Approaches to Multilingualism

A Study of Norwegian Student Teachers' Knowledge, Experience and Attitudes

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Master's Thesis

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May 2019

Abstract in Norwegian

Parallelt med at verden blir stadig mer globalisert opplever vi økt samhandling mellom mennesker fra ulike deler av verden. Økt innvandring bidrar til at Norge blir et mer flerkulturelt og flerspråklig samfunn. Sammenblandingen av mennesker fra ulike kulturelle og språklige bakgrunner reflekteres i mangfoldet av elever i norske klasserom i dag. Stadig flere elever har andre språk enn norsk som morsmål og stadig flere elever har kjennskap til flere språk enn kun de språkene de blir introdusert for gjennom sin skolegang.

I forskningslitteraturen har det vært et skifte i synet på flerspråklighet. Synspunkter om flerspråklighet har endret seg fra å primært bestå av negative assosiasjoner mot et mer positivt fokus. I dag er språk hovedsakelig ansett som en verdifull ressurs, og det synes å være en bred konsensus blant forskere om at det finnes visse kognitive fordeler knyttet til flerspråklighet.

De siste tiårene har sett en økende interesse for flerspråklighet. I Europa har den økte oppmerksomheten rundt flerspråklighet vært særlig tydelig gjennom EUs politikk, som fremmer en flerspråklig europeisk identitet. For å sikre flerspråklighet blant europeiske borgere, fremmet EU i 1995 et forslag om at EU-borgere bør mestre tre europeiske språk (Jessner, 2008, p. 15).

Målet om flerspråklighet har påvirket norsk politikk, noe som har vært spesielt synlig gjennom skolepolitikken. Det norske læreplanverket (LK06) er sterkt påvirket av det felles europeiske rammeverket for språk, som særlig vektlegger verdien av flerspråklighet. Videre inneholder det norske læreplanverket kompetansemål som potensielt kan styrke elevers flerspråklighet. Et økt fokus på flerspråklighet er å finne i utkastet til det nye læreplanverket som vil tre i kraft i år 2020, både i overordnet del og i fagfornyelse for engelsk.

Selv om det er et tydelig fokus på flerspråklighet, og et uttrykt mål om å fremme flerspråklighet i norske lærerplaner, viser enkelte av funnene fra Haukås (2016) studie av norske språklæreres tanker om flerspråklighet og en flerspråklig pedagogikk at lærernes tanker ikke alltid samsvarer med det fokuset som er uttrykt i lærerplanen. Videre indikerer resultater fra Surkalovic (2014) studie at mange norske lærerstudenter

mangler tilstrekkelig kunnskap og kompetanse til å undervise engelsk i et flerspråklig klasserom.

Denne oppgaven har lærerstudentene som sitt fokus, og tar sikte på å undersøke deres tilnærminger til flerspråklighet og en flerspråklig pedagogikk. Oppgaven har som overordnet mål å undersøke deres kunnskap, erfaring og holdninger rettet mot emnet. Det er ønskelig å undersøke om man kan finne lignende tendenser som de som har fremgått gjennom tidligere lignende studier. Innsikt i studentenes tilnærming til emnet kan gi oss verdifull informasjon om lærerutdanningen, og i hvilken grad studentene føler at de har fått tilstrekkelig kunnskap og erfaring til å selv være i stand til å implementere en flerspråklig pedagogikk gjennom sine studier. Innsikt i studentenes holdninger anses for å være relevant, ettersom disse tross alt er fremtidens lærere og sannsynligvis vil undervise i flerspråklige klasserom med elever som har andre språk enn norsk som førstespråk. Forskningsmaterialet i denne studien består av 102 studenters svar på en nettbasert spørreundersøkelse og innhenter både kvantitative og kvalitative data. Det er viktig å understreke at studentene tilhører fem ulike universiteter og høgskoler, ulike lærerutdanninger og ulike studieår.

Acknowledgements

First, I would like to thank all students who participated in the study. I would also like to thank everyone who was interested in the topic and helped by distributing the survey. This study could not have been carried out without you.

I would furthermore like to express my gratitude to my supervisors, Dania Jovanna Bonness and Sigrid Ørevik, for guiding me through the process of writing. Thank you for our regular meetings and for your useful feedback. Your dedication has been very much appreciated.

To *Skrivegruppe heihei*: Thank you for interesting discussions, long-lasting coffee breaks, and emotional support. Your feedback and comments have been extremely helpful.

Last, but not least, I would like to thank friends and family for supporting me through hectic times, especially to Anders who has been cheering for me from beginning to end.

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List of Abbreviations

L1 first language (mother tongue)

L2 second language

L3 third language

Vg1 first year of upper secondary school

Vg2 second year of upper secondary school

Vg3 third year of upper secondary school

SLA second language acquisition

TLA third language acquisition

ELT English language teaching

CEFR Common European Framework of Reference for Language

LK06 *Kunnskapsløftet*, National Curriculum for Knowledge Promotion from 2006

FREPA A Framework of Reference for Pluralistic Approaches to Languages and Culture

1 Introduction

1.1 Relevance

As the world is becoming gradually more interconnected, we experience more regular interaction between people from different parts of the world. Through the processes of increased migration and increased globalization, Norway is becoming a more multicultural and multilingual country. The mixture of people from different cultural and linguistic backgrounds is reflected in the diversity of Norwegian classrooms today. Increasingly more pupils have languages other than Norwegian as their first language(s), and they may also have knowledge of more languages than those they are introduced to in school. Many pupils have become, or are in the process of becoming, bi- or multilingual speakers when they start school. In this thesis, *bilingualism* is defined as 'the ability to use two languages', and *multilingualism* is defined as 'the ability to use more than two languages' (Krulatz, Dahl, & Flognfeldt, 2018, p. 53).

