme they had completed. Because of the growing diversity of learners and their learning needs in Ethiopian secondary schools (EMoE, 2012), general education teachers' understanding and readiness to accept diverse learners in their classrooms has been a source of concern. In this regard, **PT-F** stated that:

Inclusive education is to educate and support diverse children with no difference, and I understand this from the courses named Inclusive Education and Teaching in Multicultural Settings (PGDT... I forgot their course code), they really developed my awareness of diversity during the training.

PT-B also added that:

In my understanding providing appropriate support to diverse learners means that promoting the educational and social development of all my students without referring to their language, culture, race, ethnicity, gender, socio-economic status, abilities or disabilities, as well as family background in my school and classrooms I assigned to teach.

Further, **PT-E** stated that:

In my classrooms, diverse students learn side by side. I understand that each student can bring unique experience to my class, not only the students, I can also learn from their experiences. To be honest, there are times where I am incapable of responding to the needs and interests of my students.

The response suggests that the teacher education training has helped the graduate create awareness about the diversity of students in the Ethiopian secondary school context. In this regard, the Inclusive Education Strategy of Ethiopia published in 2012 supported the above conceptualisation of diversity in that inclusive education refers to an education system that is open to diverse learners, which includes children with disabilities and social-emotional problems, gifted and talented children, children with socioeconomic deprivation, HIV/AIDS victims, ethnic or cultural minority status, being located in isolated rural communities, and having experienced war and conflict.

7.3. Awareness of the Principles, Values, Policies and Practices Of Inclusion

The issue raised under this theme is the extent to which teacher education has developed graduates' awareness of the principles, values, policies, and practices of inclusion. For inclusion to be effective, trainee teachers need to be cognisant of and committed to the philosophy, principles, values, and practices of inclusive education to support a diverse range of learners in the Ethiopian secondary school context. It was interesting to note that courses given by the teacher education programme go beyond educating the trainee teachers on the issues of learners' diversity to include the principles, values, policies, and practices that promote inclusion, as revealed by **PT-B** below:

I enjoyed many courses, PGDT..., which I forgot their names by now, that demonstrated the link between national and international policies and the inclusive education implementation... and that informed as what we should do at secondary schools we are going to be assigned after the completion of the training.

In addition, **PT-F** stated that:

I understand and know that all children can learn but they need some kind of support. In addition to that I feel that respect and understanding given to students with diverse abilities and backgrounds will grow when they play, socialise, and learn together in inclusive schools and classrooms...; and this is what I have learned from “peda” training I have taken in HrU.

Further, **PT-A** reported that:

I have learnt from “peda” courses that Inclusive education requires flexible education systems that are responsive to the diverse needs of all learners’ particularly in the Ethiopian secondary schools. It also aimed at widening access to education for children vulnerable to exclusion in order to realize their potential. But, I don’t feel competent enough for practicing inclusive education.

Similarly, **PT-C** said that:

From “peda” I become aware that students with disabilities have a legal right to receive quality education in an inclusive school. But, I observed in secondary school I assigned that there are misconceptions towards the education of students with disabilities... integrating them into the school without proper support is considered as inclusive practices; but this only considers the physical presence.

Furthermore, **PT-G** stated that:

I know many national policies and strategies that helped us to promote the implementation of inclusive education in Ethiopian secondary schools from my “peda” training in HrU, such as the Ethiopian training and education policy, the Ethiopian Inclusive Education Strategy, the curriculum framework for Secondary school teachers' preparation in Ethiopia, the national standard for Ethiopian secondary school teachers, and also other related.

This suggests that the graduates were made aware of the connection that exists among the principles, values, policies, and practices that promote the implementation of inclusive education during their initial teacher education training. The increased awareness of graduates about the basic principles, values, and policies of inclusion will work as a good move for the successful implementation of inclusive education in the Ethiopian secondary school context. It is important to note that the inclusiveness of the policies in terms of their desire and commitment to address the needs of all children in the Ethiopian education system is clearly indicated in those strategies, documents, and directives. In this regard, producing secondary school teachers who understand and use the policies, strategies, and directives stated above to implement inclusive education is one of the objectives of the teacher education programme (PGDT) offered at the selected university in eastern Ethiopia.

7.4. Components that Influenced Secondary School Teachers’ Preparation for Inclusion

This theme covers the components of the teacher education programme that influence teachers’ preparation for inclusion, as presented below.

7.4.1. Facilities and Services Related to the Programme

The first question under this theme asked how the facilities and related services of the teacher education programme influenced their preparation for inclusive teaching. In this regard, four of the seven interviewees revealed that an adequate institutional environment that supports the teacher education programme at the selected university is lacking. For instance, **PT-C** responded that:

I am not satisfied with the ways the resources and materials that support our training were organized, even their existence, such as dormitory, classroom organization, teaching modules and references, library and laboratory - as to me it is not expected from such big university.

In addition, **PT-A** responded that:

The administrative supports to the teacher education program are below my expectation; they consider the programme as secondary and give priority for others, for those undergraduate students than students in the PGDT programme.

Further, **PT-E** revealed that:

The use of different instructional media and technology in the training and the creation of a classroom environment that is conducive to our learning are by far below the BSC programme I pass through while I studied physics.

Above all, **PT-B** stated that:

Majority of my friend including me were not happy with the availability of reading materials and text books related to our area of specialisation, laboratory for our subjects- for example, Biology subject in our case, stationery materials during field work and practicum, vehicles for transportation to and from the secondary schools, suffering sometimes as a result of lack of classrooms and moving from door-to-door, assigned to poorly ventilated and unclean dormitories.

In conducting proper teacher education for inclusion, the availability of the necessary facilities and related services is critical. In addition to the facilities, teacher education programmes that prepare graduates for the challenges of inclusion are expected to provide sufficient psychosocial and emotional support as well as academic support for initial teachers attending the training. But, from the responses of the interviewees, one can understand that the facilities and related services

of the teacher education programme are not able to support the effectiveness of the initial teacher training for inclusive teaching. The qualitative findings supported and explained the quantitative findings of the study in that the facilities, services, and instructional resources of the PGDT programme at the selected university were not able to provide sufficient academic, psychosocial, and emotional support for trainee teachers.

7.4.2. Status of the Teacher Education College

The position of the teacher education programme within a university plays a crucial role in determining the identity of teacher educators and influencing the overall effectiveness of the teacher education programme. In this regard, almost all the interviews reported that the college of teacher education was in a better position compared to other sister colleges in the university selected for this study, particularly in terms of teacher educators (teachers of teachers). For example, **PT-F** revealed that:

I know most of the teacher educators in the Postgraduate Diploma in Teaching (PGDT) programme; they are full timers and belong to College of Education and Behavioral Sciences (CEBS), I mean CEBS; and also the course they offered was related with their fields of specialisation.

In addition, **PT-G** said that:

Our teachers were very positive, available any time to help us, very knowledgeable in their subject area specialization; I also experienced some dictator teacher educators during my stay in the University for “Peda” training.

Teachers who define themselves as “teachers of teachers” are full-time workers who have two major roles that complement one another, namely producing knowledge on education (research) and teaching teachers. To participants, teacher educators having independent organs for training teachers is an indication of the professionalisation of teaching, which in turn influences the effectiveness of teacher preparation for inclusion (EMoE, 2012). This finding concurs with the findings of the quantitative study in that the resourcefulness of the teacher education programme

(in terms of the faculty involved) influences its effectiveness. In addition, teacher educators were full-timers, belonged to the college, and were assigned to offer courses based on their fields of specialisation. The above findings suggest that the position of the teacher education programme within a university has its own role in producing competent graduates for secondary inclusive education in Ethiopia.

7.4.3. The Modality of the Teacher Education Programme

Teachers can demonstrate higher competence in teaching if they are trained in the proper modality and approaches for inclusive teacher education. In this regard, almost all interviewees who participated in the study revealed that the modality and approaches of the teacher education programme (PGDT) were more theory-oriented, with limited or no opportunities for practical or field experiences; it was tokenistic at best. For instance, **PT-D** noted that:

Most of my teachers were just talk, write on the board and uses none or limited practical examples in their lessons that may help as to handle realities of secondary school classrooms and students with disabilities; we students were not actively engage in the lessons of most of our teachers.

Similarly, **PT-C** reported that:

I feel that the practical teaching experience I got from the training is inadequate, I am happy with theory part but did not get enough time to practice what I learnt.

In addition to that, **PT-A** revealed that:

I did not get the opportunity to deal with students coming from diverse socio-economic, educational and language backgrounds in the secondary school I assigned for teaching practice.

The results of the above qualitative interview suggest that the current modality, known by different names (sequential, consecutive, add-on), and approaches of the teacher education

programme (PGDT) that the graduates had passed through failed to integrate trainees' subject-area knowledge with pedagogical practice. Field experience enables trainee teachers to make connections between what they are learning in their coursework and the day-to-day realities of being a teacher, and that aspect is important if teachers are to be effectively prepared for 21st century classrooms. The qualitative findings supported and explained the findings of the quantitative study in that the modes and approaches of the teacher education programme studied failed to integrate trainees' subject area knowledge with pedagogical practices. The above findings suggest that trainee teachers have not been given enough opportunity to make connections between what they have learned in their coursework and the day-to-day realities of being an inclusive teacher.

7.4.4. Curriculum and Its Organizations in the Teacher Education Programme

The fourth issue on which the participants gave their views under this theme was the curriculum and its organisations in the teacher education programme, namely the Postgraduate Diploma in Teaching (PGDT). In order to be effective, teacher education programmes should have a well-organised curriculum that produces graduates who are knowledgeable, reflective, empathetic, and responsive, as well as understand 21st-century inclusive teaching. The duration of the programme, the nature of the students' mastery of content and pedagogical knowledge and the alignment of the programme curricula with secondary school curricula are all important issues to be considered within the curriculum of a teacher education programme and its organisation. In this regard, the interviewees reported that the PGDT is a one-year training programme divided into three terms, which includes many pedagogical courses and a teaching practicum at the end of the programme. For example, **PT-F** revealed that:

I have been in HrU (the selected university) for ten busy months to take 'Peda' course (Short name for the PGDT programme) - almost all of the courses are pedagogy courses except two subject area courses (teaching secondary school Physics I and II), to my understanding the courses we took during the training are important for secondary school teaching and they are also interrelated.

In support of this, the curriculum framework for secondary school teachers' preparation in Ethiopia stated that the duration of the PGDT training is ten months, which is divided into three terms, with each term having a three-month duration. It further stated that the terms allow the teacher education universities to maintain the sequence and integration of the courses in the programme, which are 12 in number, namely: assessment and evaluation of learning, psychological foundations of learning and development, teachers as reflective practitioners, secondary school curriculum and instruction, school and society, subject area teaching I and II, instructional technology, teaching in a multicultural setting, inclusive education, English for secondary school teaching, practicum, and action research project (EMoE, 2009). This result also shows an alignment between the PGDT curriculum and secondary school curricula, as it is reported above that the courses the graduates have taken during the training are important for secondary school teaching. For instance, **PT-D** stated that:

I feel that all the courses included in 'Peda' training are important and adequate to produce effective secondary school teachers; training modules also written with clarity and organised based on our understanding level.

This suggests that student teachers in the PGDT programme have a chance to take foundation courses well ahead of those that deal with the specifics of teaching in their area of specialisation, and courses that complement each other are offered within the same term. This idea was well established in the literature that, while many factors influence student academic achievements and outcomes in schools that serve diverse student populations, as one of the major factors is quality teachers who are backed by a well-managed curriculum during their initial training (World Bank, 2013). More than half of the interviewees (four out of the seven) felt that they were overburdened with a heavy workload in every term in terms of theory (content knowledge), and the teacher educators were in a rush to cover the vast content of each course, which did not give them time to exercise and practice what they had learned. For example, **PT-B** stated that:

The PGDT programme has difficulties connecting theory to practice, because we were not exposed to the real tasks of secondary school teachers during our training.

The current teacher education programme does not integrate trainees' subject area knowledge with pedagogical content knowledge, which might be because of a lack of commitment and follow-up from all concerned bodies in the proper implementation of the programme as was planned in the curriculum framework. This finding of the qualitative study is consistent with the finding of the quantitative study in that the teacher education programme under study was not helpful in promoting trainee teachers' pedagogical content knowledge. In addition, the teacher education programme was not practice-oriented, which means that it lacked trainee-centred pedagogical approaches that linked theory with practice. This suggests that in order to become an effective resource for inclusive teaching, teachers must be provided with a curriculum that includes appropriate opportunities to practice what they have learned during their preparation in schools while receiving constructive feedback.

7.4.5. The Teacher Education Pedagogies

Because there is a strong relationship between teachers' pedagogical preparation and the educational quality they provide in school settings, the pedagogies used by the teacher educators during the initial teacher education training fell under scrutiny here. In this regard, the interviewees who participated in the study revealed that the pedagogies used in the programme are not aligned with the key pedagogies emphasised in the curriculum framework, such as clinical experience like fieldwork and microteaching; the use of performance assessments and portfolios; analysis of teaching and learning; case methods; teacher inquiry; autobiography; and action research. For instance, **PT-C** said that:

We did not get ample time for practical attachment of each course; the experience we have in micro-teaching and teaching our peers in the classroom is very minimum, no portfolio development at all, and we practiced action research for fulfillment, even we copy from each other.

In a similar manner, almost all of the interviewees who participated in the study reported that the pedagogies used in the teacher education programme during the training are not in a position to support and promote inclusiveness as stipulated in the Inclusive Education Strategy of Ethiopia

published in 2012 that guides secondary school teachers' preparation for inclusion in Ethiopia, which is the core agenda of this study. For example, **PT-D** revealed that:

I feel that I gained theoretical knowledge of what inclusive education is from different courses I have taken, but I didn't get practical experiences that helped me to manage inclusive class and... to be honest, I am very challenged to practice inclusion in the secondary school I am teaching now.

Nonetheless, all of the interviewees who participated in the study believe that teacher education pedagogies that are helpful to teach students with special needs and disabilities, diversity, and gender issues were not given attention during the training by the teacher educators. In this regard, the Curriculum Framework for Secondary School Teachers Preparation published in 2009 stipulated that the teacher education programme should institutionalise equity in the teaching force and reach underprivileged groups in the provision of quality secondary education in Ethiopia (EMoE, 2009). Further to this, it stated that one of the missions of the Ethiopian secondary school teacher education programme was to strive to ensure equity in education. In this regard, **PT-A** said that:

I feel that I am not ready and confident enough to manage students with disability and treating them as their need; designing learning (physical activity) for blind students as I am teaching sport science is a challenging task I am experiencing.

In addition, **PT-F** revealed that:

Manage instructional environment for language teaching; and handling students' misbehavior in the teaching learning process is difficult and... I feel that I missed experience (I mean, I did not get opportunity) during the training.

Inclusive pedagogy is a range of pedagogical methods, approaches, forms, and principles that promote trainee teachers' participation in their training. It is also conceptualised in terms of the nature of the knowledge acquired by the student-teacher, the pedagogy necessary for students

with individual differences, and the forms of assessment that lead to subject-related and transformative learning for student-teachers attending the teacher education programme. However, all the interviewees who participated in the study revealed that the training they have passed through has moderately supported them to understand and practice inclusive pedagogy during the training, which they are expected to implement in an Ethiopian secondary school context after their graduation. For instance, **PT-B** admitted that:

The training I have passed through did not give me an opportunity to understand, practice, and value the inclusive pedagogical approaches that are needed to implement inclusive education in the secondary school I assigned to teach; I know the concept of diversity and equity from inclusive education course I took during the training, but, only 'theory' to pass the course.

PT-G also added that:

Even if the teacher education programme was planned in such a way that we able to support diversified students in secondary school and implement inclusive pedagogical approaches in our teaching; to be honest, I don't have the capacity to adapt lesson and teach all students in the secondary school I assigned.

Further, **PT-E** stated that:

I know that I am expected to empower and encourage students with diverse needs, use alternative and supportive pedagogical approaches that improve the quality of learning for all; in reality this is very difficult in a classroom with 80 students, everybody says implementing inclusive pedagogy is mandatory, which is not go hand in hand with the realities of our secondary school, for such reason and others I tried off hearing the propaganda of inclusive education everywhere.

In addition, **PT-C** revealed that:

Honestly speaking, the 'Peda' training I have taken did not give a room to apply various educational theories and principles I have learned from different courses and; thereby, I didn't develop inclusive pedagogical skills on how to help students with special needs and diversity, students with disability and others in secondary school settings I assigned to teach.

But the curriculum framework for secondary school teachers' preparation published in 2009 states that one of its objectives is to produce secondary school teachers capable of meeting students' needs in inclusive settings as well as supporting and preventing the possible exclusion of learners at risk. The Inclusive Education Strategy of Ethiopia published in 2012 also states that in order to prepare teachers for inclusive education, teacher education programmes ought to afford sufficient space for inclusive pedagogical approaches as well as active learning methodologies, which will ensure the active participation of trainee teachers and make the teaching-learning process more attractive and engaging (EMoE, 2012). The qualitative findings supported and explained the findings of the quantitative study in that neither the pedagogies employed in the teacher education programme were aligned with the key pedagogies nor did they support and promote inclusiveness. In addition, it was observed that the pedagogies for teaching students with special needs and disabilities, as well as diversity and gender issues, were not prioritised throughout the training.

7.4.6. The Effectiveness of the Integration of the Inclusive Education Learning Area in the Teacher Education Programme

The integration of the inclusive education learning area in the training of teachers for inclusion is critical in producing competent and responsive teachers for 21st-century inclusive teaching, but what matters is its effectiveness. In this regard, almost all of the interviewees who participated in the study revealed that they were not satisfied with the course organisation, teaching strategies, and teacher educators' inclusive practices during the training. For instance, **PT-D** reported that:

I feel that the organisation of inclusive education course was not effective in balancing the theory and practice dimensions as I expect, and the teaching strategies were not effective in delivering the contents included under course as they need more practical attachments and field works.

In addition, **PT-B** stated that:

I believe that the inclusive education course instructors were not serving as role models of inclusive practices in the classroom and outside of classroom during the training, even, I observed that some of them do not have positive attitude towards trainee teachers with disability.

According to the Ethiopian Inclusive Education Strategy published in 2012, the main focus of the inclusive education course is assisting teachers to better understand inclusion and thus effectively teach learners with diverse needs, as well as maintaining the balance between the knowledge, skills, and abilities, attitudes, and beliefs that trainee teachers should have at the end of the program. The findings of this qualitative study are also consistent with and support the quantitative findings of the study in that the inclusive education learning area and its teaching strategies were not effective in balancing the theory and practice dimensions of the teacher education programme, which was supposed to produce graduates capable of implementing inclusion in education.

7.4.7. Existence of Partnership (Collaboration) and Its Effectiveness

The issue to which the participants were asked to respond under this theme is their view on the existence of partnership (collaboration) and its effectiveness between the selected university (the college of teacher education) and the surrounding secondary schools, as well as other stakeholders during their stay in the university. But the responses of the interviewees who participated in the study did not show its effectiveness in this regard. For instance, **PT-B** replied that:

As to me the time allocated for collaborative learning experiences was not adequate particularly during the practicum, and I also felt that the collaboration between the trainee teachers and mentors in the secondary schools was not as such effective in supporting the development of important collaborative skills necessary to handle students with diverse educational needs.

In addition, **PT-F** said that:

I am not satisfied with the collaborative learning practices held with different professionals at secondary school I assigned for practical attachment of inclusive education course. School teachers were not cooperative to support us... even they were not accessible, I feel that this limited our understanding concerning students with diversity educational needs and their learning in Ethiopian secondary schools' context.

This suggests that the collaboration among the concerned parties did not allow the trainee teachers to gain highly supervised clinical practices for extended periods of time and understand students' diversity and their learning in an inclusive classroom. The annual report of EMoE (2018) also revealed that collaboration between the teacher education universities and the secondary school community was not well coordinated, to the extent that some secondary schools disallowed universities from assigning trainee teachers for field visits, practicums, and teaching practices. But the inclusion of students with disabilities in educational contexts is not the job of a single individual in isolation, requiring instead a collaborative effort among professionals. This qualitative finding supported and explained the quantitative findings in that the teacher education programme had limitations in exposing trainee teachers to a collaborative learning environment where they could truly understand students' diversity, their learning, and how they should be supported collaboratively.

7.4.8. General Perceptions of the Qualification Requirements to Obtain a Postgraduate Diploma in Secondary School Teaching (PGDT)

In order to ensure the quality of the teacher education programme for secondary school education, exit exams were considered a qualification requirement such that trainees are certified to teach in the Ethiopian secondary school context, as stated in the Curriculum Framework for Secondary School Teachers' Preparation (EMoE, 2009). In this regard, five out of the seven interviewees who participated in the study revealed that the exit exam as a qualification requirement is necessary for ensuring the quality of the teacher education program. For instance, PT-C stated that:

The exit exam has linked the components of the “Peda” training with the requirements of secondary school teaching in Ethiopia; I also believe that it can ensure the certification of competent graduates for Ethiopian secondary schools.

Further, **PT-E** revealed that:

I feel that the time given to prepare for the exit exam was sufficient to review pertinent issues that are directly related to competency standards stated in the curriculum framework.

In addition to the exit exam, passing all the courses (no "F"); scoring at least "C" in subject methodology areas I and II and Practicum; and presenting a portfolio that demonstrates the student-teachers' development throughout the training, the judgments of which add to the result of the student-teacher's teaching practice, were the mandatory graduation requirements to become a secondary school teacher in Ethiopia (EMoE, 2009). The finding suggests that the holistic competency of the graduates was judged, which takes into account not only knowledge and skills but also the ethical dimension of the teaching profession. It also supported and explained the quantitative findings stated under Table 6.8.

7.4.9. The Link between the Secondary School Teachers' Standard and the Teacher Education Programme

With regards to the competency standards, the Ethiopian Ministry of Education (EMoE, 2012) has designed a national professional standard for Ethiopian secondary school teachers, consisting of seven basic elements: knowing students and how they learn; knowing contents and how to teach them; planning for and implementing effective teaching and learning; creating and maintaining supportive and safe learning environments; assessing, providing feedback, and reporting on student learning; knowing the professional code of ethics of the teaching profession; and engaging professionally with colleagues, parents or caregivers, and the community.

Among the seven standards stated by the ministry, the interviewees were not satisfied with the fulfillment of the three, namely: planning for and implementing effective teaching and learning;

creating and maintaining supportive and safe learning environments; and assessing, providing feedback, and reporting on student learning. For example, **PT-C** said that:

I feel that the teacher education programme (PGDT) did not allow me to practice planning and implementing effective lessons particularly for students with disabilities.

In addition, **PT-E** replied that:

I don't think creating supportive and safe learning environments is very difficult in school I am teaching now due to large number of students; and even the classrooms are not conducive by themselves.

Further, **PT-G** revealed that:

Assessing our students, providing feedback and reporting on each and every students learning is unthinkable in secondary school contexts of eastern Ethiopia not due to lack of knowledge but due to number of students in one classroom. For example, I am assigned to teach chemistry in Grade Nine that are seven sections, the average students of these classes are 78, and how you can expect me to do that.

Among the seven standards stated by the ministry, the interviewees were satisfied with the fulfillment of four, namely knowing the students and how they learn, knowing the content and how to teach it, knowing the professional code of ethics of the teaching profession, and engaging professionally with colleagues, parents or caregivers, and the community. For instance, **PT-D** stated that:

I feel that the "peda" training I took in HrU provides me with the knowledge of the professional code of ethics of the teaching profession in Ethiopian secondary school context.

In addition, **PT-F** noted that:

From the course named foundation of human development and learning and from subject area courses, I know and understand secondary school students and how they learn theoretically, and also the contents area of my subject and how to teach them in the secondary school context.

The main purpose of the national professional standard is to improve educational quality at all levels and also to define the work of teachers and make explicit the elements of high-quality, effective, inclusive teaching that will improve the educational outcomes of all students in Ethiopia (EMoE, 2012). The graduates (initial teachers) are those who have completed a qualification that meets the requirements of a nationally accredited programme of initial teacher education. The award of this qualification means that they have met the Graduate Standards. However, the graduates were not able to interpret student assessment data in order to evaluate their learning; modify teaching practices and know-how to select and apply timely and appropriate feedback; and demonstrate knowledge of practical strategies to create rapport with students and manage student behavior, as well as know-how to support students' wellbeing and safety, according to the qualitative findings of the study. This finding supported the quantitative findings of the study in that the teacher education programme was ineffective in enhancing the competence standards related to the graduates' professional practice.

7.4.10. Induction and Professional Support Programmes

In order to smooth the transition from being a student to being a teacher, there should be induction and professional support programmes for beginning teachers at the secondary school level before they start their actual work. In this regard, six out of the seven interviewees revealed their satisfaction with the induction and professional support programmes held at their respective secondary schools. For example, **PT-C** stated that:

I feel that the orientation and induction training I got at my school from experienced colleagues was very important in bridging the transition student to secondary school teacher.

Further, **PT-E** said that:

The induction training I took supported me in refreshing the knowledge and skills acquired during “Peda” training... it also bridged the gap observed between the teacher education training and the real world of work at secondary school context of eastern Ethiopia.

This suggests that effective induction and professional development support programmes at the secondary school level is an important ingredient in producing competent graduates for the successful implementation of inclusive education. This qualitative finding of the study is consistent with the quantitative findings of the study as stated under Table 6.10 above.

7.5. Developing Core Competency to Implement Inclusion in Education

Among the major factors for the successful implementation of inclusive education, the professional competencies of teachers, namely knowledge, attitudes, and skills, are widely recognised as the three most important pillars teachers should have to practice inclusion in education. As a result, the following sections address issues concerning the graduates' knowledge, attitudes, and practical skills and abilities as a result of the teacher education programme they had completed.

7.5.1. Knowledge Gained About Inclusive Education

The responses of interviewees who participated in the study vary in this regard. Some of them revealed that they did not get adequate knowledge on teaching strategies that promote inclusion in education within the local context, on the principles and methods of teaching contextualised for students with special needs and disabilities, on how to address diversity and equity in an inclusive classroom, and on the learning capacity of all children and how to properly support them in an inclusive classroom. For instance, **PT-C** replied that:

I faced challenges to understanding and support a student with learning problem in my class, because I do not know the details of what learning disability is, and how such kind of students can supported. Even if the ‘Peda’ training is good...

there was not enough time to practice what we do if we meet such kind of students in the secondary schools we are going to teach during the training.

Similarly, **PT-A** said that:

I feel that 'Peda' did not give me ample opportunity to understand the expectations and culture of the surrounding community; school settings and guidelines, and factors that may affect classroom instruction in this region; more specifically, students and their backgrounds, for example, disabled students, and their needs and interests in education were not informed during the training.

In addition, **PT-E** revealed that:

The 'Peda' training I have taken was not helped me in developing my confidence and making me realise the wish to be involved in teaching of disabled students because of the very little knowledge I have on different methods of teaching that help us to support disabled students.

Further, **PT-G** reported that:

I believe that every one of us has different capacity to learn; the problem is that I am not capable to properly support and cultivate the diverse ability and potential of my students. I feel that the 'Peda' training I took in HrU (the sample university) did not give me enough knowledge with different approaches to support my students.

Above all, **PT-B** replied that:

From 'Peda' training in HrU, I observed that even lecturers have knowledge gap on how to handle students with disability; they can't be role models for us. I feel

that more knowledge on handling students with disability would have been passed to us to properly practice inclusion in the secondary schools we assigned.

This suggests that understanding how children learn and develop in different ways and the sociocultural and sociopolitical contexts in which they live is critical for the successful implementation of inclusive teaching. In the same vein, trainees need to develop a curricular vision to teach with an understanding of learning and learners, as these intersect with the educational goals of the Ethiopian education system and the broader context of national and international issues of inclusive education. However, the study revealed that graduates did not understand their role as inclusive teachers in the wider context beyond the classrooms and were not knowledgeable enough about the professional norms and expectations in their educational contexts.

To the contrary, two of the seven interviewees who participated in the study responded that they do have adequate knowledge on the psychological and behavioral characteristics of students with disabilities; how to assess their teaching (reflection); the practices associated with the implementation of inclusive education; the theories guiding the implementation of inclusive education; and how to collaborate with different stakeholders to support the implementation of inclusive education from the training they had taken. For example, **PT-D** replied that:

I have got adequate awareness and understanding on the educational and social problems and issues that can affect students' learning in secondary schools; and I have developed teaching strategies that can I use to support and deal with such difficulties in an inclusive classroom from the 'Peda' training I have taken for ten months in HrU (sample university).

Similarly, **PT-F** said that:

I have got a good grasp of most-up-to-date national policies and local regulations of inclusive education in Ethiopia as well as I have adequate understanding about the psychological, physical, and educational needs of secondary school level

students from the inclusive education and foundation of human development and learning courses I have taken during the training.

From the above it is clear that there was a mix of responses in relation to the knowledge gained about inclusion: students with disabilities and diverse needs; national and internal legal and policy frameworks; guidelines and strategies in context; students' learning capacity and supports needed; collaborative strategies among stakeholders; and principles, theories, practices, and implementation issues associated with inclusive education. In this regard, EMoE (2012) stated that teachers' knowledge and understanding of inclusion have a significant impact on its successful implementation in its Inclusive Education Strategy document published in 2012. EMoE (2009), in its curriculum framework for secondary school teachers' preparation, also argued that effective teaching in an inclusive classroom depends on teachers' knowledge about disabilities and their responsibilities for students with special needs and diverse students in inclusive settings. The qualitative findings stated above supported and explained the quantitative findings of the study in that the teacher education programme was moderately effective in equipping the graduates with the necessary knowledge about inclusive education, students with special needs and disabilities, legal and policy frameworks, and guidelines and strategies from national and international perspectives.

7.5.2. Attitudes Developed

Teachers' attitudes towards inclusion and students with diverse educational needs are important factors in creating inclusive schools and communities. However, as knowledge-related responses, the interviewees' responses varied in terms of the training's contribution to developing positive attitudes towards inclusive education and students with disabilities. Five out of the seven participants did not react positively regarding the rights of students with disabilities to receive quality education, the role of inclusive education in making students with disabilities more confident, the inclusive teaching that provides good opportunities to students with disabilities, the role of teachers in paying closer attention to differences amongst individual students in an inclusive classroom, and the role of inclusive education in creating opportunities for learning improvement for students with disabilities. Thus, the teacher education programme did not play

its role in positively changing the attitudes of graduates in this regard. For instance, **PT-E** replied that:

To be honest, I don't believe that I have the capacity to make a difference to the learning of students with disability; it is a responsibility of special educator to teaching students with disability.

PT-C also added that:

As far as I am concerned, I believe that it is impossible and very difficult to include students with vision problems to mathematics class; rather they are excluded and stay outside.

Similarly, **PT-A** revealed that:

I feel that the inclusion of students with disability cannot be beneficial for others normal students. This is because, students with disability will monopolise the teachers' time and difficult to give appropriate attention to all students. It is better to teacher them in special school than that of inclusive school.

Further, **PT-F** reported that:

I feel uncomfortable and more stressed around students with disability in the school I assigned to teach. Including students with disability into regular class create extra work for teachers like me who don't have experience of handling such kind of cases.

On top of that, **PT-D** revealed that:

In our culture, the society does not support students with disability believing that their disability comes from God and if we support them, we fear that the

impairment may go with us to our homes. Such kind of thinking and believe also has an influence on the inclusion of students with disability into regular schools.

To the contrary, two out of seven participants reacted positively towards the role inclusive education plays in helping students with disabilities socialise with others and reducing social discrimination against students with disabilities. In addition, the interviewees believe that inclusive education urges school reform and improves education quality for all students, requires all teachers to work in teams, and also requires parental and community support. Thus, the teacher education programme plays a critical role in positively changing the attitudes of graduates in this regard. For instance, **PT-B** stated that:

I believe that students with disability worth educating and they have capacity to learn if they are properly supported; doing this is not only the task of special educators, but also regular teachers are responsible to teach, socialise and support students with disability. In addition to that support of parent with students with disability and the surrounding community support are also important.

In addition, **PT-G** stated that:

As a teacher, the most important thing is to be sympathetic to students with disability in and outside the classroom. I am very positive and trying my best to include such kinds of students into class activities, rather than exclude them or ignore them. I feel that students with disability have equal educational right as others normal students. I am also asking other normal students to treat them friendly and not to discriminate them.

Interventions during the initial teacher education programme that aim to help the trainees understand and implement inclusive education successfully in their classrooms need to address the competencies related to attitudes towards inclusion and students with disabilities (EMoE, 2012). This suggests that affecting teachers' attitudes is of great importance, and it is more advisable to do so during their initial teacher education programmes. The qualitative findings

supported and explained the quantitative findings in that the teacher education programme was moderately effective in terms of influencing trainee teachers' attitudes towards inclusion and students with special needs and disabilities, particularly in terms of their behavioral predisposition towards an action.

7.5.3. Practical Skills and Abilities Developed

Graduates' perceptions of their preparedness for inclusive teaching are highly associated with the practical skills and abilities gained during their initial teacher education programme. The Inclusive Education Strategy of Ethiopia published in 2012 also stipulated that the practical skills and abilities the graduates acquired during their initial teacher education training will help them to teach their students better, spending additional time planning lessons and working with students to address their individual needs and successfully manage inclusive classrooms. In this regard, six out of the seven interviewees responded that they did not have the skills and abilities necessary to make a difference in the lives of students with disabilities because those basic skills and abilities (for example, braille reading and writing, using different adaptive technologies, sign language, lesson adaptation and modification, individualising education programmes, teaming and collaboration, classroom management, active learning methods for large classes, creating a conducive psychological and physical learning environment, communication skills, assessment strategies, and feedback for students with disabilities) have not been covered in the courses they have taken, and, thus, they lack confidence with the practical aspects of inclusive teaching.

It seems that the teacher education programme did not fully support the graduates in gaining the necessary skills and abilities to implement inclusive education successfully in Ethiopian secondary school contexts. For instance, **PT-A** replied that:

During the teaching practices I assigned to the secondary school, I have not done much to implement inclusive teaching because I did not cope with the diversity within the classroom, and time allocated for a single lesson was also 50 minutes, which is difficult to manage as a fresh teacher; I feel that I need further skills that can help me to adapt a lesson and address students with disabilities in the classroom and also outside of the classroom as I am sport science teacher.

PT-B also added that:

Our lecturers were in agreement with the teacher education college timetable, which was too loaded, as a result, they face difficult to effectively equip us with the necessary inclusive skills and abilities; I don't feel confident..., uhu... I found it very challenging to have a student with disability in my class during teaching practices.

In addition to that **PT-C** reported that:

We are required to teach students with and without disabilities at the same time in the same classroom. We need different strategies to meet the needs of different students; we need to organise group activities in classroom that include all students, which requires different skills again. We need to think how to get students with disabilities engage in learning and other social activities with their peers etc. Do you think that I have gained all those skills and abilities from 'peda' training? No, to be honest, it is very difficult to manage students with disability in Ethiopian secondary school context at this time.

Further, **PT-D** responded that:

Behaviour problem is very common in secondary school I assigned to teach, it overwhelmed me at first and I didn't know what to do. I think I missed important skill that helps me to manage students' behavior in classroom. I need to know how to properly respond to those problematic behaviours. This also needs collaboration with school teachers, principals, and parents of students. I feel that 'Peda' training is full of theory, I suggest being more practical during the training, because you can read and understand the theory part. The practical part of teaching needs more engagement.

The above findings suggest that secondary schools in Ethiopia are largely staffed by graduates who do not seem to have the necessary professional skills and abilities that promote inclusion in education, and the teacher education programme (PGDT) under study has made insufficient efforts to ensure the basic skills and abilities required to materialise inclusive education through graduates in Ethiopian secondary schools. The above qualitative findings supported and explained the quantitative findings of the study in that the teacher education programme was low in terms of influencing trainee teachers' practical skills and abilities necessary to implement inclusion in education, which means that the trainee teachers were not exposed enough to the practical and hands-on experiences that can make a difference in the lives of students with diverse learning needs.

7.6. Chapter Summary

The chapter presented the findings of the qualitative data collected through the in-depth, semi-structured face-to-face interview thematically, using headings derived from the sub-research questions as an organising framework. This includes conceptualisation of inclusion and diversity, awareness of the principles, values, policies, and practices of inclusion, components that influenced secondary school teachers' preparation for inclusion, and developing core competencies to implement inclusion in education. The next chapter (Chapter 8) presents the discussion of the major findings of the study by merging both the findings of quantitative and qualitative studies.

CHAPTER EIGHT: DISCUSSION OF FINDINGS

8.1. Introduction

This study investigated the effectiveness of secondary school teachers' preparation for inclusion in one university in Ethiopia, with the intention of proposing a model (an alternative strategy) to enhance its effectiveness. The findings of a sequential explanatory mixed-methods research design study that used a questionnaire and semi-structured individual interviews to generate data were presented in the previous chapter. In this chapter, major findings of the study are discussed in relation to the literature reviewed, guided by the following theoretical frameworks: inclusive pedagogy, Vygotsky's sociocultural theory of learning, and Hart's notion of learning without limits. The discussion takes into account the research questions stated in the first chapter of the study, namely, how teachers are trained for inclusion, as this was answered through framing the components of teacher education programmes that influenced their effectiveness; how the training supported the teachers in developing the core competencies necessary for inclusion, namely knowledge, attitudes, and skills; and the application of inclusive pedagogy as a strategy that enhances the effectiveness of the current teacher education programme for inclusion in Ethiopia. The conclusions and recommendations drawn will be covered in the next chapter (Chapter Nine) of the study.

8.2. Summary

It was discovered that the teacher education programme (PGDT) was unable to provide adequate academic, psychosocial, and emotional support for trainee teachers and that its resources were underutilised in preparing its graduates for inclusive teaching. The status of the teacher education college within a university, particularly in terms of the faculty involved, has positive influences on producing competent graduates for inclusive education. The modality and approaches of the PGDT programme did not guarantee the selection of high-performing candidates into the teaching profession and failed to integrate trainees' subject-area knowledge with pedagogical knowledge. Additionally, the PGDT programme was incapable of preparing graduates who could employ different active learning methods and student-centered teaching strategies necessary to implement inclusive education. It was also found that the teacher educators in the PGDT

programme teach the importance of active learning, but do not implement it to make it a model for trainee teachers. Similarly, the teaching and learning process of the PGDT programme was not practice-oriented, which means that it lacked trainee-centred pedagogical approaches that linked theory with practice.

The curriculum of the PGDT programme and its organisations were incapable of boosting the pedagogical content knowledge of graduates. It was also found that the training curriculum failed to integrate trainees' subject-area knowledge with pedagogical content knowledge during the training. The pedagogies used in the PGDT programme were neither aligned with the key pedagogies nor supported and promoted inclusiveness. It was also found that the pedagogies for teaching students with disabilities, diversity, and gender issues were not prioritised throughout the training. The inclusive education learning area and its teaching strategies were not effective in balancing the theory and practice dimensions of the PGDT programme, which was supposed to produce graduates capable of implementing inclusion in education. The findings also revealed that the university-school partnership and collaboration were not effective in allowing the trainee teachers to engage in collaborative learning experiences for an adequate period of time. It was also observed from the findings of the study that the way the teacher education programme exposed trainee teachers to an environment where they could truly understand students' diversity and their learning, as well as how to handle them collaboratively, was not satisfactory.