In the research literature, there has been a shift in the views on bi- and multilingualism; views have changed from primarily holding negative associations towards holding more positive associations. Today, language is seen as a valuable resource and there seems to be a general consensus among researchers that there are certain cognitive benefits related to multilingualism (Cenoz, 2013). The last few decades have seen a growing interest in multilingualism. In the European context, the increased attention to multilingualism has been particularly apparent through the European Union's policy, which promotes a multilingual European identity. To ensure multilingualism among European citizens, the EU proposed in 1995 that EU citizens should be proficient in three European languages (Jessner, 2008, p. 15).

Furthermore, the aim to ensure multilingualism among European citizens is evident in the EU's language education policy. In 2001, the Council of Europe published *the Common European Framework of Reference for Languages* (CEFR), which promotes a plurilingual approach to language learning:

> The plurilingual approach emphasises the fact that as an individual person's experience of language in its cultural contexts expands, from the language of the home to that of society at large and then to the languages of other peoples (whether learnt at school or college, or by direct experience), he or she does not keep these languages and cultures in strictly separated mental compartments, but rather builds up a communicative competence to which all knowledge and experience of language contributes and in which languages interrelate and interact (Council of Council of Europe, 2001, p. 4).

Although Norway is not a member of the EU, Norway is a member state in the Council of Europe. The aim for multilingualism, and the plurilingual approach to language learning, have influenced Norwegian public policy. As observed by Haukås (2016, p. 4), the curricula for L1 Norwegian, L2 English and the L3 are highly influenced by CEFR which emphasises the value of multilingualism. Furthermore, Norwegian language curricula include competence aims that have the potential to enhance pupils' multilingualism. The English subject curriculum (LK06), in particular, values multilingualism in that it focuses on 'what is involved in learning a new language and seeing relationships between English, one's native language and other languages' (Utdanningsdirektoratet, 2013, p. 3). Currently, the Norwegian Directorate for Education and Training is preparing a new curriculum for primary, lower and upper secondary school. The core curriculum has been laid down by Royal Decree, but has not yet been implemented. There is an ongoing process of developing new subject curricula (*fagfornyelse*), which describe the content and goals of the subjects. The curriculum in its entirety will be implemented in 2020. An extended multilingual focus may be found in the core curriculum, which has as one of its main objectives across subjects that:

> The teaching and training shall ensure that the pupils are confident in their language proficiency, that they develop their language identity and that they are able to use language to think, create meaning, communicate and connect with others. Language gives us a sense of belonging and cultural awareness. (…) Knowledge about the linguistic diversity in society provides all pupils with valuable insight into different forms of expression, ideas and traditions. All pupils shall experience that being proficient in a number of languages is a resource, both in school and society at large (Ministry of Education and Research, 2019, p. 7).

Even though there is a clear focus on multilingualism, and an aim to foster multilingualism in Norwegian language curricula, some of the findings from Haukås'

(2016) study of Norwegian language teachers' beliefs about multilingualism and a multilingual pedagogy show that teachers' beliefs about language teaching do not always conform with the focus on multilingualism that is found in the curriculum. In addition, results from Surkalovic (2014) study indicate that many Norwegian student teachers lack the adequate knowledge and competence to teach English in a multilingual classroom.

1.2 Aim and Scope

In the current thesis, the focus is on student teachers' approaches to multilingualism, their knowledge, experience and attitudes related to multilingualism and a multilingual pedagogy. Insight into the students' attitudes are considered relevant, since the students are tomorrow's teachers, and they are likely to teach in multilingual classrooms with students who have languages other than Norwegian as their first language(s). Insight into the students' knowledge may provide us with valuable information about the teacher education programs, and to what extent the students feel they have received adequate knowledge and experience to implement a multilingual pedagogy in their later profession. The study seeks to examine whether tendencies similar to those that were found in previous studies (see e.g. Surkalovic, 2014; Dahl & Krulatz, 2016; Haukås, 2016; Krulatz & Torgersen, 2016) may also be found in the sample in the current study.

1.3 Research Questions and hypotheses

This study seeks to answer the following research questions:

1. To what extent do students have knowledge of multilingualism and a multilingual pedagogy?
2. To what extent do students have experience with a multilingual pedagogy?
3. What attitudes do students express towards multilingualism and a multilingual pedagogy?

Based on the results from previous studies (see section 2.6), and due to the fact that there seems to be relatively little focus on multilingualism in the course descriptions of most teacher education programs from which the participants in this study are currently enrolled in (see section 3.5.6), the students are expected to demonstrate limited knowledge of multilingualism. Accordingly, they are also expected to show little knowledge of pedagogical strategies which might be suitable to foster a multilingual learning environment. They are also expected to have little experience with using these. Lastly, these two factors – limited knowledge and limited experience – are hypothesised to influence and form their overall attitudes in relation to multilingualism in general, and their attitudes towards a multilingual pedagogy. Thus, the following three hypotheses were formulated:

1. The students are expected to demonstrate little knowledge of multilingualism and a multilingual pedagogical approach.
2. The students are expected to have little experience with a multilingual pedagogical approach.
3. The students' attitudes are expected to deviate from the theory on multilingualism and a multilingual pedagogy.

1.4 Structure of the Thesis

The thesis consists of seven chapters. In chapter 1, the research field is presented along with the study's aim and scope, research questions and hypotheses. In chapter 2, the theoretical background relevant for this investigation is provided, followed by chapter 3, which introduces the material and methods. Chapter 4 presents the results and findings, which are further elaborated on and discussed in chapter 5. The conclusion is given in chapter 6 with suggestions for further research.

2 Theoretical Background

This chapter provides an overview of some of the theoretical issues related to multilingualism. The primary focus is on the complexity of multilingualism, and how the concept differs significantly from bilingualism. Following the distinction between multilingualism and bilingualism, the chapter also introduces second language acquisition and third language acquisition. The differences between the two concepts are then related to an educational context, and the chapter elaborates on what a multilingual pedagogy entails, and these views are then related to the Norwegian educational context. These are all concepts of crucial importance for the topic of this thesis, and they provide a basis for the discussion chapter.