Further, the study found that the exit exam is an important ingredient in ensuring the quality of teacher education preparation for inclusion in Ethiopia. The PGDT programme was ineffective in enhancing the competence standards related to the graduates' professional practice, which means that the graduates were not equipped enough with practical strategies to help plan for and implement inclusive teaching. Furthermore, the study confirmed that an induction programme bridges the gap between the teacher education programme and the real world of work and increases the effectiveness of ongoing teachers' professional development practices, which promotes the implementation of inclusion in education. The study also discovered that trainee teachers conceptualised inclusion from various perspectives, namely equity, diversity, and accessibility. Additionally, PGDT has helped the graduates create awareness about the diversity of students in the Ethiopian secondary school context. The study's findings also suggested that, during their initial teacher education training, graduates were made aware of the relationship that

exists between the principles, values, policies, and practices that promote the implementation of inclusive education.

In terms of competencies developed by the graduates, the PGDT programme was moderately effective in equipping the graduates with the necessary knowledge about inclusive education, students with disabilities, legal and policy frameworks, and guidelines and strategies from national and international perspectives. In addition, the PGDT programme was moderately effective in terms of influencing trainee teachers' attitudes towards inclusion and students with disabilities, particularly in terms of their behavioral predisposition towards taking action. Further to this, the PGDT programme had little influence on trainee teachers' practical skills and abilities necessary to implement inclusion in education, which means that the trainee teachers were not exposed enough to the practical and hands-on experiences in order to make a difference in the lives of students with diverse learning needs. What follows is a discussion of major findings emanated from both the quantitative and qualitative studies.

8.3. Training Teachers for Inclusion in Ethiopian Universities

Regarding the components of the teacher education programme and their effectiveness in preparing secondary school teachers for inclusive education in Ethiopia, the discussion covers a number of aspects. These include the facilities and services related to the programme, the stand of the teacher education programme in the selected university, the modality and approaches of the programme, the programme structure and curriculum, the integration of inclusive education subjects in the programme, the teacher education programme pedagogies, the university and school partnership (collaboration), the qualification requirements of the programme, the competence standard of the programme, and the induction programme for graduates at their respective secondary schools. These components illustrate the training of teachers for inclusion in Ethiopian universities.

The study points to a lack of adequate and underutilised facilities, services, and curricular resources at the Ethiopian university that prepare teachers for inclusion. The trainee teachers also expressed dissatisfaction with the qualities and conduciveness of the instructional environment of the teacher education programme (PGDT). The suggestion is that the teacher education

programme studied was not able to provide sufficient academic, psychosocial, and emotional support for trainee teachers and has underutilised its resources towards preparing its graduates for inclusive teaching in the Ethiopian secondary school context. In his study conducted in the US, Crawford's (2004) observation that trainee teachers frequently experience a lack of teaching and learning facilities and services in teacher education colleges throughout the world proves relevant in this regard. The same author cautioned that this problem poses great barriers to implementing inclusion in education successfully (Crawford, 2004). The finding stands in contrast with that of Petrovska et al. in their study conducted in Macedonia (2016), namely that teacher education during the era of inclusive education may afford trainee teachers the benefits of accessing learning and instructional resources in a more stimulating environment.

In addition, Chong and Cheah (2009) note that, in order to conduct proper teacher education for inclusion, the availability, utilisation and quality of facilities, services, and curricular resources are not only useful, but critical in allowing trainee teachers to have practical experiences and develop skills that help them work effectively in an inclusive school. This is because the lack of adequate teaching and learning resources and their underutilisation may negatively impact the effectiveness of teachers' preparation for inclusion (Zeichner & Conklin, 2008). It may also undermine one of the aspects of inclusive pedagogy, which is to extend the teaching and learning environment available to everyone in the community. In this light, Vygotsky's sociocultural theory of learning urges organisations conducting teacher education preparation to institutionalise the issue of inclusivity in their policies, guidelines, and service provisions by eliminating barriers to teaching and learning, creating favorable conditions, and encouraging all their trainees with enthusiasm (Cherry, 2019).

The findings of the study also revealed that the college of teacher education, which is in charge of preparing graduates for inclusive teaching in the Ethiopian secondary school context, was in a better position compared to other sister colleges in terms of the faculty involved. It was also observed from the findings of the study that the teacher educators are full-time workers and belong to the college. According to Salend (2010), the status of teacher education preparation programmes in the educational systems of a nation plays a crucial role in determining the identity of teacher educators. Teacher educators who identify themselves as teachers of teachers

tend to be more committed to the teaching profession, which in turn greatly influences their effort towards producing competent graduates for inclusive teaching (Bekele & Tacconi, 2014). In the same vein, Minello (2011) established that having a teacher education programme with its staff recognised as a full-fledged teaching unit parallel to other programmes in a university is one of the indicators of having a successful teacher education programme for inclusion. Similarly, the European Commission (2010) argued that having an independent organ for the training of teachers is an indication of the professionalisation of teaching, which in turn helps to create conducive learning environment for trainee teachers. This implies that the resourcefulness of the teacher education programme in terms of the faculty involved makes a major contribution to the effectiveness of teacher education preparation for inclusion.

The course allocation and assignment of teacher educators emerged as an important factor in teacher education preparation for inclusion. Such allocation in the programme was based on factors such as: (a) teaching experiences in the Ethiopian secondary school context; (b) training and certification in the Higher Diploma Programme (HDP); and (c) one's fields of specialisation (subject matters). Therefore, their experiences, short-term trainings, and expertise in a specific subject are crucial to understanding the complexity of teaching and learning and applying a variety of teaching strategies and theoretical lenses in preparing teacher candidates for diversity, which is in alignment with one of the basic principles of inclusive pedagogy (Cochran-Smith & Villegas, 2015). The findings of this study are also consistent with the findings of Salend et al. in their study conducted in the US (2006), which established that diversity in teacher educators allows trainee teachers to learn from and interact with their different areas of expertise, experiential and cultural backgrounds, pedagogical practices, and teaching styles. As a result, the teacher education programme studied has the prospect of empowering and retaining the quality teacher educators needed to facilitate inclusion in the Ethiopian secondary school context.

Regarding modality and approaches, the findings of the study revealed that the PGDT programme employed the consecutive (sequential or add-on) modality, where graduates first study discipline content and earn a bachelor's degree in a specific subject, then join the programme for certification to teach in Ethiopian secondary schools. In this regard, a study conducted by Wakgari et al. (2016) in Ethiopia revealed that the consecutive modality of the PGDT programme was ineffective, as it failed to integrate trainees' subject area knowledge with

their pedagogical knowledge. They further revealed that the modality did not guarantee the selection of high-performing candidates into the teaching profession, as those joining the PGDT programme are those who already failed to join other professions like medicine, engineering, and law. However, a study conducted by Kumashiro (2009) in the US showed that the most important factor is not the question of which modality is being used for the professional preparation of teachers, but the adequacy of time for learning the discipline contents, pedagogical preparation, and carrying out longer school-based clinical practices. The findings of the study confirmed that the time allotted for learning pedagogical preparation and school-based clinical practices was inadequate in the consecutive mode of the PGDT programme studied.

The PGDT programme enabled the preparation of competent graduates in terms of the subject matter they were certified to teach. This is consistent with the study findings conducted by Wilson et al. (2001) in the US, who established that there is a positive connection between teachers' preparation in their subject matter and their impact in an inclusive classroom. This suggests that the training helped the trainee teachers' think in a disciplined manner to apply their content knowledge in a multitude of places and situations that can yield richer learning for their students (UNESCO, 2009). Similarly, a study conducted by Bekele and Tacconi (2014) in Ethiopia found that PGDT graduates have a better understanding of the subject-matter content they certified with since secondary education in Ethiopia is organised based on specific content specialisation. Similarly, the 2009 curriculum framework for secondary school teachers' preparation published in Ethiopia stated that the PGDT programme was designed to confront several problems of previous teacher education programmes in Ethiopia, particularly the inadequate subject-matter competence on the part of secondary school teachers.

The teacher education programme studied was incapable of preparing graduates who could employ the different active learning methods necessary to implement inclusive education. The findings of the study also revealed that teacher educators do not implement active learning to make it a model for trainee teachers. Gallimore and Tharp (1992) have defined modeling by teacher educators as the practice of intentionally displaying certain teaching behaviours, with the aim of promoting trainee teachers' professional learning. This implies that modeling by teacher educators is a means of changing the views and practices of future teachers based on the idea that 'teachers teach as they are taught' (Lunenberg et al., 2006). It also suggests that modeling is a

powerful instrument that has the potential to enhance the impact of teacher education programmes on the learning processes of student teachers, which seems neglected in the current teacher education preparation for inclusion in Ethiopia. However, as per the report of the OECD (2010), an inclusive teacher is the one who responds to the diverse learning needs of students and faces the challenges of 21st century teaching by employing different active learning methods.

Deppeler (2012) also argued that teaching in an inclusive classroom requires teachers to have appropriate knowledge of active learning methods that help them meet the demands of diverse learners and create an inclusive learning environment for students with learning difficulties. The inability of the graduates to employ the active learning methods necessary to implement inclusion is in contrast with the views of inclusive pedagogy, which require teachers to be knowledgeable about and apply a variety of student-centered methodologies that consider the various learning interests and requirements of students in an inclusive classroom (Florian, 2016). Further to this, Frederickson and Cline (2010) added that in the era of inclusion, teachers' lacking the professional preparation of child-centered pedagogy and being unable to employ active learning teaching methods in an inclusive classroom proves to be a critical problem. Lampert (2009) also argued that providing opportunities to learn teaching through teaching, such as delivering presentations during teacher education lessons, leading group discussions, conducting mini-research independently or in a team, and microteaching, can allow trainee teachers to explore the secret of inclusive teaching from its root. It can be argued that the current teacher education programme in Ethiopia is ineffective in this regard, as it contradicts international practices by not exposing trainee teachers to a variety of active learning methods while preparing graduates for inclusive secondary school teaching in Ethiopia.

The study also revealed that the teaching and learning process of the teacher education programme (PGDT) was not practice-oriented (activity-oriented), which means that it lacks trainee-centred pedagogical approaches that link theory with practice. It was more theory-oriented, and the opportunities for practical engagement were very limited. This supports the point made by several previous studies that the disconnection between practical experience and coursework is one of the central problems in university-based teacher education preparation for inclusion (Mills, 2013). It was argued, however, that teacher education programmes preparing

teachers for inclusive teaching ought to allow enough time for hands-on experience in inclusive settings (Emaliana, 2017). As noted by Miller et al. (2011), trainee teachers should be given opportunities to make connections between what they have learned in their coursework and the day-to-day realities of being a teacher in inclusive settings. In the same vein, inclusive pedagogy requires trainee teachers to be prepared in a variety of pedagogical approaches because an inclusive teacher is expected to employ a variety of teaching strategies as no single, universal approach is appropriate for all learners (Bhowmik et al., 2013).

Vygotsky's sociocultural theory of learning also argues for teacher educators (mentors) to afford practical experiences and a variety of pedagogical tools in the sociocultural context of trainee teachers (mentees) so that they can scaffold and provide high-quality teaching for students with diverse learning needs (Ashby, 2012). Teacher educators should be able to employ a range of inclusive pedagogical practices and learning activities that provide trainee teachers with numerous opportunities to reflect on their learning, interact with students with special needs, apply their programme's competencies, and model effective teaching in inclusive educational settings (McHatton, 2007). Providing trainee teachers with a variety of practical experiences reflecting a wide range of contextual and student diversity helps them link theory and practice, view exemplary professionals implementing inclusive education, and think critically about their values, beliefs, and practices (Maheady et al., 2007).

The curriculum of the current teacher education programme (PGDT) and its organisations were incapable of boosting the pedagogical content knowledge of graduates as they failed to integrate trainees' subject area knowledge with pedagogical content knowledge during the training. This is to say that teacher educators did not employ methods that promote flexibility in the way trainee teachers' learning of pedagogical content can be maximised. This is what Shulman (1986) called pedagogical content knowledge (PCK), which represents the blending of contents and pedagogy into an understanding of how particular topics, problems, or issues are organised, represented, and adapted to the diverse interests and abilities of learners and presented for instruction. Darling-Hammond (2006) defines understanding and skills for teaching as “content pedagogical knowledge, knowledge for teaching diverse learners, assessment knowledge, and classroom management knowledge,” implying that the structure and curriculum of the teacher education

programme (PGDT) studied were not adequate for boosting the pedagogical content knowledge of the graduates.

In this regard, Vygotsky's sociocultural theory of learning requires teacher educators' understanding of the social, political, cultural, and physical environments in which the trainee teachers are asked to teach after graduation (Fraser, 2005). Additionally, in the face of student diversity, trainee teachers are expected to have a flexible and multi-faceted comprehension of subject matter adequate to imparting alternative explanations of the same concepts or principles (EADSNE, 2010). Rink (2002) also argues that effective teacher education for inclusion is the one that provides the following for their trainee teachers: developmentally appropriate content, clear instructions for practice, opportunities to practice at an appropriate level of difficulty, opportunities to participate in appropriately designed task progressions, and accurate feedback and assessment of subject matter and role performance, which were found to be lacking in the findings of the current study. From an inclusive pedagogy perspective, trainee teachers should be professionally prepared to carry out all the teaching and learning roles and responsibilities expected of them instead of having specialist teachers (Florian, 2016).

It also emerged that neither the pedagogies employed in the teacher education programme were aligned with the key pedagogies, nor did they support and promote inclusiveness as stipulated in the curriculum framework for secondary school teachers' preparation in Ethiopia. In addition, pedagogies for teaching students with disabilities, diversity, and gender issues were not prioritised throughout the training. Above all, the findings of the study revealed that the training the graduates had received did not equip them with an understanding of inclusive pedagogy. Husbands and Pearce (2012) argued in this regard that, to conduct proper teacher education for inclusion, the pedagogies employed by teacher educators are critical, as there is a strong link between teachers' pedagogical preparation and the educational quality they are going to deliver. This suggests that teacher education programmes must adjust themselves in such a way that their graduates can accommodate a greater diversity of learners in today's inclusive settings.

Similarly, Black-Hawkins and Florian (2012) have also established that effective teacher education pedagogies must be inclusive and consider the diverse needs of all learners, as well as

the issue of student equity, in preparing graduates for the challenges of 21st century teaching. Further to this, Korthagen et al. (2006) noted that pedagogies that allow trainee teachers to learn from their experiences, from one another, and from their own professional knowledge are critical for the success of inclusive education implementation. In the same vein, Darling-Hammond (2009) argued that, in preparing initial teachers for inclusion, pedagogies that require trainees to use knowledge and skills learned in different parts of the course to respond to the diverse demands of real classroom teaching are highly needed. This suggests that it is the underlying responsibility of teacher education programmes to provide quality pedagogical training in order to produce competent, responsive, and inclusive teachers.

The inability of pedagogies employed in the PGDT programme to promote inclusiveness contradicts one of the views of inclusive pedagogy, which states that courses, classroom activities, fieldwork, and pedagogies of teacher education ought to address child diversity to engage all students in meaningful, relevant, and accessible learning (Cherry, 2019). This is also inconsistent with Vygotsky's sociocultural theory of learning, which requires expanding the social environment in which trainee teachers understand the theoretical, policy, and legislative issues of inclusive pedagogy (Pantic & Florian, 2015). According to Vigotsky (1993), it is the pedagogical approach that should be changed, not the school setting, to take disability into account as part of diversity. A study conducted by Abebe and Woldehanna (2013) suggests that in preparing trainee teachers for inclusive teaching, modern pedagogical techniques were not given enough priority during the pre-service teacher training modality in Ethiopia. Tefera et al. (2015) also found that teachers in Ethiopia lacked the essential knowledge and understanding of inclusive pedagogy because universities hardly train their graduates in this regard. But graduates that are expected to implement inclusion teaching would have been equipped with the basic knowledge and skills of inclusive pedagogy, which were found to be lacking in the current study.

A point to note from this study is that the inclusive education course and its teaching strategies were not effective in balancing the theory and practice dimensions of the teacher education programme that was supposed to produce graduates capable of implementing inclusion in the Ethiopian secondary school context. In this regard, Kim (2011) argued that teacher education for inclusion is expected to achieve a balance among the knowledge, skills, abilities, attitudes, and

believes the graduates should have at the end of the training. It was also discovered that teacher and educators were not acting as role models for inclusive practices. This contradicts the point made by Kurniawati et al. (2014) that teacher of inclusive education subjects have a responsibility to serve as models of inclusive practice and to have the transformative learning experiences required to challenge the traditional assumptions underlying teacher education programmes in the era of integration.

According to Bustos et al. (2012), the effectiveness of course instructors is distinguished by their ability to become role models, their sensitivity to diverse students' needs, their inclusive teaching, their expectations armed with inclusive values and humanness, and their ability to create a classroom environment where there is respect, fairness, and equity so that aspiring teachers can learn from them. The sociocultural theory of learning also argues that a teacher educator is a professional in the classroom, who has been suitably trained to mentor and lead her or his students using appropriate techniques and to assist their trainees in reaching diverse learners through quality teaching (Tomlinson, 2004). Alongside this, inclusive pedagogy argues that the preparation of teachers for inclusive teaching should apply both theoretical and practical knowledge of the subject matter of their study (Florian & Black-Hawkins, 2011). Furthermore, the 2009 curriculum framework of Ethiopia stated that the integration of inclusive education into the PGDT programme was to assist trainee teachers to better understand the philosophy, principles, and practices of inclusion and, thus, teach learners with diverse educational needs in an inclusive classroom. Thus, the ineffectiveness of the inclusive education course in the current Ethiopian teacher education programme suggests that a more integrated inclusive education framework that will improve teacher preparation for inclusion is needed.

This study revealed that the university-school partnership and collaboration were not effective in allowing the trainee teachers to engage in collaborative learning experiences for an adequate period of time. However, inclusion in education needs collaborative skills, which require trainee teachers to work collaboratively with other professionals to provide support for students with diverse educational needs in an inclusive classroom (EMoE, 2012). It was also observed that the way the teacher education programme exposed trainee teachers to an environment where they could truly understand students' diversity and their learning as well as how to handle them collaboratively was not satisfactory, which is one of the most important ingredients in boosting

the collaborative skills of trainee teachers. In this regard, Wassermann (2004) argued that it is during the collaborative learning experiences that student teachers' abilities to handle content, facilitate the learning of students from diverse backgrounds, and manage a general learning environment are tested, where a pathway to the teaching profession is provided.

This finding contradicts one of the views of Vygotsky's sociocultural theory of learning, which established that trainee teachers understand how teaching and learning take place in social and cultural contexts through input, guidance, interaction, and observation from others who are more skilled, advanced, and experienced (Cherry, 2019), and this provides an opportunity for trainees to gain knowledge and skills, while also increasing their confidence to teach in an inclusive classroom (Spratt & Florian, 2013). The 2009 curriculum framework for secondary school teachers' preparation in Ethiopia also suggests that collaborative learning is important to: generate knowledge; enhance active participation in learning; develop problem-solving skills; enhance teamwork; strengthen relationships; and share experiences.

This finding is inconsistent with one of the views of inclusive pedagogy, which requires the preparation of trainee teachers for inclusive education through hands-on experience (McNeil et al., 2017). It also contradicts the findings of Allday et al. (2013), who established that it is during the fieldwork experience that the trainee teachers become familiar with and exposed to a wide range of abilities and interests, as well as diverse learners, as an inherent component of the inclusive classroom community. In support of this, the study conducted by Tefera et al. (2015) revealed that trainee teachers in Ethiopia do not have a wide range of learning opportunities during their teacher education preparation for inclusion. This was attributed to a lack of strong collaboration among the concerned stakeholders. According to the study's findings, establishing and maintaining strong collaboration between the university and various members of the school community, linking professional knowledge and practice through highly supervised clinical practices over long periods of time, and creating favorable conditions for an effective partnership between teacher educators and mentors are critical for the preparation of inclusive teachers (Bekele & Tacconi, 2014; Symeonidou, 2017; Nketsia et al., 2016).