2.1 Bilingualism and Multilingualism

There has been some controversy as to how to define the bilingual speaker. Definitions range from Bloomfield's (1933, p. 56) definition of bilingualism as 'native-like control of two languages' to Myers-Scotton's (2006, p. 44) definition 'the ability to use two or more languages sufficiently to carry on a limited casual conversation'. However, the concept of bilingualism has proven itself to be quite complex and thus difficult to define in brief terms. Rather, it has become common to speak of degrees of bilingualism, and to discuss bilingualism as something that varies. Lanza (1997) describes bilingualism as follows:

> There are degrees of bilingualism, and each end point on the continuum is represented by dominance in the one language or the other. Midway on the continuum is the notion of a 'balanced' bilingual, that is, a bilingual who has equal command of both languages (p. 6)

However, she sees the idea of the balanced bilingual as a hypothetical construct, and emphasises that bilinguals rarely have the same degree of proficiency in both languages (Lanza, 1997).

In the literature, the terms bilingualism and multilingualism are often treated as synonyms. However, an increasing number of scholars operate with a clear distinction

between bilingualism and multilingualism, due to, among other things, differences in acquisition. For an increasing number of scholars, a clear distinction between second language acquisition (SLA) and third language acquisition (TLA) has to be drawn based on their views that learning a third language differs from learning a second language in many respects (Jessner, 2008, p. 18). SLA and TLA, and the differences between those two, will be discussed more in depth in section 2.2. Jessner (2008, p. 20) describes the complexity of multilingualism, and the difficulties of defining the concept in short terms. Kemp (2007, p. 241) defines multilinguals as 'experienced language learners who use three or more languages without necessarily having equal control of all domains in all their languages'. In this thesis, the two concepts are treated as separate phenomena. In accordance with Krulatz, Dahl and Flogntvedt's (2018, p. 53) definitions, *bilingualism* refers to 'the ability to use two languages', whereas *multilingualism* refers to 'the ability to use more than two languages'. Hence, a level of proficiency is not specified as a requirement to be defined as bilingual or multilingual. Accordingly, the bilingual speaker is a speaker who has acquired or is acquiring two languages, and the multilingual speaker is a speaker who has acquired or is acquiring more than two languages. The monolingual speaker is a speaker who has acquired or is acquiring one language.

A central concern regarding both bilingual and multilingual speakers is how languages interact in the brain. Across disciplines, there have been debates about whether the languages of the bi- or multilingual speaker should be seen as separate entities, or as parts of an integrated system. However, Haukås (2016, p. 2) argues that 'languages are not stored separately in the brain; they are connected in multiple ways and influence one another in a dynamic system'. Additionally, Herdina and Jessner (2002, p. 28) note that 'language systems do not coexist without influencing each other'. Irrespective of whether there is one system or several systems, there seems to be a consensus that the languages, in some way, influence each other.

Features of bilingual and multilingual speech include, among other things, *code switching*. Grosjean (1982, p. 204) defines this phenomenon as 'the alternate use of two languages in the same utterance or conversation'. Furthermore, he stresses that code switching is an exceptionally common characteristic of bilingual speech, and that it is something naturally occurring which can be observed early in bilingual children's

speech. Lanza (1997, p. 3) expands upon this definition, and defines the term as 'the alternation or mixing of languages within and across utterances in discourse'. The definitions above have considered code switching only between languages. However, switching between dialects, styles or registers are also common (Myers-Scotton, 1998, p. 218). Even though code switching is a common feature in bilingual and multilingual speech, attitudes towards code switching are often negative, and code switching has been labelled *Tex-Mex* (a mixture between English and Spanish), *Franglais* (a mixture between English and French), *Japlish* (a mixture between English and Japanese), etc. Myers-Scotton (1998, p. 217) states that outside the community of researchers on code switching, some still assume that the main reason for code switching is a lack of sufficient proficiency in the opening language, or that the selection of words in code switching from one language rather than another is more or less random.

Nevertheless, authors stress that code switching should be seen as a valuable discourse strategy, and as a sign of communicative competence rather than mere 'errors' (see e.g. Lanza, 1997). Furthermore, the terms code switching, code mixing and language mixing are used interchangeably in the literature on bilingualism and multilingualism, with various meanings by various scholars. The term *translanguaging* has also been used to cover the use of all the linguistic resources a speaker has at their disposal (Horner & Weber, 2012). Wei (2011, p. 1223) uses the term to refer to the process of using one's entire linguistic repertoire 'to gain knowledge, make sense, to articulate one's thoughts and to communicate about using language'. It has also been suggested that translanguaging may be used as a multilingual pedagogy in language education (Canagarajah, 2011; García & Wei, 2014; Krulatz et. al., 2018).

The effects bilingualism and multilingualism have on the speaker, and whether these are positive or negative, have been a matter of disagreement among scholars. Edwards (2006), for example, describes a shift in research. Early studies (around 1900-1920), he states, tended to associate bilingualism with lowered intelligence. However, he argues for reduced validity and reliability in these studies, and he bases this claim on three main factors. Firstly, most of these studies were conducted in America. Secondly, the studies had certain methodological issues. Thirdly, he states that the results stemmed indirectly from social fears of immigrants. A similar point is made by Darcy (1963, p. 279), who emphasises that most studies related to the effect of

bilingualism on the measurement of intelligence from this time period were conducted on Spanish-English bilinguals in America, and on Welsh-English bilinguals in Wales. However, she points to a handful of relevant studies of other bilingual populations. For instance, Kittell (1959) investigated the effects of bilingualism on the measurement of intelligence of elementary school children, and found no significant difference between the mean MAs of the two language groups on a non-language intelligence test. Furthermore, Levinson (1959) compared the scores on four intelligence tests for bilingual and monolingual native-born Jewish pre-school children, and found no significant differences between the mean scores of the two groups on two of the non-verbal tests. However, the 1960s represented a shift with Peal and Lambert's (1962) study of French and English bilingual children in Montreal providing evidence for a positive relationship between intelligence and bilingualism.

Cenoz (2003) provides a detailed review of research on the general effects of bilingualism on cognitive development, with special attention given to the specific effects on third language acquisition. She concludes that studies on the effect of bilingualism on third language acquisition conducted in different contexts tend to associate bilingualism with advantages in third language acquisition. These advantages are particularly relevant in relation to language learning, and are discussed further in section 2.2.

Another term that is commonly used in the literature is the term *plurilingualism*. The term is used by some researchers to indicate individual as opposed to societal multilingualism (Aronin & Hufeisen, 2009, p. 15). Societal multilingualism refers to the linguistic diversity (i.e. societal use of more languages) that can be found in a country (Jessner, 2008, p. 18). Jessner (2008, p. 18) emphasises that in the European context, the use of plurilingualism to denote individual multilingualism has become increasingly common, and she sees the increased usage of this term as a consequence of the European Union's language education policy and enhanced focus on multilingual education. The Council of Europe's language policy has a focus on plurilingualism, and the CEFR defines plurilingual and pluricultural competence as

> the ability to use languages for the purposes of communication and to take part in intercultural interaction, where a person, viewed as a social agent has proficiency, of varying degrees, in several languages and experience of several cultures. This is not seen as the superposition or juxtaposition of distinct

> competences, but rather as the existence of a complex or even composite competence on which the user may draw (Council of Europe, 2001, p. 168).

Concepts such as bilingualism, multilingualism and plurilingualism are used with various meanings within various research fields. However, for the purpose of this thesis, only the terms bilingualism and multilingualism will be used, although the usage of multilingualism might partly overlap with the purpose of the term plurilingualism as defined by CEFR.

2.2 SLA and TLA

Several scholars have suggested that a clear distinction should be made between SLA and TLA, arguing that TLA differs from SLA in many respects (see e.g. Cenoz, 2003; 2013; Cenoz, Hufeisen & Jessner, 2001; Jessner, 2008). Typically, SLA refers to a second language that is learned chronologically after the first language (Cenoz, 2013, p. 73). With TLA, Haukås (2016) uses L3 learning and multilingualism synonymously, with reference to Cenoz' (2003, p. 71) definition 'the acquisition of a non-native language by learners who have previously acquired or are acquiring two other languages'. The acquisition of the first two languages can be either *simultaneous* (as in early bilingualism) or *consecutive* (as in successive bilingualism) (Cenoz, 2003, p. 71). Thus, a typical example of L3 learners would be bilingual children learning an L3 at school from an early age. The terms *learning* and *acquisition* are used synonymously in this thesis.

Although TLA shares many characteristics with SLA, authors have identified important differences between the two paradigms (see Cenoz, 2013; Jessner, 2008). These differences stem from the fact that at the beginning of the process of acquiring a second language, TLA learners are bilingual speakers and SLA learners are monolingual speakers. By being bi- or multilingual, third language learners have at least two languages in their linguistic repertoire. Since they have experience with acquiring a second language they may thus be seen as more experienced language when compared to monolinguals. According to Haukås (2016, p. 384) there is, within the field of TLA, a 'general consensus that previous language learning experience facilitates additional language learning'. TLA learners are influenced by the general effects of bilingualism

on cognition, and they have access to two linguistic systems when acquiring a third language (Cenoz, 2003, p. 71).

Cenoz (2003) provides a thorough review of studies on the effects of bilingualism on cognitive development, and she concludes that studies on the effect of bilingualism on TLA tend to confirm the advantages of bilinguals over monolinguals in language learning. The advantages of bi- and multilinguals over monolinguals in relation to language acquisition have centred around three factors in particular: metalinguistic awareness, learning strategies, and a broader linguistic repertoire that is available in TLA as compared to SLA. Jessner (2008, p. 277) argues that the differences between SLA and TLA can be related to an increased level of metalinguistic awareness, which she defines as 'the ability to focus on linguistic form and to switch focus between form and meaning'. Furthermore, she states that a higher degree of metalinguistic awareness may be found amongst bi- and multilinguals, and she explains that 'individuals who are metalinguistically aware are able to categorise words into parts of speech; switch focus between form, function and meaning; and explain why a word has a particular function' (Jessner, 2008, p. 277). Haukås (2014) discusses the relevance of metalinguistic awareness and awareness of learning strategies in relation to language learning. She states that learners who reflect on their own language learning and who are aware of which strategies are suitable in different situations also achieve better results as compared to those learners who to a lesser extent reflect on their own language learning (Haukås, 2014, translated from Norwegian by author, SN). She furthermore indicates that various studies have shown that multilinguals demonstrate superior metalinguistic and metacognitive abilities, such as the ability to draw comparisons between different languages and to reflect on and employ appropriate learning strategies (Haukås, 2016, p. 1).

However, there are also misconceptions concerning the bi- or multilingual's ability to acquire additional languages, as have been highlighted by several authors. As an example of such misconceptions, Cenoz (2003, p. 72) mentions the common belief that additional languages are acquired more easily by bilinguals and multilinguals than by monolinguals. According to folk wisdom, the more languages a speaker knows, the easier it is for this speaker to acquire additional languages. In relation to children's ability to acquire two languages simultaneously, Lanza (1997, pp.

73-74) introduces two similar misconceptions, the first being that 'children learn language so quickly and, consequently, can pick up anything around them with the least amount of effort'. Furthermore, the second states that:

> language acquisition is such a delicate process that children must not risk being exposed to more than one language at the same time. Otherwise they will end up not having learned either of them properly, and will never be able to think or express themselves clearly (Lanza, 1997, p. 74).