Although the graduates expressed satisfaction with the programme's qualification requirements, it was clear that the programme was problematic in terms of preparing teachers for inclusive teaching in Ethiopian secondary schools. This study revealed that the teacher education programme was ineffective in raising the competence standards of trainees' professional practices. This means that the training did not equip the trainee teachers with practical strategies to plan for and implement inclusive teaching, create, and maintain supportive and safe learning environments, improve students' learning, manage student behaviour, apply timely and appropriate feedback, and support students' wellbeing and safety while working in inclusive schools. This finding concurs with a study by Milovanovic et al. (2010) conducted in Serbia, which found that initial teacher education for inclusion was ineffective in promoting the professional practices expected of graduates to implement inclusion in education and achieve the competence standard set by the government.

In Cyprus, Symeonidou and Phtiaka (2014) found that pre-service teachers were dissatisfied with their initial teacher education for inclusion towards attaining the expected professional standard in terms of professional practices. These practices include: (a) catering for the needs of an increasingly diverse group of learners; (b) utilising evidence-based pedagogies; and (c) collaborating with all education partners, both within the school and the wider community. In this regard, Forlin (2012) suggests that teacher education for inclusion should equip their trainee teachers with relevant and effective practical strategies that enable them to implement inclusion in education effectively and respond to learners' diversity in an inclusive classroom. In this regard, the curriculum framework for secondary school teacher preparation published in 2009 in Ethiopia suggests that trainee teachers are expected to: interpret student assessment data in order to evaluate their learning; modify their teaching practices; select and apply timely and appropriate feedback to improve students' learning; and demonstrate knowledge of practical strategies to create rapport with students while teaching in an inclusive school.

Despite the limited time allocated for practical experience, this study lauded the effectiveness of teacher education in providing appropriate induction programmes in the Ethiopian secondary school context. With the assistance of senior teachers, induction programmes play an important role in acculturating beginning teachers to their new profession and contexts (Kearney, 2010).

Induction programmes provide professional support for beginning teachers and minimise the trauma of the transition from being a student teacher to becoming a teacher (Bekele & Tacconi, 2014). An effective induction programme bridges the gap between the teacher education programme and the real world of work and boosts the effectiveness of on-going teachers' professional development practices (Darling-Hammond, 2017). They are very important to new teachers' early experiences as they influence their effectiveness, student achievement, and the attitudes they carry over an entire career (Strong, 2005). Inclusive pedagogy regards instructional coaching and interdisciplinary collaboration between educational partners and stakeholders in the community to improve trainee teachers' efficacy and their adoption of evidence-based inclusive practices in inclusive classrooms, which in turn improves the social and academic outcomes of students with special needs and disabilities (Knight, 2011).

8.4. Developing of Core Competency for Inclusion

This section discusses how the teacher education programme supported graduates in developing the core competencies necessary to implement inclusive education in Ethiopia, namely knowledge, attitudes, and practical skills and abilities. In particular, discussion is made on the role of the teacher education programme in enhancing trainee teachers' knowledge about and attitudes towards inclusive education and students with disabilities, as well as the practical skills and abilities necessary for the successful implementation of inclusive education, respectively; all of which are embedded in the theoretical frameworks of the study and the reviewed international and Ethiopian literature. This section addresses sub-research question 2, raised in the introductory chapter of the study, viz.: How did the training support the teachers in developing the core competencies necessary for inclusion in Ethiopian universities?

The teacher education programme (PDGT) did not equip trainee teachers with adequate knowledge regarding inclusive education and students with disabilities. There were limitations in supporting the graduates to gain adequate knowledge on: the principles and methods of teaching students with disabilities; how to address diversity and equity in an inclusive classroom; and the learning capacity of all children and how to properly support them in an inclusive classroom. This finding supports the Ethiopian Ministry of Education's 2018 annual report, which stated that teachers who graduated from Ethiopian teacher education universities have little to no

knowledge of inclusive education and students with disabilities. Similar findings were also revealed by studies conducted in European and other countries. For example, a study conducted by Alias and Salleh (2017) suggests that teachers in Malaysia lacked the requisite training and preparation with respect to understanding learners' multiple disabilities, including their characteristics, needs, appropriate teaching aids, and effective support strategies. Akalin et al. (2014) also found that teachers in Greece had limited knowledge about inclusive practices and students with disabilities. The graduates of such a programme may lack an understanding of their roles as inclusive teachers in a wider inclusive context and adequate knowledge about the professional norms and expectations of their educational environment (El-Ashry, 2009).

In this regard, the 2009 curriculum framework published in Ethiopia stipulates that trainee teachers need to have adequate knowledge about inclusion that can help them identify and assess the needs, problems, and potentials of students with disabilities (EMoE, 2012). This point is consistent with the global trend advocating for inclusion in education. It also contradicts one of the principles of inclusive pedagogy, which calls for teachers to be professionally prepared and knowledgeable in order to engage with diverse students in the current era of inclusion (Florian, 2016). Thus, inadequate preparation in terms of knowledge necessary to implement inclusion, as evidenced in this study, would imply that many teachers in Ethiopia may struggle to accommodate and support the diverse learning needs of all children (EMoE, 2018). This is the case because it is the knowledge and understanding of teachers that are brought to bear in creating an inclusive learning environment for all children, making the teacher a critical influence on the development of inclusive schools (Reynolds, 2009). Other studies suggest that teachers with a shallow understanding of inclusion may resist the invitation to develop a more inclusive school by pointing to a lack of knowledge about teaching students with disabilities (Kortjass, 2012). This highlights the tensions between the knowledge desirable for inclusive teaching and the teachers' lack of knowledge in reality, which is attributed primarily to teacher education for inclusion and the processes the trainee teachers have passed through during the training (West & Hudson, 2010).

Understanding how children learn and develop in different ways, as well as the sociocultural and sociopolitical contexts in which they live, is critical knowledge for the successful

implementation of inclusive teaching (UNESCO, 2009). However, when the knowledge and understanding of trainee teachers about inclusive education are not well addressed during their initial teacher education preparation, efforts to implement inclusive education in schools will be hampered (Mu et al., 2015). As noted by Johnstone and Chapman (2009), teachers' knowledge of inclusive education is a major determinant for the successful implementation of inclusive education policies and practices. Teachers need to be knowledgeable about a variety of teaching methodologies that consider the various learning interests and requirements of students with diverse needs (Florian, 2016). Therefore, it is imperative that teacher education provide trainees with essential knowledge organised in a way that would enable them to develop deep understandings of teaching and learning in inclusive settings (LePage et al., 2010).

This suggests that trainee teachers need to develop inclusive knowledge to teach diverse learners, as these intersect with the educational goals of the Ethiopian education system and the broader context of international issues of inclusive education (EMoE, 2009). In this regard, Bocala et al. (2010) suggested a package of knowledge for teachers working in an inclusive context that includes an understanding of the legal and historical foundations of inclusive education, the growth and development of children with special educational needs, and the instructional design, planning, and methods of inclusive education. According to the Inclusive Education Strategy of Ethiopia, published in 2012, inclusive education involves changing how teachers conceptualise teaching in order to meet the needs of all learners in inclusive settings. This demonstrates the critical role the teacher education programmes play in raising awareness about inclusive education among the trainee teachers so that, after training, they are equipped to support all learners in order for them to reach their full potential in inclusive settings (Hodgson et al., 2011).

The findings of the study also revealed that trainee teachers' background characteristics were not a significant predictor of knowledge development about inclusive education and students with disabilities. This was in reference to gender, previous contact with children with disabilities, prior training on inclusive education, and an experience of teaching students with disabilities during practicum. When it comes to gender, the findings concur with Bitew's (2019) study conducted in Ethiopia that gender did not predict teachers' knowledge development, as gender differences did not result in statistically significant better knowledge of inclusive education and

students with disabilities among male and female participants. When it comes to the influence of other attributes, a study conducted by Hughes et al. (2018) revealed that trainee teachers who had experienced teaching children with disabilities during practicum had a better understanding of the developmental characteristics of children with disabilities, which demonstrated better knowledge of inclusive education. In addition, Moberg et al. (2013) revealed that trainee teachers with prior training and experience of inclusive education and students with disabilities had more knowledge than trainee teachers without such training and experience. Further to this, Alhumaid et al. (2021) found that previous contact and acquaintance with children with disabilities improved trainee teachers' professional knowledge related to inclusive education.

The likely reason for the absence of a significant prediction of knowledge development about inclusive education and students with disabilities may be due to the fact that knowledge of inclusive education is connected with the contents of inclusive education subjects that have an impact on cognitive functioning rather than gender, previous contact with children with disabilities, prior training on inclusive education, and an experience of teaching students with disabilities (Pendergast et al., 2011). However, more research is needed to determine why trainee teachers' knowledge development about inclusive education and students with disabilities did not result in statistically significant differences due to their background characteristics. This implies that initial teacher education preparation for inclusion in Ethiopia is expected to better integrate the inclusive education learning area into the teacher education programme, with the aim of supporting trainee teachers to better understand the philosophy, principles, values, and practices of inclusive education and, thus, teach learners with diverse educational needs in an inclusive classroom.

The findings of the study also revealed that trainee teacher' attitudes towards inclusion and students with disabilities were moderately effective, in the sense that one of the critical aspects of attitude, namely the behavioural predisposition towards an action, was not effectively influenced. Teachers' attitudes towards inclusion are of utmost importance for promoting inclusive practices and creating inclusive schools and societies (UNESCO, 2005). Their positive attitudes towards creating conducive learning environments for students with disabilities are critical for the successful implementation of inclusive education (Sepadi, 2018). Initial teacher education

programmes are a context in which changes in attitude towards inclusion and students with disabilities do occur (Loreman et al., 2013). Pre-service training ought to strive to close the gap between theory and practice if trainees' positive attitudes towards inclusive education are to be developed (Munyungu, 2015). This suggests that initial teacher education training should provide opportunities for trainee teachers to interact with diverse learners and with policies and legislation related to inclusive education (Chaitaka, 2012).

This was a challenge in the current teacher education programme in Ethiopia, as modules and courses in higher education are overly theoretical, and tend to be too reliant on the medical model of disability, which encourages perceptions of disability as a punishment (Temesgen, 2020). The aforementioned perspective has been impacting Ethiopian teacher education institutions as well as secondary schools' efforts to create favourable learning environments for students with disabilities (Tefera et al., 2015). Zegeye (2014) also found that, following the views of the medical model of disability during initial teacher education, contributed to teachers' negative attitudes towards inclusive education and students with disabilities in Ethiopia and to general determinist attitudes towards children's worth and abilities (Galovi et al., 2014). This suggests that, for initial teacher education preparation for inclusion to develop a positive behavioural disposition towards an action, there must be a close gap between theory and practice during the training.

Hart et al. (2004) also argued that inclusive pedagogy begins with the notion that all learners are different and that human diversity should not be neglected or disregarded. According to Vygotsky's sociocultural theory, learning should be based on positive differentiation, which stands against segregation and mindless inclusion (Sandir, 2014). An important fundamental characteristic of inclusion in education is the willingness of teachers to accept students with disabilities (Ginja & Chen, 2021). Teachers' attitudes towards inclusive education and students with disabilities are important because they are indicators of such willingness (Hunter-Johnson, 2014). Thus, the complexity of teachers' attitudes towards inclusive education and students with disabilities should be accommodated during their initial teacher education programme (Florian & Spratt, 2013). In other words, teacher candidates must accept and recognise individual

differences as a natural part of the human condition in the classroom (Florian & Rouse, 2009) and overcome the constraints imposed by deterministic beliefs (Hart et al., 2004).

According to Johnson and Howell (2009), attitudes are amenable to change through courses and assignments, particularly when the courses are comprehensive, well-structured, and hands-on. Training designed in this manner will benefit not only learners with diverse educational needs, but also the education system as a whole in order to build an inclusive society (Sepadi, 2018). Positive teachers' attitudes towards inclusive education and students with disabilities would thus only improve if teacher education programmes exposed trainee teachers to a variety of inclusive pedagogical approaches during training, as positive teacher attitudes are linked to better inclusion implementation in education (Pather, 2019). Consistent with the findings of the study, studies revealed that ineffective teacher preparation programmes were identified as a factor that has negatively impacted trainee teachers' attitudes towards the inclusion of students with disabilities in an inclusive classroom (Ainscow et al., 2019; Ginja & Chen, 2020).

The multiple regressions also revealed that background characteristics were not significant predictors of trainee teachers' positive attitude development towards inclusive education and students with disabilities. Inconsistent with the findings of the study, it has been well documented that female teachers are more positive towards inclusive education and students with disabilities than their male counterparts (Woodcock, 2008). Similarly, a study conducted by Forlin et al. (2009) found that female teachers showed more positive attitudes towards inclusive education and students with disabilities than their male counterparts. However, Rana (2012) found no significant relationship between participants' gender and their attitudes towards inclusive education and students with disabilities. In addition, Sharma et al. (2009) reported that teachers who had prior training in inclusive education showed more positive attitudes towards inclusive education and students with disabilities. Prakash (2012) also revealed that the more teaching experiences the trainee teachers have in inclusive settings, the more they accept and become comfortable with inclusion and students with disabilities. Further to this, Forlin et al. (2010) found that contact (acquaintance) with persons with disabilities is a significant predictor of trainee teachers' positive attitudes towards inclusive education and students with disabilities.

The teacher trainees' lack of exposure to practical and hands-on experience in inclusive education points to the teacher training's inadequacy to prepare trainees for inclusive teaching. This is the case because previous studies in the field suggest a close association between teachers' preparedness for inclusive teaching and the practical skills and abilities gained during their initial teacher education (Lewis, 2009; Tirussew, 2009; Hiwot, 2011). In support of this, Jordan et al. (2009) noted that ill-prepared teachers in terms of the basic skills and abilities necessary for inclusive education implementation tend to feel discontent, and may pass that discontent onto the students, which in turn can undermine the confidence and success of learners with disabilities. However, if they have gained the necessary skills and abilities, they can create a comfortable learning environment for students with disabilities (Haye, 2018).

Inclusive pedagogy advocates for trainee teachers to learn to think and act like inclusive teachers, and they are also expected to demonstrate multiple formats of instruction and implement diverse teaching strategies, as that guarantees access to effective teaching-learning and support mechanisms (Florian & Black-Hawkins, 2011). Inclusive teachers are expected to: adapt, differentiate, accommodate, or modify instructional methods; acquire field experiences with students with disabilities; prepare, implement, or evaluate individualised education programmes; seek support or collaboration to assist students with disabilities; and identify students' learning differences during their initial teacher education training (Florian, 2016). Other skills for effective inclusive practices include personal support, assistive technology, positive behavioural support, and literacy instruction (Graham & Scott, 2016). These skills will enable inclusive teachers to respond to the dense and multifaceted nature of an inclusive classroom (EMoE, 2009).

In light of this, Mukhopadhyay et al. (2009) note that the skills and abilities developed during teacher preparation are critical for and constitute contributing factors towards their success or failure. As a result, teacher education for inclusion ought to design modules and courses so that trainee teachers understand the environmental, social, and cultural contexts of learning and teaching and can apply these understandings in an inclusive classroom, amongst diverse students (Alur & Timmons, 2009). It must impart trainee teachers with the skills and abilities to enable them to understand teaching in ways different from and more complex than their own

experiences as students during their teacher education preparation for inclusion, which was found to be lacking in the current study (Falkenberg, 2008). Importantly, teacher education ought to provide optimum time to help trainee teachers gain the necessary practical skills and abilities for the success of inclusive education implementation.

8.5. Applications of Inclusive Pedagogy as a Strategy to Enhance the Effectiveness of Secondary School Teachers' Preparation for Inclusion in Ethiopia

From the findings of the study, the following areas of concern were observed and need attention so that the teacher education programme (PGDT) studied will be more effective in producing graduates ready to implement inclusive education in the Ethiopian secondary school context:

- The teacher education programme was not able to provide sufficient academic, psychosocial, and emotional support for trainee teachers and has underutilised its resources towards preparing its graduates for inclusive secondary school teaching.
- The consecutive (sequential or add-on) modality of the teacher education programme did not guarantee the selection of high-performing candidates into the teaching profession and failed to integrate trainees' subject area knowledge with pedagogical knowledge.
- The teacher education programme was incapable of preparing graduates who could employ the different active learning methods and student-centred teaching strategies necessary to implement inclusive education. It was also observed that almost all teacher educators teach the importance of active learning but do not implement it to make it a model for trainee teachers.
- The teaching and learning process of the teacher education programme was not practice-oriented (activity-oriented), which means that it lacked trainee-centered pedagogical approaches that linked theory with practice.
- The curriculum of the teacher education programme and its organisations were incapable of boosting the pedagogical content knowledge of graduates. It was also observed that the training curriculum failed to integrate trainees' subject-area knowledge with pedagogical content knowledge during the training.
- The pedagogies used in the teacher education programme were neither aligned with the key pedagogies nor did they support and promote inclusiveness. It was also observed that the

pedagogies for teaching students with special needs and disabilities, as well as diversity and gender issues, were not prioritised throughout the training.

- The inclusive education course and its teaching strategies were not effective in balancing the theory and practice dimensions of the teacher education programme, which was supposed to produce graduates capable of implementing inclusion in education.
- The university-school partnership and collaboration were not effective in allowing the trainee teachers to engage in collaborative learning experiences for an adequate period of time. It was also observed from the findings of the study that the way the teacher education programme exposed trainee teachers to an environment where they could truly understand students' diversity and their learning, as well as how to handle them collaboratively, was not satisfactory.
- The teacher education programme was ineffective in enhancing the competence standards related to the graduates' professional practice, which means that the graduates were not equipped enough with practical strategies to help plan for and implement inclusive teaching.
- The teacher education programme was moderately effective in equipping the graduates with the necessary knowledge about inclusive education, students with disabilities, legal and policy frameworks, and guidelines and strategies from national and international perspectives.
- The teacher education programme was moderately effective in terms of influencing trainee teachers' attitudes towards inclusion and students with disabilities, particularly in terms of behavioral predisposition towards an action.
- The teacher education programme was low in terms of influencing trainee teachers' practical skills and abilities necessary to implement inclusion in education, which means that the trainee teachers were not exposed enough to the practical and hands-on experiences that can make a difference in the lives of students with diverse learning needs.

As a result of the above findings, it is possible to conclude that the teacher education programme (PGDT) was ineffective in preparing graduates for successful implementation of inclusive education in the Ethiopian secondary school context. In this regard, Darling-Hammond (2017) recommended that initial teacher education for inclusion be framed based on conceptual links across the university curriculum, theory-practice links between the school and university

settings, socio-cultural links among the participants in the programme, and personal links that help shape the identity of each teacher-educator to fill the gaps stated above. As inclusive education is concerned with issues of social justice, graduates entering the teaching profession ought to understand how they might create classrooms and schools that address issues of respect, fairness, and equity (Ballard, 2013). They are expected to understand the historical, socio-cultural, and ideological contexts that create discriminatory and oppressive practices in education, which can be accomplished by infusing inclusive pedagogy concepts into initial teacher education for inclusion (Florian & Spratt, 2013; Cherry, 2019; Emaliana, 2017).

According to the study's findings, secondary school teachers' training in Ethiopia is organised in such a way that follows the views of the medical model of disability. This can be improved by incorporating inclusive pedagogy, which aims to provide teachers with a wide variety of knowledge and skills that they can apply in various settings and situations (Savolainen, 2009). Furthermore, Brownell et al. (2005) recommended that highly effective initial teacher education for inclusion should include the following: connections between carefully planned coursework and field work; the use of various strategies by teacher educators; coursework and field work that emphasise the needs of a diverse student population; teacher education that occurs within a collaborative professional community; subject matter pedagogy that facilitates the development of content-specific pedagogy; a clear vision of high quality teaching; and the use of active pedagogy by teacher educators to promote reflection that is likely to lead to conceptual change by trainee teachers, which aligns with and reflects the notion of inclusive pedagogy.