Nevertheless, such oversimplifications do not account for the complexity of language acquisition. The process of language acquisition, as well as its outcome, might be diverse and dependent on a number of factors. Several authors have argued that TLA is highly complex in comparison to SLA. With the increased number of languages included in the learning situation one may also expect increased complexity. As introduced in the beginning of this chapter, the bilingual speaker acquires two languages either simultaneously or consecutively. Cenoz' (2003) model illustrates that with three languages, there are (at least) four different ways these may be acquired:

> The three languages can be acquired consecutively (L1 → L2 → L3); two languages could be acquired simultaneously before the L3 is acquired (Lx/Ly → L3) or after the first language (L1 → Lx/ Ly) or the three languages could be acquired simultaneously in early trilingualism (Lx/Ly/ Lz) (p. 72).

The process of language acquisition may be complex, and it has also been said to be influenced by sociolinguistic, psycholinguistic and educational factors. It has been suggested that certain conditions must be met for learners to benefit from their status as bilinguals. Cenoz (2003), for example, introduces two factors that may be said to influence the outcomes of TLA. She emphasises that the outcomes of TLA may be positive or negative depending on the conditions in which TLA takes place. Firstly, the context is important. She refers to Lambert (1974) who introduces the idea of additive and subtractive bilingualism. *Additive bilingualism* is associated with positive cognitive effect when the first language is valued, and when acquisition of a second language does not replace the first language. The opposite situation would be *subtractive bilingualism*, which is associated with negative cognitive effect. Subtractive

bilingualism often implies a society in which one language is valued more than the other, where one dominates the other (Edwards, 2006, p. 11). Secondly, the outcomes of bilingualism may also be explained in relation to proficiency. Cenoz refers to Cummins' (1976) threshold hypothesis. According to this hypothesis, a speaker must attain a certain level of proficiency in order to benefit from the cognitive advantages that are associated with bilingualism (Jessner, 2008, p. 29). In relation to these two factors, context and proficiency, Cenoz (2003) states the following:

> The sociolinguistic context and the level of bilingual proficiency can explain why learners with a minority language as their first language have advantages when their L1 is valued in society and they have acquired literacy skills in their L1 as it is reported in most of the studies on the general effects of bilingualism (p. 82).

Similarly, Bono and Stratilaki (2009) investigated learners' representations regarding the existence of a *plurilingual asset*, which they defined as plurilinguals' 'strategic advantage for further language learning and use' (Bono & Stratilaki, 2009, p. 207). They investigated the sociolinguistic conditions that must be met for learners to perceive their multilingualism as an asset in education. Firstly, they introduced several personal and psychological factors that must be met for pupils to progress in language learning. These include factors such as motivation, perceived communicative needs and anxiety. Secondly, the choices of the institution, such as language curricula and teaching methodology, may have an impact on the learners when it comes to their willingness, or reluctance, to rely on previous knowledge and to transfer resources from one context to another (Bono & Stratilaki, 2009, p. 212). Lüdi and Py (2002, p. 181) state that such conditions include positive attitudes towards the languages as well as the communities speaking these languages, liberal representations about linguistic variation and acceptance of non-standard forms.

Thus, in relation to the classroom context, in order for pupils to benefit from their linguistic background, the languages the pupils know should be appreciated and made available. One may argue that bi- or multilingualism does not automatically become a resource, but that certain conditions must be met so that learners may benefit from having a broad linguistic repertoire. All languages must be made available, and they should be used as resources that bi- and multilinguals might benefit from in their

processes of further language learning.

2.3 Multilingualism in Norway

Norway has been a linguistically diverse country for centuries. This diversity has been further expanded through the process of globalisation, broadly defined as 'the strengthening of worldwide interconnectedness in terms of society, culture, economy, politics, spirituality, and language' (Galloway & Rose, 2015, p. 11). With globalisation, we experience increasingly more interaction between people from different parts of the world. In addition, Norway, like many other Western European countries, is seeing a growing number of immigrants and refugees, leading to an increasingly multicultural and multilingual population (Statistics Norway., 2018).

Krulatz et al. (2018, pp. 21-23) distinguish between three groups of people representing various minority languages. Firstly, there is the minority group referred to as *indigenous people*. In the Norwegian context, the Sami have this special status. Furthermore, there are several varieties of spoken Sami, and there are three written Sami standards in Norway. These are North Sami, South Sami and Lule Sami. Secondly, there are minority groups that are referred to as *regional minorities*. Their languages are recognised as *national minority languages*, and in the Norwegian context these are the Kven people, Forest Finns, Norwegian Romani, Romanes, and Jews. In addition to these two groups of minority languages, there are the first languages of all the recent immigrants to Norway. Their languages are commonly referred to as *more recent minority languages*. These constitute a large group of minority languages today. Approximately 17.3 per cent of Norway's populations are immigrants or the children of immigrants (Statistics Norway., 2018), and there are more than 150 more recent minority languages in Norway (Språkrådet, 2013, p. 1).

There is also great variation in relation to the majority language of Norway. Norwegian has two official written standard languages, *Nynorsk* and *Bokmål*. In addition, Norway is also a country of a great variety of different dialects. The two standard written varieties are mutually intelligible, and this is also the case for most of the spoken dialects in Norway.

2.4 A Multilingual Pedagogy

The fact that Norway is becoming an increasingly multilingual country is also reflected in the diversity of Norwegian classrooms. It is becoming increasingly important to implement a multilingual pedagogy to meet all pupils' needs in relation to language learning. However, many teachers report little experience with working with pupils of multilingual backgrounds (Dahl & Krulatz, 2016; Krulatz & Torgersen, 2016). One may argue that introducing a multilingual pedagogy is beneficial for both mono-, bi- and multilingual pupils, as it might increase their curiosity and motivation for further language learning.