The gaps identified in the teacher education programme (PGDT) necessitate the intervention of inclusive pedagogy as an instructional theory and strategy that places a strong emphasis on inclusive approaches to teaching and learning as well as a commitment to social justice (Florian & Rouse, 2013). In several studies conducted around the world, inclusive pedagogy has been shown to improve the effectiveness of initial teacher education in preparing them for inclusion, which was discussed in the second chapter of this study (Florian, 2010; Florian et al., 2010; Florian & Black-Hawkins, 2011; Black-Hawkins & Florian, 2012; Rouse & Florian, 2012; Spratt & Florian, 2013). Ainscow et al. (2019) also recommended that teacher education programmes that enhance the social and educational inclusion of students with diverse needs and encourage

participatory approaches to teaching and learning should be in place for 21st century education, and this requires embedding the concept of inclusive pedagogy into courses of teacher education for inclusion (Slee, 2010).

Similarly, the OECD report of 2011 recognised that the demands on today's schools and teachers are becoming more complex as society now expects schools to deal effectively with different languages and student backgrounds, to be sensitive to culture and gender issues, to promote tolerance and social cohesion, to respond effectively to disadvantaged students and students with learning or behavioral problems, to use new technologies, and to keep pace with rapidly developing fields of knowledge and approaches to student assessment. Trainee teachers, therefore, require confidence in their ability and the knowledge and skills in inclusive education to meet the challenges that they will encounter in the present school climate, through the incorporation of inclusive pedagogy into their initial teacher education for inclusion (Carroll et al., 2013). This implies that initial teacher education for inclusion should prepare teachers to engage with learner diversity arising from age, gender, sexual orientation, ethnic, cultural, linguistic, or religious background, socio-economic status, disability, or special educational needs by infusing inclusive pedagogical approaches into their teacher training (Rouse, 2008), where Ethiopia is not exceptional, as the country ratified the UN Convention on the Rights of the Child in May 1991.

As noted in the second chapter of this study, there is no functional system of education without effective pedagogy, and there is no basis for meaningful inclusion without deliberate and effective inclusive pedagogical approaches (Loreman, 2017). Florian and Linklater (2010) also argue that the desire to improve inclusive practices has no value until pedagogy offers learning opportunities for trainee teachers. This means that, for inclusive education to be successful, teacher education programmes must have a careful pedagogic design that addresses what teachers should know, the attitude teachers should have, and the practical skills and abilities teachers should acquire in order to respond to learners' differences and avoid the exclusion of some learners in inclusive classrooms. In response, an inclusive pedagogy focusing on meeting the needs of all learners, minimising or eliminating the singling out of individuals for special education, and raising the attainment of the lowest-achieving groups has emerged since the early

1990s (Forlin et al., 2013). In this study, inclusive pedagogy is defined as an instructional theory and strategy that allows for judgments to be made about the processes, activities, and practices associated with the teacher education programme (PGDT) preparing secondary school teachers for inclusive teaching in Ethiopia (Spratt & Florian, 2013).

In Ethiopia, inclusive teaching represents a philosophical shift away from the accommodation of students with disabilities towards a model where all individuals have the right to an education that meets their needs (EMoE, 2012). As a result, secondary school teachers are expected to work with diverse groups of learners more than ever before, but the study found that teachers did not feel adequately prepared for inclusive teaching, as the teacher education programme (PGDT) they had passed through was not effective in preparing them for this kind of job. This necessitates inclusive pedagogy as a strategy, and teacher education model that prepares teachers who can work with and meet the challenges of diversity in inclusive secondary schools in Ethiopia. Thus, the above findings call for fostering inclusion through and within teacher education programmes that prepare teachers for inclusive education. To address the gaps identified, a teacher education model (an alternative strategy) based on the theoretical framework of inclusive pedagogy is proposed to improve the effectiveness of teacher education programmes for inclusion in Ethiopia, as trainee teachers invariably adopt and transport the practices, attitudes, and thinking of their training institutions to their classrooms.

Incorporating the notion of inclusive pedagogy into teacher education programmes enables trainee teachers to: boost their understanding of the learner, learning, teaching, and the curriculum; accept the principle that every learner is different; engage in inclusive practices; and enhance students' learning and achievement through the provision of quality education (Black-Hawkins, 2017; Florian, 2019). Furthermore, inclusive pedagogy-infused teacher education programmes prepare trainee teachers to: deal with differences in students' learning styles; promote active learning and reflection; learn to identify their own learning needs; manage their professional development; update their subject-matter knowledge; equip them with pedagogical content knowledge; manage diversity issues; understand inclusive policies and practices; and understand the societal culture and political and economic history of the education system in which the teaching profession is located (Loreman, 2017; Buchan et al., 2019).

Above all, successful implementation of inclusive education primarily requires teachers who account for the diversity of children as an essential component of child development in any conceptualisation of learning (knowing); believe and be convinced that they are qualified and capable of teaching all children (believing); and adopt innovative strategies of working in collaboration with other stakeholders (doing) (Florian & Black Hawkins, 2011). Teacher education programmes enacting inclusive pedagogy have the potential to influence trainee teachers' knowing, being, and becoming inclusive teachers, and the trainee teachers' "doing," "knowing," and "believing" are core competencies expected of graduates to implement inclusion in education successfully (Pantic & Florian, 2015). In this way, trainee teachers are prepared to learn how to teach inclusively in diverse environments, and this can be enabled through initial teacher education for inclusion incorporating inclusive pedagogy (Moriña, 2020). This study supports that Ethiopian teacher education institutions can help facilitate the shift to inclusive pedagogy through their policies, philosophies, campus cultures, administrative services and support, teaching and learning, and institutional inputs that boost trainee teachers' confidence and positive attitude towards implementing inclusion in the Ethiopian secondary school context. Finally, a figure that shows the components of the proposed model is presented in the next chapter (Chapter Nine).

8.6. Chapter Summary

This chapter presented the discussion of the major findings by merging the quantitative and qualitative aspects together. It was structured using the headings derived from the sub-research questions namely: how are teachers trained for inclusion in Ethiopian universities; how does the training support teachers in developing the competencies necessary for inclusion in Ethiopian universities; and what strategies can be put in place to enhance its effectiveness in Ethiopian universities? The next chapter (Chapter Nine) of the study will present the summary, conclusions, and recommendations arising from the major findings of the study.

CHAPTER NINE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

9.1. Introduction

As stated in the introductory chapter of the study, inclusion is a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures, and communities and reducing exclusion within and from education (UNESCO, 2009; European Agency, 2015). In this study, inclusion refers to meeting the needs of all children in a regular inclusive classroom, regardless of their socio-economic status, gender, ethnic background, language, disabilities, impairments, or other factors. Furthermore, it is an education system that is open to diverse learners, which includes children with disabilities and social-emotional problems, gifted and talented children, children with socioeconomic deprivation, HIV/AIDS victims, ethnic or cultural minority status, being in isolated rural communities, and having experienced war and conflict (EMoE, 2012). However, this requires classroom teachers to: deal with the process of teaching children in a way that is relevant to their diverse needs; be sensitive to the styles of learning and levels of motivation of students; design appropriate learning materials and adapt instruction; create situations in which active student learning is maximised; respond to the complexity of inclusive classrooms; and be responsive to the issues of diversity, equity, and social justice (Ainscow et al., 2019).

All these roles require inclusive classroom teachers to acquire new knowledge, practical skills and abilities, attitudes, values, and beliefs; if not, they become a major barrier to the successful implementation of inclusion in education (Shelile & Hlalele, 2014; Abu-Heran et al., 2014), and this necessitates the preparation of teachers who can work with and meet the challenges of diversity in today's inclusive school settings (Florian & Panti, 2017). As a result, fostering inclusion through and within teacher education programmes is a common agenda throughout the nations, including Ethiopia. This is to say that the preparation of teachers for inclusion should be at the centre of inclusive education reform since it paves the way for the successful implementation of inclusion in education. Even though promoting inclusion is a core aim for many teacher education programmes across the globe, studies demonstrate that teachers continue to feel unprepared to address issues of diversity in an inclusive setting (Watkins & Donnelly, 2014).

As a result, teacher education programmes are under increasing pressure to provide evidence that they are producing effective teachers for inclusive teaching. In response to these pressures, international reforms of teacher education are being conducted to explore how the best teachers are prepared for inclusion (Symeonidou, 2017). Further to this, certain studies suggest that teacher education programmes that prepare teachers for inclusion need to be re-evaluated to ensure teachers' efficacy in knowing (knowledge), being (values), and doing (skills), since there is insufficient evidence to judge the appropriateness and adequacy of the teacher education programmes that are delivered to trainee teachers, what these programmes consist of, and in what ways they can be considered effective, which is not an exception in Ethiopia (Shevlin et al., 2013). The purpose of this study was, therefore, to investigate the effectiveness of the teacher education programme (PGDT) in preparing secondary school teachers for inclusive education in Ethiopia. It also aimed at proposing strategies that would enhance its effectiveness.

In order to do so, the following main and sub-research questions were formulated to guide the study: The main research question was: how effective is the teachers' preparation for inclusion in Ethiopian universities? The sub-research questions were:

- How are teachers trained for inclusion in Ethiopian universities?
- How does the training support teachers in developing the core competencies necessary for inclusion in Ethiopian universities? and
- What strategies can be put in place to enhance the effectiveness of teachers' preparation for inclusion in Ethiopian universities?

The study was carried out at one of the ten universities in Ethiopia that have been offering trainings for secondary school teachers, known as the Postgraduate Diploma in Teaching (PGDT), since the programme's inception in 2011. The PGDT is an add-on, one-year training designed to confront several problems of previous teacher education programmes in Ethiopia, including inadequate subject-matter competence on the part of teachers, insufficient and improper active learning methods in the classroom, insufficient professional commitment and work ethic among teachers, a lack of teacher interest in following up and assisting students, and poor school-community relationships (collaboration) (EMoE, 2012). Further to this, the PGDT programme was designed to prepare teachers for today's inclusive schools and aims to become

the forerunner of a new teaching approach that imparts the scientific method, creativity, and higher-order metacognitive skills (EMoE, 2009). It also emphasised teacher training strategies that deal with variations in students' learning styles and promote active learning and reflection, which go with the philosophy of inclusion. Within this programme, trainee teachers are also expected to learn to identify their own learning needs, manage their professional development, and continuously update their subject-matter knowledge and inclusive pedagogical practices (EMoE, 2009).

The one-year teacher education programme (PGDT) in Ethiopia consists of training in educational foundations, pedagogy, subject area methodology, language, and school-based practicum courses with a total of 40 credit hours (EMoE, 2009). The duration of the training is ten months, and the training time is divided into three terms, where each term has three-month duration. These terms allow one to maintain the sequence and integration of the courses in the programme. Trainee teachers get the chance to take those foundation courses well ahead of those that deal with the specifics of teaching. Additionally, courses that complement each other are offered during the same term to minimize interruptions (EMoE, 2012). However, the following questions remain unanswered: have current secondary teacher education programmes kept up with the move towards inclusion; is it possible to claim that the PGDT programme is effective in adequately preparing secondary school teachers for inclusion; and how should secondary school teachers be trained in the future for the successful implementation of inclusive education in Ethiopia?

In the theoretical framework chapter of the study, understanding inclusive pedagogy and its origin, major theories that influenced the development of inclusive pedagogy, theories or models that are in contrast with the notion of inclusive pedagogy, and the notion of inclusive pedagogy and its application in the current study were addressed in detail. The study was underpinned by the theoretical framework of inclusive pedagogy, influenced by Vygotsky's sociocultural theory of learning and Hart's notion of learning without limits. Inclusive pedagogy is conceptualised as an instructional theory and strategy that aims to educate all children in a regular inclusive classroom setting by respecting their differences and responding to their individual learning needs (Florian, 2016); a philosophy that believes that all children can learn, make progress, and

achieve (Florian & Linklater, 2010); and a theory that understands that every learner is different and this difference cannot be a problem (Loreman, 2017). Hence, the way in which secondary school teachers are trained for inclusion in Ethiopian universities, how supportive the training is in transforming the trainee teachers' knowledge, attitudes, and practical skills to enact inclusive teaching, and what strategies would be put in place to enhance the effectiveness of the teacher education programme (PGDT) studied, were all conceptualised within the theoretical framework of inclusive pedagogy. Additionally, the views of Vygotsky's sociocultural theory of learning and Hart's notion of learning without limits, which support the views of inclusive pedagogy, were also addressed in the discussion section of the study.

In the literature review chapters of the study, international and Ethiopian literatures regarding teacher education for inclusion were reviewed in detail. More specifically, the global move towards teacher education for inclusion, international perspectives on initial teacher education for inclusion, components of effective teacher education for inclusion, and core competencies necessary for initial teacher education for inclusion were addressed in Chapter 3 of this study. In addition, the development of the teacher education system and its effectiveness in Ethiopia, the move towards inclusive education and its impact on teachers' preparation for inclusion in Ethiopia, and the development of the Postgraduate Diploma in Secondary School Teaching (PGDT) and its role in producing graduates ready for the challenges of 21st century inclusive teaching in Ethiopia were addressed in Chapter Four of this study.

Under the research design and methodology chapter of the study, research paradigm, research approach, research design, description of the research site, population, sample, and sampling procedures, methods of data collection, methods of data analysis, ethical considerations, and validity, reliability, and trustworthiness (quality assurance mechanisms) were addressed in a very comprehensive manner. The study utilised a mixed-method research approach based on the pragmatic paradigm, a philosophical position that believes qualitative and quantitative data are more useful when combined rather than arguing the competing ontological, epistemological, and methodological dimensions of one true reality versus multiple socially constructed realities (Cresswell, 2014). Taking a pragmatic stance, the study adhered to a mixed-method research approach, which involves collecting, analysing, and mixing quantitative and qualitative research

and methods in a single study. The central premise of a mixed-methods research approach is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of the research problem than either approach alone (Creswell & Plano Clark, 2011).

In terms of design, the study employed a sequential explanatory research design, which is known for collecting and analysing first quantitative and then qualitative data in two consecutive phases within one study (Tashakkori & Creswell, 2007). As a result, the researcher first collected and analysed the quantitative (numeric) data in the first phase. Then, the qualitative (text) data was collected and analysed in the second phase in a sequential manner, and this helped the researcher explain the quantitative results obtained in the first phase. The rationale behind choosing this design was to obtain a general understanding of trainee teachers' sense of preparedness for the successful implementation of inclusive education in the Ethiopian secondary school context by using a questionnaire first. Thereafter, the experiences of trainee teachers during the training and the components that contributed to their preparedness as well as gaps observed in the teacher education programme (PGDT) were explored in greater depth, using the semi-structured individual interview to elaborate on the quantitative results.

The study's population included 232 trainee teachers who completed a PGDT programme and graduated from a university in the eastern part of Ethiopia. For the first phase, 152 graduates (109 males and 43 females) were selected (67%) using simple random sampling. For the second phase, seven (7) graduates (three females and four males) were selected using purposive sampling. Quantitative data was collected using a questionnaire for the first phase, and qualitative data was collected using an in-depth, semi-structured face-to-face interview for the second phase. Data processing and analysis were done in two phases. In the first phase, quantitative data collected using questionnaires was exported to the Statistical Package for Social Sciences (SPSS) version 26, where basic descriptive and inferential statistical analyses were undertaken, such as frequency, percentage, means, standard deviations, and multiple regression, and a demographic profile of participants was also compiled. In the second phase, qualitative data collected through an in-depth, semi-structured face-to-face interview was analysed thematically in a way that aligned with the research questions of the study.

Finally, the quantitative and qualitative results of the study were presented in chapters Six and Seven, respectively. Chapter Eight presented the discussion of the findings from both chapters Six and Seven. In this final chapter (Chapter Nine), a summary of the major findings of the study is presented. The chapter then provides conclusions drawn from both the quantitative and qualitative results of the study. In the end, recommendations are drawn from the findings to: inform policy development; influence practices; and suggest areas for future research in order to advance the preparation of secondary school teachers for inclusive education in Ethiopia. The recommendations made also include a proposed model (an alternative strategy) that helps prepare secondary school teachers for inclusive teaching in Ethiopia and other countries with similar contexts. Lastly, the limitations of the study are highlighted.

9.2. Major Findings of the Study

9.2.1. Facilities and Related Services of the Teacher Education Programme

The study addressed the availability of facilities and related services and their utilisation in the teacher education programme (PGDT) studied, including the library, laboratory, information communication technology, counselling services, orientation and guidance services, and awareness about the expected outcomes of the programme. The findings of the study revealed that a lack of adequate facilities such as libraries and laboratories, services such as guidance and counselling, and curricular resources such as information and communication technology and instructional media were observed at the selected university that prepares teachers for inclusion in Ethiopia. It was also observed that the PGDT programme was unable to provide adequate academic, psychosocial, and emotional support for trainee teachers through its services and that its facilities were underutilised in preparing the graduates for inclusive teaching.

9.2.2. The Status of Teacher Education College in the Selected University

The status of the teacher education college within the selected university and its influence on the preparation of secondary school teachers for inclusion were addressed in the study. It was observed that the college of education responsible for preparing secondary school teachers for inclusion was in a better position compared to other sister colleges in the selected university; teacher educators (teachers of teachers) offering courses in the programme were full-timers and belonged to the college of teacher education; the assignment of teacher educators offering

courses in the programme was based on their fields of specialisation; short-term and refresher training were available for teacher educators, particularly on teacher education management; and the Higher Diploma Programme (HDP) was mandatory for teacher educators participating in the programme (PGDT) preparing secondary school teachers for inclusive teaching.

9.2.3. The Modality and Approaches of the Teacher Education Programme

Regarding the modality and approaches of the teacher education programme (PGDT), the mode of delivery, subject matter and active learning methods competence, a practice-oriented aspect of the programme, and the interrelatedness of modules and courses in the programme were addressed in the study. It was found that the teacher education programme did not guarantee the selection of high-performing candidates into the teaching profession and failed to integrate trainees' subject-area knowledge with pedagogical knowledge; the programme was incapable of preparing graduates who could employ different active learning methods and student-centered teaching strategies necessary to implement inclusive education; and the teaching and learning process of the programme was not practice-oriented and lacked trainee-centred pedagogical approaches that linked theory with practice.

9.2.4. Structure and Curriculum of the Teacher Education Programme

With regard to the curriculum and organisational structure of the teacher education programme (PGDT), the adequacy of the duration of the training, the extent to which the curriculum allows the understanding of the nature of students, as well as mastery of content and pedagogical knowledge, and the extent to which the curriculum of the teacher education programme (PGDT) aligned with secondary school curricula and the broader context of inclusive teaching were addressed. It was observed that the programme duration was adequate to prepare trainee teachers for secondary school teaching, but the curriculum and its organisations provided minimal support for the trainee teachers in understanding the nature of the students they were going to teach. In addition, the curriculum and its organisational structure were helpful in promoting trainee teachers' capacity to master subject-specific content knowledge, and they were moderately aligned with the national secondary school curriculum, which the graduates are expected to implement. Further to this, the study revealed that the programme curriculum and its organisational structure were not helpful in promoting trainee teachers pedagogical content knowledge, which is important for inclusive teaching.

9.2.5. The Teacher Education Pedagogies

Issues concerning the inclusive pedagogical approach and its application in the PGDT training, as well as how the training assisted the trainee teachers in promoting inclusive practices, were addressed in the study. The findings revealed that the pedagogies used in the programme were not aligned with the key pedagogies emphasised in the secondary school curriculum framework; the pedagogies used in the programme were not in a position to support and promote inclusiveness; pedagogies for teaching students with special needs and disabilities as well as diversity and gender issues were not prioritised in the training; the teacher education programme did not allow for the understanding of inclusive pedagogy; and the training the graduates had taken did not give them the opportunity to understand, practice, and value the inclusive pedagogical approaches considered a key ingredient in the preparation of teachers for inclusive teaching.

9.2.6. Integration of Inclusive Education Learning Area in the Programme

The study addressed how well the inclusive education learning area integrated into the PGDT programme in terms of its course organisations, course objectives, and contents, teaching strategies, and the way teacher educators' model inclusive practices. It was found that the course objectives were met by the contents delivered, and the course contents were effectively addressed during the training. In contrast, the organisation of the course was not effective in balancing the theory and practice dimensions of the training; the teaching strategies employed by the teacher educators were not effective in delivering the course contents; and the instructors of the course were not serving as role models for inclusive practices during the training. Additionally, the teaching practice did not have enough opportunity so that trainee teachers could link theory with practice as well as understand students' diversity and their learning in an inclusive classroom.

9.2.7. Partnership and Collaboration

Issues related to collaboration between the college of teacher education and secondary schools, the roles of school principals in supporting the trainees to develop collaborative learning skills, the adequacy of time for collaborative learning experiences during teaching practices, the availability and experience of school teachers in supporting the mentoring process and collaborative learning, and the success of collaborative learning in supporting the trainee

teachers in developing the necessary collaborative skills were addressed in the study. The findings revealed that the college of teacher education in the selected university and the surrounding secondary schools were collaborating on teaching, staff development, and action research during the training; the secondary school principals within the catchment area of the selected university were supportive towards developing collaborative learning skills; and experienced secondary school teachers were selected to guide the trainees towards collaborative learning experiences during the practicum. To the contrary, the time allocated for collaborative learning experiences was inadequate, and the trainee teachers were not satisfied with the collaborative learning practices held with different professionals during their stay in the teacher education university.

9.2.8. Exit Requirements of the Teacher Education Programme (PGDT)

In relation to the qualification requirement, the study addressed the extent to which the exit exam ensures the certification of competent secondary school teachers, how well the exit exam links the components of the teacher education programme with the requirement of secondary school teaching, how necessary the exit exam is in ensuring the quality of teacher education for inclusion, the relevance of the exit exam to the demands and needs of secondary school inclusive teaching, as well as the adequacy of time given for trainee teachers to prepare for the exit exam. It was observed that the respondents positively viewed the way the exit exam systematically linked the components of the teacher education programme with the requirements of secondary school inclusive teaching and the importance of the exit exam in ensuring the quality of the teacher education for inclusion in the Ethiopian secondary school context.

9.2.9. Professional Standards for Ethiopian Secondary School Teachers

The study also addressed the national professional standards expected of secondary school teachers in Ethiopia, which include seven components. The findings of the study revealed that the teacher education programme (PGDT) allowed the trainee teachers to know the students and how they learn as well as the contents and how to teach them (the professional knowledge domain). In addition, the teacher education programme (PGDT) provided the trainee teachers with knowledge of the professional code of ethics of the teaching profession and allowed them to engage professionally with colleagues, parents, and the secondary school community (the professional engagement domain). To the contrary, the teacher education programme (PGDT)

did not allow the trainee teachers to plan for and implement effective teaching and learning; create and maintain supportive and safe learning environments; and assess, provide feedback, and report on student learning (the professional practice domain).

9.2.10. Induction at Secondary School Level

Issues concerning the effectiveness of induction training given at the secondary school level were also addressed in the study, which included its availability, trainee teachers' responsibility for their professional development, its success, and the involvement of experienced mentors during the practicum placement. It was observed from the findings of the study that the trainee teachers had experienced induction training and a professional support programme at their respective secondary schools. In addition, the successfulness of the induction programme in bridging the transition, the importance of the induction programme in refreshing the knowledge and skills necessary for secondary school teaching, and the assignment of experienced and competent teachers for the induction programme were positively considered by the graduates at their respective secondary schools surrounding the selected university.

9.2.11. Developing Knowledge Related Competency

The study also addressed the competencies developed by the trainee teachers that are related to knowledge of inclusive education and students with disabilities because of the teacher education training they had passed through. The findings of the study revealed that the teacher education programme (PGDT) moderately equipped the trainee teachers with knowledge of international policies and legal frameworks as well as national policies and local institutional regulations that helped them promote and implement inclusion in education. In addition, the programme moderately supported the trainees in gaining knowledge about the principles, methods of teaching, and psychological and behavioural characteristics of diverse students. Further to this, reflective knowledge, knowledge of inclusive practice, theories, and principles guiding inclusion, knowledge of addressing diversity and the fact that all children have the capacity to learn if properly supported, and knowledge of collaboration with various stakeholders that support the implementation of inclusion in education were moderately considered by the trainee teachers.

9.2.12. Developing Attitude Related Competency

The study also addressed attitude-related competencies developed by the trainees as a result of the teacher education training (PGDT) they had experienced. It was observed from the findings of the study that the trainee teachers moderately believed that students with disabilities have a right to receive quality education in an inclusive setting and that inclusive teaching provides a good opportunity for them. In addition, the trainee teachers moderately believed that inclusion has a social benefit for students with disabilities, improves the learning of students with disabilities, assists teachers in paying closer attention to differences among individual students, encourages school reform and improves education quality for all students, requires all teachers to work in collaboration, necessitates parental and community support, and creates conducive learning environments and promotes a sense of belonging for students with disabilities. Furthermore, the cognitive and affective aspects of attitudes towards inclusion and students with disabilities had been positively influenced by the programme, whereas the behavioural predisposition towards an action of trainee teachers had not been positively influenced by the teacher education programme (PGDT) they had passed through.

9.2.13. Developing Practical Skills and Abilities Related Competency

The practical skill and ability-related competencies of trainee teachers developed as a result of the teacher education programme (PGDT) were addressed in the study, which included collaborative learning experiences, differentiated instruction, flexible course work and assessment, adjusting teaching objectives and contents, managing groups and individual behaviour, developing and using various teaching materials, and collaboration among parents and school communities. The findings of the study revealed that the teacher education programme (PGDT) the trainee teachers had passed through did not assisted them in developing the skills necessary to: make their students with and without disabilities learn from each other; conduct differentiated teaching for students with disabilities; work collaboratively with other teachers and professionals to teach students with disabilities; design flexible coursework and create individual assessments for students with disabilities; adjust teaching objectives; arrange group discussions; collaborate with others to help students with disabilities according to their needs; conduct effective behavioral management; work effectively with parents and the school community; and use various teaching and learning materials to help students with disabilities.

9.2.14. The Impact of Background Characteristics on Competencies Developed

In this study, the regression correlation coefficient was used to assess the impact of trainee teachers' background characteristics (sex, acquaintance, prior training, and teaching experience) on their knowledge, attitude, and practical skills and abilities development. It was observed from the findings of the study that the above-mentioned background characteristics of the trainee teachers did not predict the development of their basic competencies necessary to implement inclusive education, namely knowledge, attitude, and practical skills and abilities.

9.3. Conclusions

As stated in the first chapter of the study, there are three major objectives that guided the study, namely: examining how teachers are trained for inclusion in Ethiopia; investigating how the training supports teachers in developing the core competencies necessary to implement inclusion in the Ethiopian secondary school context; and proposing strategies that could be put in place to enhance the effectiveness of the programme (PGDT) towards preparing teachers for inclusive teaching in Ethiopia. The conclusions of the study are drawn in line with the first two objectives stated above that guided the entire thesis and the discussion of major findings. There is no conclusion for the third objective since it sought to propose a model (strategy) that would enhance the effectiveness of the teacher education programme for the successful implementation of inclusive education in Ethiopia.

9.3.1. First Objective of the Study

The first objective of the study was to examine how secondary school teachers are trained for inclusion in Ethiopian universities, as it was answered through framing the following major components of the teacher education programme (PGDT) that illustrate its effectiveness: the facilities and services, the status of the programme, the modality and approaches, the programme structure and curriculum, the integration of the inclusive education learning area, the programme pedagogies, the partnership and collaboration, the programme qualification requirements, the programme competence standard, and the induction programme at the school level. For this objective, the study concludes that:

1. The teacher education programme (PGDT) was not in a position to provide adequate academic, psychosocial, and emotional support for trainee teachers, and its resources were underutilised in preparing its graduates for inclusive teaching in the Ethiopian secondary school context. As a result, without adequate, conducive, and properly utilised facilities, services, curricular resources, and instructional environments, the quality and effectiveness of the teacher education programme (PGDT) in preparing teachers for inclusion would be jeopardised. This may pose great barriers to implementing inclusive education successfully in the secondary schools of Ethiopia.

2. The teacher education programme (PGDT) involved teacher educators who identify themselves as teachers of teachers, a full-fledged teaching unit parallel to other programmes in the university, and teacher educators who understand the complexity of teaching and learning in the Ethiopian secondary school context. As a result, it is possible to conclude that the PGDT programme had the potential to empower and retain quality teacher educators needed to facilitate the preparation of secondary school teachers ready for inclusive teaching in Ethiopia.

3. Graduates in Ethiopia who first study discipline content and earn a bachelor's degree in a specific subject enroll in the PGDT programme to become certified to teach in Ethiopian secondary schools that use the consecutive (sequential or add-on) modality. However, the use of the consecutive modality did not ensure the selection of high-performing candidates into the teaching profession, as those who joined the programme had previously failed to enter other professions such as medicine, engineering, and law. It can be concluded that the programme's inability to attract high-performing candidates into the teaching profession results in graduates who, due to a lack of passion for and commitment to the teaching profession, might compromise the quality of secondary school inclusive teaching in Ethiopia.

4. The teacher education programme (PGDT) failed to produce graduates who could use active learning methodologies and child-centered pedagogies to successfully implement inclusion in education. The PDGT programme's teaching-learning process was not practice-oriented; it lacked pedagogical approaches that linked theory with practice; and it was more theory-oriented, with few opportunities for practical engagement. The observed gaps are critical problems that

teachers faced during the era of 21st- century inclusive teaching. As a result, it is possible to conclude that the current PGDT programme was ineffective in this regard, as it had a negative impact on the preparation of high-performing secondary school teachers, compromising the quality of inclusive teaching in Ethiopia.

5. The PGDT curriculum was incapable of increasing graduates' pedagogical content knowledge, which represents the integration of content and pedagogy into an understanding of how specific topics, problems, or issues are organised, represented, and adapted to the diverse interests and abilities of learners and presented for instruction. Furthermore, the PGDT curriculum did not employ methods that promote flexibility in the way trainee teachers' learning of pedagogical content can be maximised. It can be concluded that the current teacher education programme (PGDT) is ineffective in providing graduates with appropriate pedagogical content knowledge (content pedagogical knowledge, knowledge for teaching diverse learners, students' assessment knowledge, and classroom management knowledge), critical components in producing graduates ready for the successful implementation of inclusive teaching in the Ethiopian secondary school context. This may hamper the move towards inclusive education in the Ethiopian education system in general.

6. The pedagogies used in the PGDT programme were not in line with the essential pedagogies listed in Ethiopia's 2009 curricular structure, nor did they support and promote inclusiveness throughout the training. Moreover, the training did not prioritise pedagogies for teaching students with disabilities, diversity, or gender concerns. Furthermore, the training the graduates had received did not equip them with a solid understanding of inclusive pedagogy. Hence, the study concludes that the inability of the pedagogies employed in the programme to promote inclusiveness and the lack of essential knowledge and understanding of inclusive pedagogy by graduates may compromise the delivery of quality pedagogical training, as there is a strong link between teachers' pedagogical preparation and the educational quality they will be delivering.

7. The inclusive education learning area integrated into the teacher education programme (PGDT) and the employed teaching methodologies were not effective in balancing the theory and practice dimensions of the training. Additionally, the teacher educators were not acting as

role models for inclusive practices during the delivery of the learning area. It can be concluded that the ineffectiveness of the inclusive education learning area in the current teacher education programme (PGDT) may hamper the effectiveness of secondary school teachers preparation for inclusive teaching in Ethiopia, as the graduates are expected to better understand the philosophy, principles, values, and practices of inclusion and, thus, teach learners with diverse educational needs in today's inclusive classroom.

8. The partnership and collaboration among different stakeholders within the teacher education programme (PGDT) did not allow adequate time for collaborative learning experiences. The trainee teachers were not exposed to an environment where they could truly understand students' diversity and their learning, as well as how to handle them collaboratively. Additionally, favorable conditions were not created to boost the partnership and collaboration between teacher educators and secondary school teachers in supporting the trainee teachers. As a result, it is possible to conclude that the partnership was ineffective, and that there is a lack of strong collaboration among the concerned educational stakeholders, which are critical ingredients in the preparation of competent, responsive, and inclusive teachers for the Ethiopian secondary school context.

9. The qualification requirements of the teacher education programme (PGDT) systematically linked the components of the teacher education programme with the requirements of inclusive teaching. It was also considered an important tool by the graduates in ensuring the quality of the teacher education programme (PGDT) in the Ethiopian teacher education universities. Hence, the study concludes that the qualification requirement of the PGDT programme has a prospect of facilitating the production of competent and qualified graduates for inclusive teaching in Ethiopia.

10. The teacher education programme (PGDT) the graduates had passed through was not capable of raising the competence standards of teachers related to the professional practice domain, which include planning for and implementing inclusive teaching, creating and maintaining supportive and safe learning environments, improving students' learning, managing students behavior, applying timely and appropriate feedback, and supporting students' wellbeing and

safety while working in inclusive schools. Hence, it is possible to conclude that the PGDT programme was ineffective in this regard, as this may compromise the quality of inclusive teaching in the Ethiopian secondary school context. This is because the graduates of the teacher education programme (PGDT) were not equipped with relevant and effective practical strategies that can enable them to respond to learners' diversity in today's inclusive classrooms.

11. The induction and professional support programmes at the secondary school level were effective in bridging the gap between the teacher education programme (PGDT) and the real world of work, which were given by senior and experienced secondary school teachers (mentors). As a result, it is possible to conclude that the induction and professional support programmes at the secondary school level have the potential of acculturating, smoothing transitions, empowering, and retaining fresh graduates in the teaching profession.

12. Even though the Ethiopian government, through the Ministry of Education, has been promoting inclusion in education for the last three decades since 1994, the findings of the study revealed that secondary school teachers' preparation had only minimally kept up with global changes and the move towards inclusive education. The teacher education programme (PGDT) was not meeting the needs of adequately preparing secondary school teachers for inclusive teaching in Ethiopia. Additionally, trainee teachers were not in a position to be cognisant of and committed to the philosophy, principles, values, and practices of inclusive education to support a diverse range of learners in the Ethiopian secondary school context. However, policy reform for inclusive education primarily depends on teachers' preparation. As a result, the study concludes that the teacher education programme (PGDT) offered in the Ethiopian universities was ineffective in this regard, and this may hinder the provision of equitable quality education for all learners by taking into account their individual differences in the Ethiopian secondary school context.

9.3.2. Second Objective of the Study

The second objective of the study was to investigate how the training supported secondary school teachers in developing the core competencies necessary to implement inclusion in Ethiopia. In particular, it focused on the role of the teacher education programme (PGDT) in

improving trainee teachers' knowledge and attitudes towards inclusion and students with disabilities, as well as the skills and abilities required for inclusive teaching. For this objective, the study concludes that:

1. The teacher education programme (PDGT) did not equip the graduates with adequate knowledge of inclusive practices that can help them identify and assess the needs, problems, and potentials of students with disabilities. Additionally, limitations were observed in supporting the graduates to gain adequate knowledge on: the principles and methods of inclusive teaching; how to address diversity and equity; and the learning capacity of all children in an inclusive environment. The graduates also lacked an understanding of their roles and professional expectations as inclusive teachers in the wider context of Ethiopia's secondary education system. As a result, the study concludes that the PGDT programme was inadequate and ineffective in preparing graduates in terms of the knowledge necessary to implement inclusion in education, which implies that many secondary school teachers in Ethiopia are struggling to accommodate and support the diverse learning needs of all learners in an inclusive classroom. This is the case because it is the knowledge and understanding of teachers that matters most in creating an inclusive learning environment and developing inclusive schools and classrooms. This may hamper the efforts to implement inclusive education in Ethiopian secondary schools.

2. The teacher education programme (PGDT) was not adequate in positively influencing the attitudes of graduates towards inclusive education and students with disabilities, particularly in terms of the behavioral predisposition towards an action. Additionally, modules and courses in the PGDT programme were overly theoretical, were reliant on the medical model of disability, and graduates were not well exposed to a variety of inclusive pedagogical approaches during training, which are critical in positively amending the attitudes of trainee teachers towards inclusion and students with disabilities. Hence, it is possible to conclude that the teacher education programme (PGDT) was ineffective, as teachers' positive attitudes towards creating conducive learning environments and willingness to accept students with disabilities are critical for the successful implementation of inclusive education in the Ethiopian secondary school context.

3. The teacher education programme (PGDT) did not adequately expose the graduates to practical and hands-on experience for inclusive teaching. It was also observed from the findings of the study that the graduates were not well equipped with the basic skills and abilities necessary for inclusion in education. These skills and abilities include adapting, differentiating, accommodating, or modifying instructional methods; acquiring field experiences with students with disabilities; preparing, implementing, and evaluating an individualised education programme; seeking support or collaboration to assist students with disabilities; and identifying students' learning differences. Additionally, the PGDT programme did not provide adequate time to help trainee teachers gain the necessary practical skills and abilities for the success of inclusive education implementation in Ethiopia. As a result, it is possible to conclude that the teacher education programme (PGDT) was not effective in this regard, as the skills and abilities developed by the graduates during their initial teacher education are critical for and contributing factors to the success or failure of inclusive education implementation in the Ethiopian secondary school context.

4. It was observed from the findings of the study that the graduates' background characteristics were not a significant predictor of knowledge, attitudes, and practical skills and abilities development about inclusive education and students with disabilities. This might be because the knowledge, attitude, and practical skills about inclusion and students with disabilities are connected to the contents and teaching strategies (pedagogies) of the teacher education programme (PGDT) rather than gender, prior training, previous contact, or experience of teaching students with disabilities.

9.4. Limitations

The current study used one purposefully selected university found in the eastern part of Ethiopia out of the 10 universities running the training of secondary school teachers using the PGDT programme since 2011. This may limit the generalisability of its findings beyond the experience of this single university. But, I provided a detailed description of the research methodology (mixed method research design) and study settings to ensure that the findings of this study may be used in the 10 universities running the programme in Ethiopia and elsewhere with similar context. Hence, readers can make informed decisions about the transferability of the findings of

the study to their own situations. The study also reviewed policy documents and strategies that are related to the preparation of teachers for inclusive education and its practices and challenges in Ethiopia, but did not include teacher educators, university management, expertise from the Ethiopian Ministry of Education, trainee teachers with disabilities, other concerned educational stakeholders, and the secondary school community, which could have provided different perspectives to those provided by the trainee teachers only.

9.5. Recommendations

The recommendations presented in this section are based on the findings of the current study as well as the literature reviewed. Further to this, recommendations for this study are drawn for implementing three areas of focus, namely, policy, practice, and research, which are harmonised with the current practices of teacher education for inclusion, as delineated and considered by the global community of practice.

9.5.1. Recommendations for Policy Development

1. Policies and legislation governing teacher education programmes in Ethiopia must enforce all educational stakeholders, including teacher education universities, to properly and effectively carry out the responsibility of producing competent graduates ready for inclusive teaching.
2. The Ethiopian Ministry of Education (EMoE) ought to design policies that enforce a benefit package for teachers to attract high-calibre and interested candidates into the teaching profession, since the Ethiopian people rely heavily on the economic return of education, and this will help the universities produce graduates ready for the successful implementation of inclusive education in Ethiopia.
3. The university leadership running teacher education programmes should be cognisant of the international policies and legal frameworks that the country ratified as well as the national policies and strategies related to teacher education for inclusion so that they own the programme as part of the university's major tasks.