A common example of TLA refers to bilingual speakers learning a third language at school from an early age. In Norway, children are taught English from their first year of primary school. Thus, Norwegian pupils who are being raised bilingually learn English as a third language. However, many Norwegian pupils are also bilingual with English as their first or second language, and these are not considered TLA-learners. Pupils whose first language is not Norwegian (or English) are acquiring English in addition to Norwegian, and are thus also learning English as their third language. However, the majority of pupils in Norway acquire English as a second language, and they are introduced to their third language in lower secondary school.

Krulatz, Dahl, et al. (2018) provide a summary of various pedagogical strategies that may be used to implement a multilingual pedagogy in the English classroom. For instance, translanguaging may be used as a pedagogical strategy in language learning. When teachers and learners engage in translanguaging in the classroom, they include all of the languages spoken by anybody in the group in various activities to raise language awareness and foster a multilingual ELT classroom. When pupils engage in translanguaging, their 'knowledge of languages other than the majority language of the school is nurtured as a valuable resource which can advance more extensive cognitive, academic, emotional and creative engagement of these very learners' (García & Wei, 2014, p. 126). Furthermore, translanguaging can be introduced through different activities, for instance by reading multilingual texts, multilingual writing, highlighting and working with cognates, and working in collaborative groups (García & Wei, 2014, p. 120).

Krulatz, Steen-Olsen & Torgersen (2018) suggest the use of identity texts in the classroom as a way to strengthen awareness of cultural and linguistic diversity. *Identity texts* as a pedagogical approach is defined as an approach which 'promotes cross-language transfer, literacy engagement and identity development through the creation of spoken, written, musical, dramatic, or multimodal texts in contexts where multiple languages and cultures are present in the classroom' (Krulatz et al., 2018, p. 556). Furthermore, they state that examples of identity texts may include dual-language books and bilingual stories. More specifically, in a project that aimed to support language teachers to develop teaching strategies that foster multilingualism, they introduce the following ideas for identity texts:

> an identity poster about yourself or a friend; a picture book about learning and play both at school and at home; a video-diary of a series of school days; class visits by adults from the community; sharing stories and fairy tales from other countries and cultures; and an 'identity week' consisting of several activities such as drama performances, storytelling, story writing and culinary activities (Krulatz et al., 2018, p. 561).

A multilingual pedagogy, as the term is understood and applied in this thesis, can be understood in relation to FREPA's (*A Framework of Reference for Pluralistic Approaches to Languages and Cultures*) term 'pluralistic approaches to languages and cultures', which refers to didactic approaches that use teaching/learning activities involving several (i.e. more than one) varieties of languages or cultures. Such approaches are to be contrasted with *singular* approaches, in which the didactic approach takes into account only one language or only one particular culture, and deals with it in isolation (Candelier et al., 2012, p. 6). FREPA introduces several linguistically oriented approaches, which include *integrated didactic approaches to different languages*, the *intercomprehension of related languages* and *awakening to languages* (Candelier et al., 2012, pp. 6-7). The first approach, termed *the integrated didactic approach*, aims to help learners to establish links between a limited number of languages which are taught within the school curriculum. In this approach, a first foreign language is acquired with the help of the first language (or the language of education), and these two languages are then used as the basis for learning an additional foreign language. With the second approach, termed *the intercomprehension between*

related languages, the learner works with several languages from the same linguistic family (for instance, between Germanic languages, Roman languages, etc.). These languages may be either the learner's first language, the language of education, or another language the learner has previously learnt. These approaches primarily focus on receptive skills, and thus involve listening and reading. The third approach, *awakening to languages*, differs from the two previous methods in that it is defined and used 'to describe approaches in which some of the learning activities are concerned with languages which the school generally does not intend to teach' (Candelier et al., 2012, p. 7). Moreover, the approach involves the language of education and any other language that is in the process of being acquired, and includes all sorts of linguistic varieties. These varieties may include languages the pupils are exposed to in various contexts. In particular, this approach is linked to raising language awareness.

A multilingual pedagogy involves raising awareness of linguistic diversity and linguistic equality. All languages should be acknowledged, and the languages the pupils know should be considered a valuable asset for learning additional languages. This may be seen as a more inclusive learning environment, and a way to promote multilingualism. Also, with reference to how languages interact in the brain of the bi- and multilingual, Haukås (2016, p. 2) notes that 'rather than attempting to maintain learners' languages in isolation, teachers should help learners to become aware of and draw on their existing knowledge'. She also notes that learners should be encouraged to draw on experiences from previous language learning, and apply these strategies to learning a new language. It is important to note that a multilingual pedagogy is something all pupils might benefit from. As Krulatz et al. (2018) point out, monolinguals may become more aware of the linguistic and cultural diversity around them, and this might increase their curiosity and motivation for learning other languages.

2.5 Multilingualism in the English Subject Curriculum

In Norway, English is taught as a compulsory second language in primary, lower secondary and upper secondary school. The 2006 English subject curriculum is divided into the subsections *purpose*, *main subject areas*, *teaching hours*, *basic skills*,

competence aims and *assessment* (Utdanningsdirektoratet, 2013). These subsections are introduced in the following sections in order to observe and discuss to what extent there is a multilingual focus to be found.

In the subsection *purpose*, multilingualism is mentioned as the section states that 'learning English will contribute to multilingualism and can be an important part of our personal development' (Utdanningsdirektoratet, 2013, p. 2).

Within the subsection *main subject areas*, language learning is listed as one of the main aspects. It is stated that this subject area 'focuses on what is involved in learning a new language and seeing relationships between English, one's native language and other languages' (Utdanningsdirektoratet, 2013, p. 3).

The subsection *competence aims* lists various competence aims after years 2, 4 and 7 in primary school, year 10 in lower secondary school, and after Vg1 (first year of upper secondary school) in programmes for general studies and Vg2 (second year of upper secondary school) in programmes for vocational education programmes. One might expect this section to reflect the multilingual focus that was introduced in the previous subsections. In relation to language learning, there is a competence aim after years 2, 4, 7 and 10 that expects the pupils to see differences and similarities between English and his/her native language with regard to words and expressions (Utdanningsdirektoratet, 2013). This aim has a certain multilingual focus as it draws on the pupils' various native languages, and not exclusively on Norwegian. However, no equivalent aim is to be found in the competence aims after Vg1.

The Norwegian Directorate for Education and Training is currently working on new curricula for primary, lower and upper secondary school, and has published a draft of the new curriculum which will be implemented in 2020 (Utdanningsdirektoratet, 2018). The new curriculum consists of a core curriculum and new subject curricula (*fagfornyelse*). A summary of the new subject curriculum for English where it focuses on multilingualism are provided in the following section.

In the new subject curriculum for English, *fagfornyelsen*, the subsection *competence aims* lists various competence aims after years 1, 2, 4 and 7 in primary school, year 10 in lower secondary school, and after Vg1 in upper secondary school. A competence aim similar to the one that was discussed in the previous section can also be found in the new curriculum. However, this aim was originally introduced after year 2

in the current curriculum(LK06), but is now included from after year 1 in the new curriculum. It can also be found after Vg1, from which it was excluded in the current curriculum. The same aim may also be said to have a broader multilingual focus now, as the wording has been changed from finding similarities and differences between English and 'one's native language' to 'other languages the pupil knows'. It is also noted from after year 1 that the pupils should be aware of the fact that there exist various languages. Furthermore, from after years 4, 7 and 10, and after Vg1, it is also stated that the pupil should be able to make use of bi- and multilingualism as a resource.

In sum, one can observe progress in the English curriculum in relation to multilingualism from the 2006 curriculum to *fagfornyelse* which will be implemented in year 2020. The new curriculum has extended its multilingual focus, which is evident in several aspects. Firstly, there is a development from solely focusing on English and each pupil's first language, to a focus on English and other languages. This may be seen as a more inclusive and thorough attempt to encourage the pupils to draw from their entire linguistic repertoire when learning English. Secondly, there is an attempt to increase general language awareness and to understand and make use of multilingualism as a resource.

2.6 Previous Research

As indicated in chapter 1, not much research has been carried out in relation to student teachers' knowledge, experience, and attitudes related to multilingualism and a multilingual pedagogy. Nevertheless, multiple studies related to teachers' attitudes are available, and some of the key findings are presented below.

In the European context, several studies have focused on teachers' attitudes in relation to multilingualism, as well as their preparedness to teach in a multilingual classroom (see e.g. De Angelis, 2011; Otwinowska, 2014). As summarised by Haukås (2016), the European studies reveal similar findings:

> The teachers in all countries have positive beliefs about multilingualism and think that multilingualism should be promoted. However, they do not often foster multilingualism themselves in classroom teaching (i.e. they do not often make use of learners' previous linguistic knowledge in their own classrooms) (p. 4).

Similar studies on teacher's attitudes have been conducted in the Norwegian context (e.g. Dahl & Krulatz, 2016; Haukås, 2016; Krulatz & Torgersen, 2016.). Through a national survey completed by 176 teachers, as well as in-depth interviews with four teachers from two different schools, Dahl and Krulatz (2016) investigated Norwegian English teachers' preparedness to work with children whose first language is not Norwegian, and who are acquiring English as a foreign language. Based on their results, they conclude that English teachers feel 'somewhat prepared to work with students who are not native speakers of Norwegian, but that very few had an education with focus on multilingualism'. They also found that 'the participants would like to have more expertise in this area' [translated from Norwegian to English by author, SN].

Also, the teachers in Haukås (2016) study seem to express positive attitudes towards multilingualism. The study was based on data collected via focus group discussions with 12 teachers of French, German and Spanish. The teachers were actively involved in helping pupils become aware and make use of previous language knowledge. However, awareness-raising activities were restricted to the use of knowledge from Norwegian and English, and the teachers did not make use of additional languages. The teachers also believed they would need to be proficient in the additional languages before they could encourage the pupils to draw on their knowledge of those languages in their classes.

To my knowledge, little research has focused on student teachers' attitudes towards multilingualism and their beliefs about a multilingual pedagogy. Only Surkalovic (2014) investigated the preparedness of students enrolled at the English teacher education program (*grunnskolelærerutdanning*) in Oslo. Based on 94 students' responses to a survey, she investigated the students' preparedness to work with pupils with other first languages than Norwegian. Based on her results, she concluded that although the students understood the importance of having a broad understanding of language, they did not have the adequate knowledge about the linguistic situation in Norway or of language in general. She concludes that the level of knowledge and competence among future English teachers should be strengthened [translated from Norwegian to English by author, SN].

To my knowledge, most Norwegian studies have focused on teachers' beliefs and attitudes, and little research has been conducted regarding student teachers' attitudes. The current study differs from previous studies in that it investigates the attitudes of student teachers enrolled at various teacher education programs at five different universities/university colleges in Norway. In addition to investigating attitudes, the study also investigates the student teachers' knowledge and experience related to multilingualism and a multilingual pedagogy. Thus, it is a study of student teachers' *approaches* to multilingualism. These aspects are investigated by applying a mixed method approach, a web-based questionnaire which collects both quantitative and qualitative data.

3 Material and Methods

The following chapter provides an overview of the method(s) used in this study to investigate student teachers' approaches to multilingualism. The aim of the study is threefold; it seeks to investigate their knowledge, experience and attitudes. The study seeks to answer the following three research questions:

1. To what extent do student teachers have knowledge of multilingualism and a multilingual pedagogy?
2. To what extent do student teachers have experience with a multilingual pedagogy?
3. What attitudes do student teachers express towards multilingualism and a multilingual pedagogy?