4. Educational laws, strategies, proclamations, regulations, and policies to which Ethiopia is committed must communicate a clear vision of secondary school teachers' training for inclusion so that the teacher education programmes embrace diversity, build a sense of ownership, boost the belief that every child has a value and potential that should be respected, and produce graduates ready for inclusive teaching in Ethiopia.

5. In order to be effective, teacher education policies in Ethiopia should enforce the reform of the whole process of teachers' preparation for inclusion, starting from recruitment to retirement, and also the change in political, social, economic, and institutional contexts to facilitate the move towards inclusive education in addition to the changes in curriculum, structure, and modality.

6. Finally, a policy that enforces a full-fledged and well-designed teacher education programme based on the notion of inclusive pedagogy that gives autonomy to some universities to evolve as a university of teacher education in Ethiopia ought to be in place.

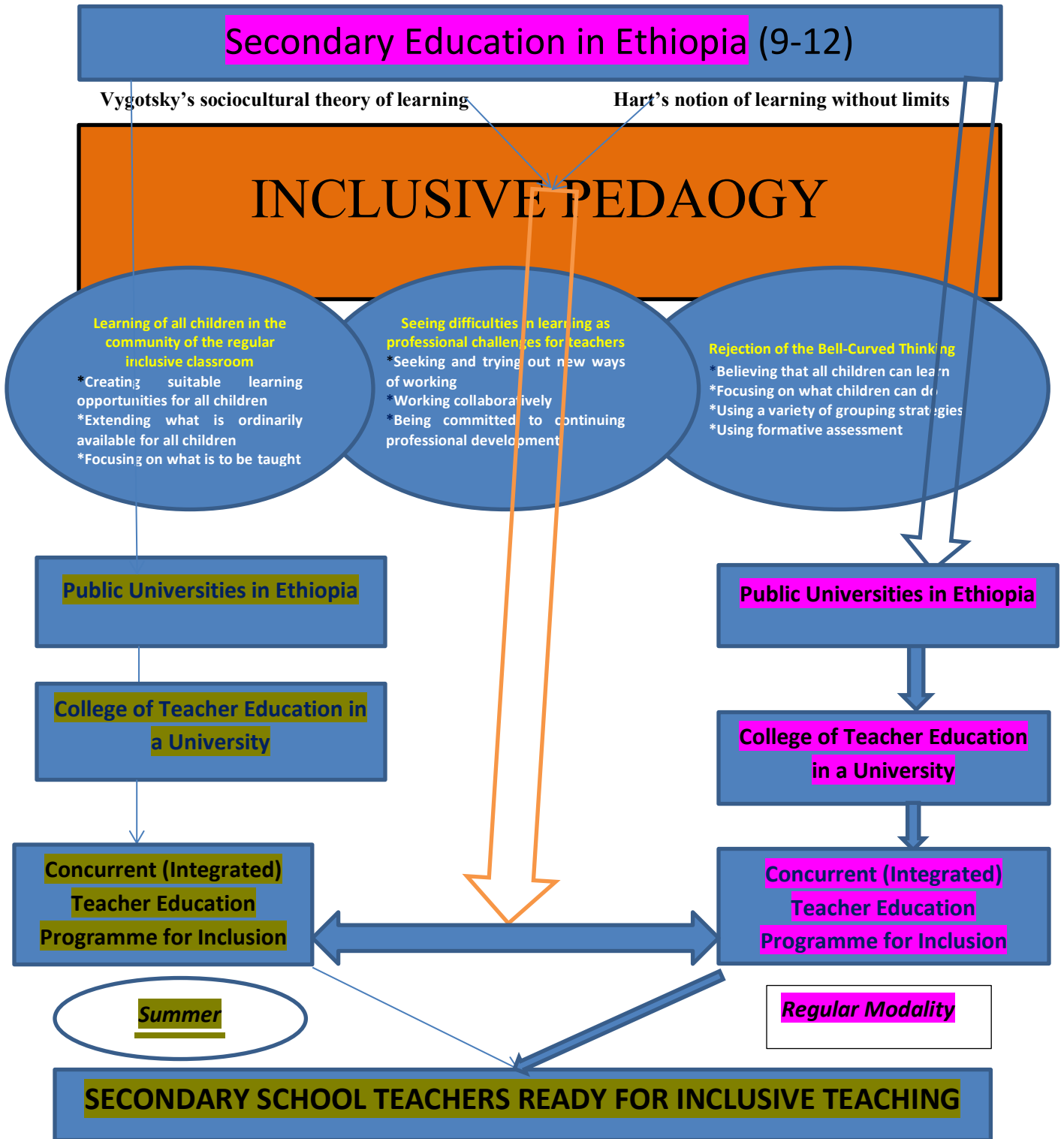
9.5.2. Recommendations for Improving Practice

The third objective of the study was to propose a strategy (model) that can be put in place to enhance the effectiveness of teacher education programmes for inclusion in Ethiopian universities. The study concluded that the teacher education programme (PGDT) currently being undertaken in Ethiopia was not effective in preparing graduates for the successful implementation of inclusive education. This requires intervention. As a result, inclusive pedagogy, an instructional theory and strategy that places a strong emphasis on inclusive approaches to teaching and learning, is proposed in order to enhance its effectiveness. As stated in the theoretical framework section in Chapter 2, several studies conducted around the world have shown that inclusive pedagogy, as an instructional theory and strategy, has strong potential for enhancing the effectiveness of teacher education programmes towards preparing teachers for inclusive education.

Above all, successful implementation of inclusive education primarily requires teachers who account for the diversity of children as an essential component of child development in any conceptualisation of learning (knowing); believe and be convinced that they are qualified and

capable of teaching all children (believing); and adopt innovative strategies of working in collaboration with other stakeholders (doing). Teacher education programmes enacting inclusive pedagogy have the potential to influence trainee teachers' knowing, being, and becoming inclusive teachers, and the trainee teachers' "doing," "knowing," and "believing" are core competencies expected of graduates to implement inclusive education successfully in Ethiopia. In this way, trainee teachers are prepared to learn how to teach inclusively in diverse environments, and this can be enabled through incorporating inclusive pedagogy into teacher education programmes. As a result, the researcher proposed the following model (alternative strategies) to prepare teachers for secondary school inclusive teaching in Ethiopia.

Figure 9.1: The Proposed Model



As depicted in the model (alternative strategies) above, a teacher education programme framed on the notion of inclusive pedagogy was proposed to produce secondary school teachers ready for the challenges of 21st-century inclusive teaching in Ethiopia with two alternative routes. Route 1 is the regular mode, indicated by the double line in the right hand, and Route 2 is the summer mode, indicated by the single line in the left hand. The alternative routes are important to address the issue of secondary school teachers' shortages in Ethiopia, and they also enable the recruitment of competent and high-performing candidates into the teacher education programme for secondary school teaching, even if Route 2 was not the primary concern of this study.

Route one implies the selection of candidates for the regular concurrent modality directly into the teacher education programme as a separate band after they pass the Ethiopian Higher Education Entrance Examination (Grade 12). In this regular modality, the trainee teachers will take subject area courses and pedagogical (professional) courses concurrently or in an integrated manner in a college of teacher education at a university. The advantages of the concurrent/integrated modality over the consecutive model are that the trainee teachers get a chance to integrate pedagogy with subject matter (content), which is a basic skill needed for inclusive teaching. This will fill the gap, as the findings of the study showed that graduates of the consecutive modality of the PGDT programme are underrepresented in pedagogical skills and professional practices, where the programme did not allow trainee teachers to integrate content knowledge and pedagogical knowledge.

As shown in Figure 9.1 above, inclusive pedagogy is a central element in the proposed teacher education programme modality. Inclusive pedagogy, as an instructional theory and strategy, is a crucial tool that supports the preparation of initial teachers for effective inclusive teaching. It incorporates three key assumptions that underpin the inclusive pedagogical approaches to teaching, namely, learning of all children in the community of the regular inclusive classroom (creating suitable learning opportunities for all children, extending what is ordinarily available for all children, and focusing on what is to be taught); rejection of bell-curve thinking (believing that all children can learn, focusing on what children can do, using a variety of grouping strategies, and using formative assessment); and seeing difficulties in learning as professional

challenges for teachers (seeking and trying out new ways of working, working collaboratively, and being committed to continuing professional development).

Hart's notion of learning without limit and Vygotsky's sociocultural theory of human learning, which have strong potential to influence the conceptualisation and application of inclusive pedagogy and the training of initial teachers for inclusive teaching, were also included in the proposed teacher education programme modality. They will be integrated into the curriculum of the proposed programme modality, particularly in the inclusive education learning areas, to facilitate the training of secondary school teachers for inclusive teaching in Ethiopia. This is because inclusive pedagogy reflects Vygotsky's sociocultural theory of human learning, which emphasises that teachers are legally and ethically bound to be the experts leading the child to full development by truly understanding the socio-cultural perspectives of learning, as well as the theoretical, policy, and legislative issues of inclusive education. The question of why inclusive pedagogy matters is further elucidated by Hart's notion of learning without limits, which aimed to contribute to the advancement of pedagogical approaches to teaching underpinned by an optimistic view of human educability, and this informs the views of inclusive pedagogy that includes not only all learners, but all learners as unique people, that is, each with their own distinctive potential.

The second route in the proposed model implies that candidates who have graduated from a 12 + 3 teacher education diploma programme from regional colleges can upgrade to a degree programme in the summer mode (Route 2). But all the procedures of Route 1 work for Route 2, except the modality, which means Route 1 is regular and Route 2 is summer.

In order to implement the first alternative (Route 1):

1. Universities running the proposed teacher education programme should take responsibility for creating conducive instructional environment, making the necessary facilities, services, and curricular resources available, and effectively utilising them, using appropriate instructional media and technology (ICT), facilitating the separate pedagogical centers with necessary instructional materials, and providing the necessary logistics for teaching practicum and fieldwork. Besides, they are expected to provide sufficient academic, psychosocial, and

emotional support and develop a review mechanism through which the modules and courses of the previous PGDT programme are evaluated and revised periodically to support the teaching and learning processes of the training and facilitate the move towards inclusive education.

2. Universities running the proposed teacher education programme should provide adequate time for trainee teachers to learn the discipline contents (subject matter), engage in pedagogical preparation, carry out longer school-based clinical practices, and integrate subject-area knowledge with pedagogical knowledge.

3. Teacher educators running the proposed teacher education programme should be a role model for trainee teachers in using appropriate active learning methods and student-centered strategies that support inclusive teaching so that they can practice it later. In addition, the teacher educators should employ a range of inclusive pedagogical practices and learning activities that provide trainee teachers with opportunities to reflect on their learning, interact with students with disabilities, practice inclusive teaching, and make connections between what they have learned in their coursework and the day-to-day realities of being a teacher in inclusive settings. Above all, the EMoE should ensure that all teacher educators (teachers of teachers) are fully trained in inclusive education to run the proposed teacher education programme effectively.

4. The curriculum designers of the proposed teacher education programme should give enough weight to the practical aspects of training in consultation with the concerned educational stakeholders so that a good balance of theory and practice is maintained. Besides, curriculum issues in the proposed teacher education programme need to be considered and take care of the ever-increasing diversity of learners whose learning is in the hands of the teachers, who themselves are products of the proposed teacher education programme.

5. There should be a more integrated inclusive education learning area in the proposed teacher education programme so that it enhances the effectiveness of secondary school teachers' preparation for inclusive teaching in Ethiopia. Besides this, the inclusive education learning area should include contents and pedagogical strategies that help to prepare trainees for supporting all students, collaborating with others, valuing diversity, and engaging professionally, as well as for

understanding learning and social justice and becoming active professionals in the Ethiopian secondary education system.

6. The universities running the proposed teacher education programme should establish and maintain strong collaboration and partnership with the concerned educational stakeholders so that the trainee teachers have a wide range of learning opportunities to generate knowledge, link the generated knowledge with practice, enhance active participation and teamwork, develop problem-solving skills, strengthen relationships, and share experiences, all of which are critical for inclusive teaching in the Ethiopian secondary school context.

7. The Ethiopian Ministry of Education (EMoE) should connect the effectiveness of universities running the proposed teacher education programme with the rate of graduates' achievement on standardized exit examinations so that they become accountable for the overall success and failure of the programme as a means of quality assurance and control .

8. In collaboration with the concerned educational stakeholders, the colleges of teacher education at a university should equip the trainees with adequate knowledge of inclusive education, develop the trainees' positive attitudes towards students with disabilities, and expose the trainees to practical and hands-on experience that helps them develop the practical skills and abilities necessary to implement inclusive education in Ethiopia. This should be done through integrated, comprehensive, well-structured, coordinated, flexible, and hands-on courses, training modules, and subject area methods addressed in the proposed teacher education programme modality.

9.5.3. Recommendations for Further Research

The study investigated the effectiveness of secondary school teachers' preparation for inclusion in one purposefully selected university among the 10 universities running the PGDT programme in Ethiopia since 2011. Additionally, the participants of the study were only trainee teachers who had attended and graduated from the programme. Therefore, it is recommended that future studies should examine the preparation of secondary school teachers for inclusion and its effectiveness by taking all the 10 universities running the programme with representative samples, and also by including concerned stakeholders such as secondary school teachers and

mentors, secondary school principals, PGDT programme and practicum coordinators, teacher educators, leaders of colleges of teacher education in the universities, university management, trainee teachers with disabilities, curriculum designers, and representatives expertise from regional and Ethiopian Ministry of Education, to gain different perspectives and better input that can advance and reform the preparation of teachers for inclusive education in Ethiopia in order to fulfill the demand of the 21st century educational practices.

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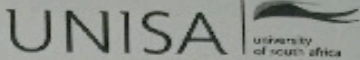
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APPENDICES

APPEDIX 1: RESEARCH ETHICS CLEARANCE CERTIFICATE



UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2022/06/08

Dear Mr AT Kebede

Decision: Ethics Approval from
2022/06/08 to 2027/06/08

Ref: 2022/06/08/55765998/06/AM
Name: Mr AT Kebede
Student No.:55765998

Researcher(s): Name: Mr AT Kebede
E-mail address: 55765998@mylife.unisa.ac.za
Telephone: +251994825461

Supervisor(s): Name: Prof Naredi Phasha
E-mail address: phashnt@unisa.ac.za
Telephone: +27124298748

Title of research:

Effectiveness of Pre-service Secondary School Teachers Preparation for Inclusivity in Ethiopia


Qualification: PhD Inclusive Education

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2022/06/08 to 2027/06/08.

*The **medium risk** application was reviewed by the Ethics Review Committee on 2022/06/08 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.
2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.


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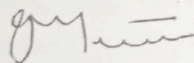
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3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
7. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
8. No field work activities may continue after the expiry date **2027/06/08**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

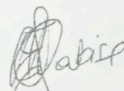
Note:

The reference number **2022/06/08/55765998/06/AM** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Kind regards,



Prof AT Motlhabane
CHAIRPERSON: CEDU RERC
motlhat@unisa.ac.za



Prof Mpine Makoe
ACTING EXECUTIVE DEAN
qakisme@unisa.ac.za

Approved - decision template – updated 16 Feb 2017

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APPEDIX 2: REQUEST LETTER TO CONDUCT THE RESEARCH

Dear Sir/Madam

I, Aschalew Teshome Kebede, am doing research on the "effectiveness of secondary school teachers' preparation for inclusion in Ethiopia" under the supervision of Professor Nareadi Phasha in the Department of Inclusive Education towards a PhD at the University of South Africa (UNISA). The purpose of the study is to investigate how effective the secondary school teachers' preparation is for inclusion in Ethiopia. To fulfill its purpose, the researcher selected your institution as a research site as it offers a Postgraduate Diploma in Secondary School Teaching (PGDT). The university was selected because it has a good track record in training teachers for secondary schools. Further, the researcher has ample experience in this regard as he has been directly involved in the training of secondary school teachers at this university and also has a better understanding of the secondary schools surrounding your institution.

Although the purpose of the PGDT programme is to produce effective, practicing secondary school teachers, its effectiveness in terms of producing teachers ready for the challenges of 21st-century inclusive teaching has not been studied. Thus, this study is intended to investigate the effectiveness of secondary school teachers' preparation for inclusion based on the views of teachers trained and qualified for secondary school teaching in your institution. The study involved 152 teachers who completed a questionnaire and seven teachers who participated in face-to-face, semi-structured individual interviews. This study is expected to assess the state of the preparation of secondary teachers for the implementation of inclusive education, which may inform policy, practice, and research in this regard. It further reveals its strengths and shortcomings that may be used by teacher education universities for the provision of need-based and responsive pre-service and in-service training to support teachers in successfully implementing inclusive education in the Ethiopian secondary school context.

In addition, the study is expected to yield information that can be used by policymakers in the formulation and amendment of policies and legislation regarding the preparation of secondary school teachers to implement inclusive education successfully. This may result in the delivery of

improved services and programmes to children with diverse educational needs in the Ethiopian secondary school context. Overall, the research is expected to benefit stakeholders in Ethiopia and the international community in view of the centrality of supporting inclusive education.

There are no potential risks anticipated in this study.

Feedback on research findings will be made available to participants through the workshop. A research report on the study findings will be given to the psychology department, and the research will inform the university once the study is completed so that the management of the university and the secondary schools may choose a convenient time for the workshop.

Yours sincerely,

Signature

Aschalew Teshome Kebede

Student Researcher

Telephone: +251911996605 Cell number: +251994825461

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APPEDIX 3: LETTER OF PERMISSION TO CONDUCT THE RESEARCH



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APPEDIX 4: CONSENT TO PARTICIPATE IN THIS STUDY

I, _____, confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits, and anticipated inconvenience of participation. I have read and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalty. I am aware that the findings of this study will be processed into a research report, journal publications, and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified. I agree to the following:

- Completing the questionnaire and
- Recording of the in-depth face-face interview.

I have received a signed copy of the informed consent agreement.

Participant Full Name -----
Participant Signature-----
Date-----
Researcher's Full Name _____
Researcher's signature-----
Date-----

Aschalew Teshome Kebede

Student Researcher

Telephone: +251911996605 or +251994825461

Email: 55765998@mylife.unisa.ac.za or shambali1998@gmail.com.

APPEDIX 5: QUESTIONNAIRE TO BE FILLED BY TRAINEE TEACHERS

I, Aschalew Teshome Kebede, am doing research on the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia with Professor Nareadi Phasha in the Department of Inclusive Education at the University of South Africa towards a Doctor of Philosophy in Education (Inclusive Education). The aim of this study is to establish how effective the secondary school teachers' preparation for inclusion is in Ethiopia and propose an alternative strategy to enhance its effectiveness. The study also aims to investigate the extent to which the training is meeting its obligations in preparing graduates ready for inclusive secondary school teaching and whether the graduates feel adequately prepared to develop the core competencies necessary to implement inclusive education in Ethiopia. The questionnaire stated below is prepared to fulfil the aim of the study with the data collected from you.

As a graduating secondary school teacher from the PGDT programme, you are kindly requested to participate in the study and provide relevant, appropriate, and genuine responses when completing the questionnaires. To ensure your identity remains anonymous, you are not expected to write your name. You are assured of confidentiality, as your responses will not be disclosed to anyone or anywhere except for the purpose of this study. Since your honest opinions are sincerely sought, please give your response to all the items.

**Thank you in advance for your cooperation and the valuable time you spent
completing the questionnaire!!**

SECTION I: PERSONAL DETAILS

Dear graduate, the following questions are about your personal issues; please put an (x) mark in the box provided.

1. Sex of the respondents: Male [] Female []
2. Age : 20-24 [] 25-30 [] 31-35 [] More than 35 []
3. Do you personally know any person with disability before the PGDT training?
Yes [] No []
4. Do you have any training in relation to person with disability or inclusive education before the PGDT training? Yes [] No []
5. Have you experienced teaching students with disability during your practicum?
Yes [] No []

SECTION II: Issues related to teacher education programme components used to analyse how secondary school teachers’ in Ethiopia are prepared for Inclusion

Dear graduate, think of the university , college and the secondary schools you have attended during the PGDT programme training, then indicate your view by using (X) mark in the space provided that corresponds your responses based on the following response scale.

Strongly Disagree =1, Disagree = 2, Undecided =3, Agree =4, Strongly Agree =5

No	Component 1: Facility and service related to the programme	1	2	3	4	5
1.	There were adequate library facilities for PGDT programme					
2.	Library facilities were effectively utilised					
3.	There are adequate laboratory facilities for PGDT programme					
4.	Laboratory facilities were effectively utilised					
5.	There were adequate Information and Communication Technology (ICT) facilities for PGDT program					
6.	ICT facilities and a variety of instructional media were effectively utilised					
7.	Educational guidance and counselling services are available for trainee teachers attending the PGDT programme					
8.	Orientation regarding the PGDT program is clearly given by the concerned bodies					
9.	The expected outcomes of the secondary school teacher education training and the PGDT program are clearly communicated					
No	Component 2: The Status of Teacher-Training Colleges in the University	1	2	3	4	5
1.	The college of teacher education is in a better position compared to similar colleges in the university					

2.	The teacher-trainers are full timers and belongs to the college of teacher education					
3.	The assignment of teacher-trainers for courses is based on their fields of specialization					
4.	Short term and refreshment training is given for teacher educators in the college of teacher education running PGDT programme					
5.	Higher Diploma Program (HDP) was mandatory for teacher educators participating in the program					
No	Component 3 : Modalities of Teacher Education Program	1	2	3	4	5
1.	The modality and approach of the programme enabled the preparation of competent teachers in terms of subject matter					
2.	The modality and approach were practice (activity) oriented					
3.	Modules and courses within the program modality were interrelated (integrated)					
4.	The modality enabled the preparation of competent teachers by employing active learning (student-centered) methods					
No	Component 4 : The Teacher Education Program Structure and Curricula	1	2	3	4	5
1.	The duration of the training is adequate to prepare quality teachers for secondary school inclusive teaching					
2.	The curricula of the programme allows the understanding of the nature of students					
3.	The curriculum of the programme allows the mastery of content knowledge					
4.	The curriculum of the programme allows the mastery of pedagogical knowledge					
5.	The curriculum of the programme is aligned with secondary school curricula and the broader context of inclusive teaching					
No	Component 5 : The Teacher Education Program Pedagogies	1	2	3	4	5
1.	The pedagogies used in PGDT program is aligned with the key pedagogies emphasized in the secondary school curriculum framework					
2.	The pedagogies used in the PGDT program support and promote inclusiveness					
3.	Pedagogies of teaching students with special needs is emphasized in the PGDT program					
4.	The pedagogies used in PGDT program allows the understanding of the nature of students the would be teachers are going to teach					
5.	The teacher education program allows the understanding of inclusive pedagogy the would be teachers are going to implement in secondary school context					
6.	Pedagogies used in the teacher education program adequately accommodated students with disabilities					
7.	Pedagogies used in the teacher education program adequately addressed gender issues					
No	Component 6 : Inclusive Education Course and the teacher education Program	1	2	3	4	5

1.	Course objectives are meet by the contents delivered during the training					
2.	Organization of the course is effective in balancing the theory and practice dimensions					
3.	Course contents are effective in producing inclusive teachers					
4.	Teaching strategies of the course are effective in delivering the course contents					
5.	Instructors of the course are servicing as models of inclusive practices during the training					
6	The teaching practice(practicum) has given enough opportunity for student-teacher to link the theory with practice					
7	The teaching practice(practicum) allows the student-teacher to understand students' diversity and their learning in secondary schools context					
No	Component 7 : Teacher Education College and School Partnership	1	2	3	4	5
1.	The college and secondary schools are collaborating on teaching, staff development and action research					
2.	School principals are supporting the trainee teachers in developing collaborative skills					
3.	The collaborative learning experience has given adequate period of time during the teaching practice					
4.	Experienced instructors are selected to guide the trainee teachers collaborative learning					
5.	Collaboration learning with different professionals in supporting the trainee teachers to develop the necessary collaborative skills is successful					
No	Component 8: Qualification Requirement of the Teacher Education Program	1	2	3	4	5
1.	Exit exam ensures certification of competent secondary school teachers					
2.	Exit exams systematically link program components with the requirement of secondary school teaching					
3.	Exit exam is a necessary tool for ensuring the quality of teacher education program					
4.	The exit exam is relevant to the demands/needs of my teaching career					
5.	The time given for student-teachers to prepare for exit exam was sufficient					
No	Component 9: The National Standard Set for Secondary School Teachers and the Teacher Education Program	1	2	3	4	5
1.	The PGDT program allows the teachers to know the students and how they learn					
2.	The PGDT program allows the teachers to know the content and how to teach it					
3.	The PGDT program allows the teacher to plan for and implement effective teaching and learning					
4.	The PGDT program allows the teachers to create and maintain supportive and safe learning environments					

5.	The PGDT program allows the teachers to assess, provide feedback and report on student learning					
6.	The PGDT program allows the teachers to know the professional code of ethics of teaching profession					
7	The PGDT program allows the teachers to engage professionally with colleagues, parents/caregivers, and the community					
No	Component 10: Induction program at Secondary School Level	1	2	3	4	5
1.	There was induction program in secondary school I assigned					
2.	Teachers have a responsibility for their own continuous professional development					
3.	Induction program was successful in bridging my transition from college to secondary school context					
4.	Induction program is important in refreshing the knowledge and skills I acquired during the training					
5.	Experienced and competent teachers were selected for induction program to guide the newly assigned teachers					

SECTION III: Issues related to the competency developed necessary to implement inclusive education in Ethiopia as a result of the PGDT Programme

Dear graduate, think of the PGDT program you have attended, then indicate your view on how the training supported you in gaining the competencies necessary to implement inclusive education successfully in Ethiopian secondary school context by using (X) mark in the space provided that corresponds your responses based on the following response scale.

Strongly Disagree =1, Disagree = 2, Undecided =3, Agree =4, Strongly Agree =5

No	Knowledge Related Competency: the PGDT program supported me to	1	2	3	4	5
1.	know the international policies and legal frameworks that promote inclusive education					
2.	know the principles and methods of teaching students with disabilities					
3.	understand the psychological and behavioral characteristics of students with disabilities					
4.	know how to assess my teaching of students with disabilities					
5.	know the practices and implementations associated with inclusive education					
6.	understand the theories and principles guiding the implementation of inclusive education					
7.	know the national policies, legal frameworks and local institutional regulations to implement inclusive education					
8.	understand how to address diversity in Ethiopian secondary school curriculum implementation					
9.	understand that all students have the capacity to learn and develop if properly supported					

10.	know how to actively negotiate with educational leaders at various levels to support the implementation of inclusive education					
No	Attitude Related Competency: after the PGDT programme training, I believe that	1	2	3	4	5
1.	students with disabilities are entitled to receive quality education					
2.	inclusive education makes students with disabilities more confident					
3.	inclusive teaching provide good opportunity to students with disabilities					
4.	inclusive education helps students with disabilities to socialize with others					
5.	inclusive school and classroom helps to reduce social discrimination against students with disabilities					
6.	through inclusive education, students with disabilities can have the opportunity for learning improvement					
7.	inclusive education helps teachers to pay closer attention to differences amongst individual students in an inclusive classroom					
8.	inclusive education urges school reform and improves education quality for all students					
9.	inclusive education requires all teachers to work in teams/in groups/					
10.	inclusive teaching requires parental and community support					
No	Practical Skills Related Competency: the PGDT program supported me to	1	2	3	4	5
1.	make students with and without disabilities help and learn from each other					
2.	conduct differentiated teaching for students with disabilities					
3.	work collaboratively with other teachers and professionals to teach students with disabilities					
4.	design flexible coursework and individual assessment for students with disabilities					
5.	adjust teaching objectives according to the characteristics of students with disabilities					
6.	arrange group discussion and collaborative learning to help students with disabilities					
7.	conduct effective behavioural management for students with disabilities					
8.	work effectively with parents to help students with disabilities					
9.	work effectively with the communities to help students with disabilities					
10.	use various teaching and learning materials to help students with disabilities					

APPEDIX 6: INTERVIEW GUIDE FOR TRAINEE TEACHERS

Dear Graduate, my name is Aschalew Teshome Kebede, and I am a PhD student in the department of inclusive studies at the University of South Africa. I would like to ask you some questions related to the teacher education programme (PGDT) you attended and its effectiveness in preparing you for inclusive teaching in the Ethiopian secondary school context. In addition, I would like to understand how you conceptualise inclusive education and inclusive pedagogy and how the teacher education programme supported you in gaining the competencies necessary to implement inclusive education successfully. I would like to inform you that your cooperation in this study is greatly appreciated. If you feel that there is any question you are uncomfortable answering, you are free to refuse to participate, and you are free to withdraw from the study at any time.

**Thank you in advance for your cooperation and the valuable time you spent participating
in the interview!**

Title of the Study:

Effectiveness of Secondary School Teachers' Preparation for Inclusion in Ethiopia

Background Information:

- A. Participant teacher code name:-----
 - B. Gender -----
 - C. Age-----
 - D. Professional qualification before PGDT (His/her first degree) -----
 - E. Modality of Teacher Education Program Attended-----
1. What do you define inclusive education from the training you have attended?
 2. What do you understand diversity in the Ethiopian secondary school context?
 3. Do you have an awareness of the principles, values, policies and practices that guide the implementation of inclusive education from your training?

4. What do you feel about the components of the PGDT programme that influenced your preparation for inclusive teaching in the Ethiopian secondary school context including:
 - A. Facilities and services related to PGDT Programme
 - B. Status of the teacher education college running PGDT programme
 - C. The modality of the PGDT programme
 - D. Curriculum and the organizations of the PGDT Programme
 - E. The Pedagogies employed in the PGDT
 - F. The integration of the inclusive education course and its effectiveness
 - G. Existence of partnership (collaboration) among stakeholders and its effectiveness
 - H. Qualification requirements of the PGDT programme
 - I. The national standard set for secondary school teachers in Ethiopia
 - J. Induction and professional support programmes at secondary school level
5. Do you feel that the PGDT programme adequately prepared you with the competency necessary to successful implement inclusive education in the Ethiopian secondary school context in terms of
 - A. Knowledge gained about inclusive education and students with disabilities
 - B. Positive attitudes development towards inclusion and students with disabilities
 - C. Practical skills and abilities developed to practice inclusion
6. What do you think needs to be changed by the Ethiopian university in preparing competent secondary school teachers' ready for inclusive teaching?

APPENDIX 7: LETTER OF EDITING

GENEVIEVE WOOD EDITING SERVICES PTY LTD

EDITING CERTIFICATE

PO BOX 23081, CLAREMONT CAPE TOWN 7735

Date: 2023/08/14

This serves to confirm that the document entitled:

**EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS' PREPARATION FOR
INCLUSION IN ETHIOPIA**

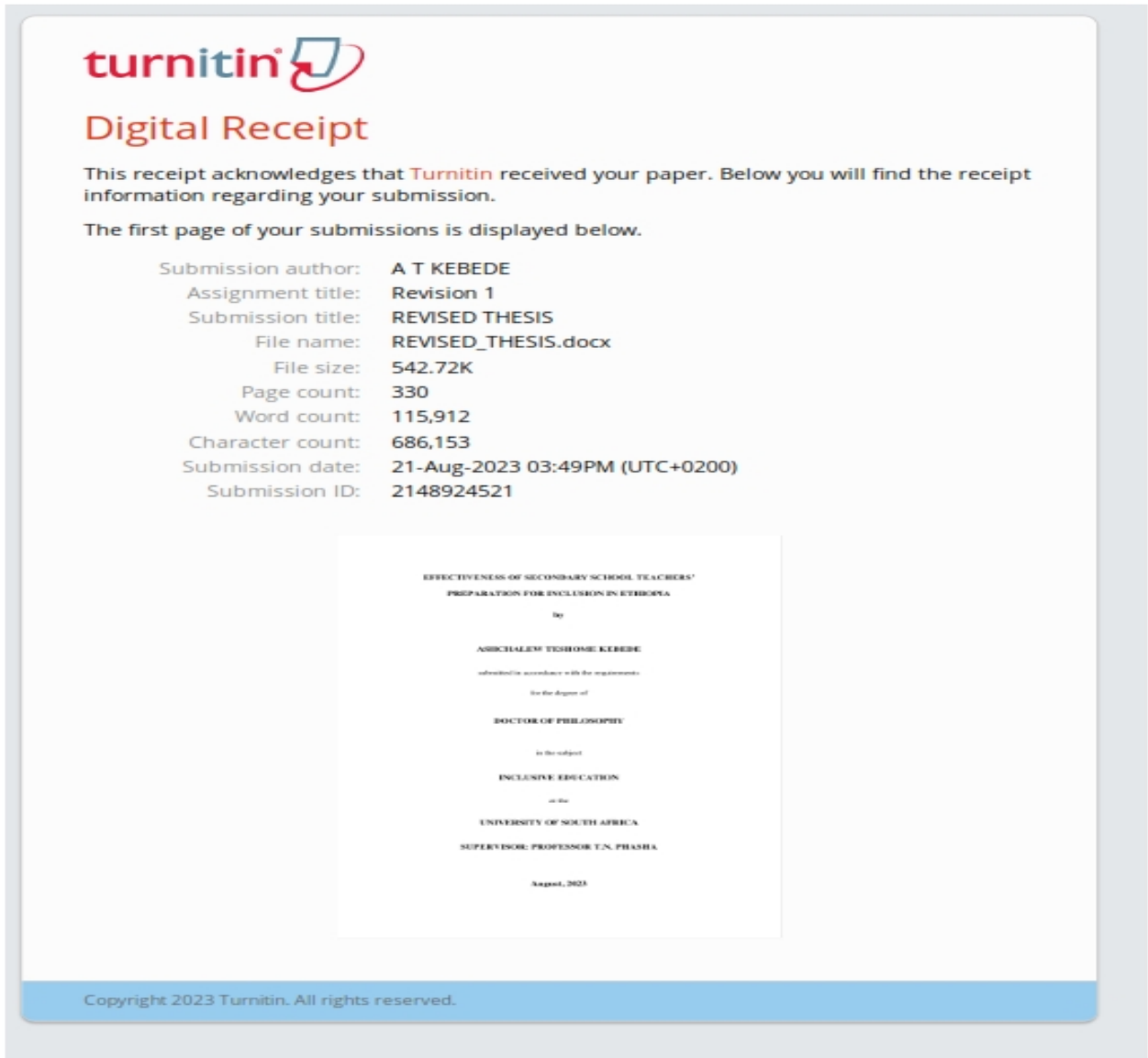
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Genevieve Wood
PhD candidate

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EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS' PREPARATION FOR INCLUSION IN ETHIOPIA

by

ABDULALEM TISHOM KEBEDE

submitted in accordance with the requirements

for the degree of

DOCTOR OF PHILOSOPHY

in the subject

INCLUSIVE EDUCATION

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROFESSOR T.N. PHASHA

August, 2023

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APPENDIX 9: SAMPLE INTERVIEW TRANSCRIPT

The researcher: Dear trainee teacher, my name is Aschalew Teshome Kebede, a PhD student at the University of South Africa conducting study on the effectiveness of secondary school teachers' preparation for inclusion in Ethiopia. I would like to ask you some questions related to the PGDT programme you have attended in the selected university. Thank you in advance for your cooperation and the valuable time you will spend in participating in the interview.

Trainee teacher: you are well come and thank for inviting me to the interview.

Background Information:

F. Participant teacher code name: **PT-B**

G. Gender : **F**

H. Age:**23**

I. Professional qualification before PGDT (His/her first degree):**Biology**

J. Modality of Teacher Education Program Attended: **PGDT-Regular**

K. Interview setting: **at PT-B secondary school**

L. Time of the interview: **from 9:00-10:00 morning.**

The researcher: What do you define inclusive education from the training you have attended?

PT-B: I took one course in relation to inclusive education during “Peda” training--- from that course, I understand that inclusive education is teaching all students in a regular classroom including students with disabilities like blind, deaf , students with physical disability and others-- ; it means “akato timihirt” in Amharic, which means including all.

The researcher: What do you understand by diversity in Ethiopian secondary schools?

PT-B: As to me diversity means students differences that attend their education regular schools of Ethiopia,---our students may differ in their sex, age, family background ---

some from rich family and some from poor family--- others from rural and some from urban . In my understanding--- providing appropriate support to diverse students means that--- promoting the educational and social development of all my students without referring to their language, culture, race, ethnicity, gender, socio-economic status, abilities or disabilities, as well as family background in my school and classrooms I assigned to teach as much as possible.

The researcher: Do you have an awareness of the principles, values, policies and practices that guide the implementation of inclusive education from your PGDT training?

PT-B: Yes, I enjoyed many courses, PGDT---, which I forgot their names by now that demonstrated the link between national and international policies and the inclusive education implementation---, and that informed as what we should do at secondary schools we are going to be assigned after the completion of the training.

The researcher: What do you feel about the components of the PGDT programme that influenced your preparation for inclusive teaching particularly in terms of facilities and services, the status of CEBS, modality of the PGDT programme, curriculum of the PGDT Programme, pedagogies employed in the PGDT programme, inclusive education course you have taken, partnership (collaboration) among stakeholders during the training, qualification requirements of the PGDT programme, national standard set for secondary school teachers, and induction and professional support programmes at secondary school you assigned to teach.

PT-B: first of all, majority of my friend including me were not happy with the availability of reading materials and text books related to our area of specialization, laboratory for our subjects- for example, Biology subject in our case, stationery materials during field work and practicum, vehicles for transportation to and from the secondary schools, suffering sometimes as a result of

lack of classrooms and moving from door to door, assigned to poorly ventilated and unclean dormitories.

In addition to that PGDT programme has difficulties connecting theory to practise because we were not exposed to the real tasks of secondary school teachers during our training. In my opinion, The training I have passed through did not give me an opportunity to understand, practice, and value the inclusive pedagogical approaches that are needed to implement inclusive education in the secondary school I assigned to teach; I know the concept of diversity and equity from inclusive education course I took during the training, but, only ‘theory’ to pass the course.

I also believe that the inclusive education course instructors were not serving as role models of inclusive practices in the classroom and outside of classroom during the training, even, I observed that some of them do not have positive attitude towards trainee teachers with disability.

As to me the time allocated for collaborative learning experiences was not adequate particularly during the practicum, and I also felt that the collaboration between the trainee teachers and mentors in the secondary schools was not as such effective in supporting the development of important collaborative skills necessary to handle students with diverse educational needs.

The researcher: great, do you feel that the PGDT programme you attended adequately prepared you with the knowledge, positive attitudes and practical skills necessary to implement inclusive education in Ethiopia?

PT-B: From ‘Peda’ training in HrU, I observed that even lecturers have knowledge gap on how to handle students with disability; they can’t be role model for us. I feel that more knowledge on handling students with disability would have been passed to us to properly practice inclusion in the secondary schools we assigned.

I believe that students with disability worth educating and they have capacity to learn if they are properly supported; doing this is not only the task of special educators, but also regular teachers are responsible to teach, socialize and support students with disability. In addition to that support of parent with students with disability and the surrounding community support are also important.

Our lecturers were in agreement with the teacher education college timetable, which was too loaded, as a result, they face difficult to effectively equip us with the necessary inclusive skills and abilities; I don't feel confident---, uhu--- I found it very challenging to have a student with disability in my class during teaching practices.

The researcher: What do you think needs to be changed by the Ethiopian university in preparing competent secondary school teachers' ready for inclusive teaching? I mean what do you suggest to improve PGDT programme?

PT-B: I am very sorry to say this; I do not want to continue with my teaching, because teaching is a very challenging profession, it is for time being-----uuff---I don't want to say anything about the job I don't like any more.

The researcher: Thanks for your time.

PT-B: You are welcome.