Section 3.1 describes the material of this study, and section 3.2 provides a description of qualitative, quantitative and mixed methods. Further, section 3.3 focuses on ethical considerations. Section 3.4 presents the choice of research design, and why a mixed method approach was applied in this study. A questionnaire was developed to investigate the topic, and within this section there are subsections about the questionnaire design (3.4.1), followed by a discussion of limitations with the questionnaire that was used in this study (3.4.1.1). The section also describes the pre-pilot and pilot studies (3.4.2), the sampling strategy that was used (3.4.3), the process of how the survey was conducted (3.4.4), as well as common challenges in survey studies in general, and how some of these challenges are relevant to the current study (3.4.4.1). Section 3.4.5 describes the sample of participants. Lastly, section 3.5 elaborates on the analyses of quantitative (3.5.1) and qualitative data (3.5.2).

3.1 Materials

The data material of this study was collected through a web-based questionnaire that was sent to three universities and two university colleges in Norway. In total, 102 students completed the questionnaire. The questionnaire consisted of a combination of

closed and open-ended questions, which means that both quantitative and qualitative data were collected. Further details about the materials are presented in the following sections.

3.2 Methods

The choice of methods for a study is highly dependent on what the researcher wants to investigate. Thus, the choice of methods depends on the objectives of the study, namely the type of research questions as well as the overarching aim. What the researcher seeks to investigate and how the research is carried out may be defined within the quantitative/qualitative dichotomy. However, the researcher may also use a combination of approaches and the method may thus be difficult to define as either belonging to the quantitative or the qualitative paradigm. While planning a research project, it is crucial to consider which method(s) might be suitable to acquire sufficient information of what we want to investigate.

In research methodology, a main division is typically made between qualitative and quantitative methods. As indicated by Dörnyei (2007), there has been controversy as to how to distinguish between qualitative and quantitative methods, as the division between the two research methods might not be all that clear. On the one hand, one might state that qualitative methods are suitable for in-depth understandings of how a small group of people think and behave in a specific context, in relation to a specific topic. Quantitative methods, on the other hand, are suitable for making generalisations about a larger sample of people. Thus, a mixed method approach is one that combines both quantitative and qualitative methods. More specifically, Leech and Onwuegbuzie (2009, p. 265) state that conducting mixed method research involves 'collecting, analysing, and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon'.

There are strength and weaknesses associated with both quantitative and qualitative methods. At its best, quantitative research is 'systematic, rigorous, focused, and tightly controlled, involving precise measurement and producing reliable and replicable data that is generalisable to other contexts' (Dörnyei, 2007, p. 34). Quantitative research often requires a slightly longer preparation period than qualitative

research, but the research process is often relatively time-efficient (Dörnyei, 2007, p. 34). However, as one of the limitations associated with quantitative research, Dörnyei (2007, p. 35) states that the general exploratory capacity of quantitative research might be seen as rather limited since it relies on averages and does not account for the subjective variety of an individual life. This means that the method does not uncover the reasons behind particular observations. Thus, one might say that quantitative methods investigate *what* and *to what extent* and does not really investigate *how* and *why*.

Qualitative research, however, typically has a relatively small sample size and is thus not suitable for generalisations. Furthermore, qualitative research is often time-consuming and labour-intensive. However, as stated by Silverman (2006, p. 56), the methods used by qualitative researchers exemplify a common belief that they may provide a 'deeper' understanding of a social phenomenon that would be obtained with a quantitative methodology. Qualitative research aims to provide a more complete understanding of diverse phenomena by answering questions related to *why* and *how*. There nevertheless seems to be some disagreement concerning the main characteristics of qualitative methods, and this is emphasised by Silverman (2006, p. 56), who states that 'there is no agreed doctrine underlying all qualitative social research'. However, Dörnyei (2007, p. 37) identifies several characteristics of qualitative research, and he states that it often works with a wide range of data, takes place in a natural setting, and is concerned with subjective opinions which the researcher interprets and analyses. Another potential weakness associated with the method is the issue concerning the researcher's role in analysing the data, as the results may be influenced by the researcher's beliefs and biases.

As an attempt to decrease the limitations of each of these two paradigms, and to thus enhance their strengths, an increasing number of scholars propose the use of a mixed methodology in linguistic research. Cohen, Manion, Morrison, and Bell (2011, p. 22) state that mixed methods research 'recognizes, and works with, the fact that the world is not exclusively quantitative or qualitative; it is not an either/or world, but a mixed world'. Denscombe (2010, p. 140) argues for improved accuracy with the use of mixed methods in research, as the approach provides the researcher with the opportunity to check the findings from one method against the findings from a different method. One may thus argue for increased validity in a study, if findings from both quantitative

and qualitative methods coincide. Furthermore, the use of a mixed method can enhance the findings of research by providing a fuller description and more complete explanation of phenomenon that is being studied (Denscombe, 2010, p. 150).

3.3 Ethical Considerations

In the current study, data collection was conducted in accordance with the ethical guidelines presented by *The Norwegian Center For Research Data*, who had confirmed that a formal ethical review was not necessary, since Enalyzer conceals each respondent's IP address, and other background information that could potentially reveal their identity. Written consent to collect and publish the data was not sought for since consent was implied by each participant's choice to participate and complete the survey after having read the information provided in the introduction of the survey, and because the survey was anonymous. This information also stated that they could at any time retreat from the survey.

3.4 Choice of Research Design

The current study is based upon combining quantitative and qualitative methods through a questionnaire survey with closed and open-ended questions. Thus, the study represents a combination of both quantitative and qualitative research designs, and therefore constitutes a mixed methods design. To acquire both information about a large number of participants, as well as in-depth information about the topic, a mixed method approach seemed suitable for this study. As discussed in the previous section, applying a mixed method may provide a more complete picture of the student teachers' knowledge, experience and attitudes, and may increase the overall validity of the study. The participants in the study were student teachers enrolled at different English teacher education programs at three universities and two university colleges in Norway. The survey was open for access from 10 October 2018 until 14 November 2018.

3.4.1 Questionnaire Design

The questionnaire sought to obtain information that could answer all three research questions by gathering information about the student teachers' knowledge, experience and attitudes related to multilingualism and a multilingual pedagogical approach. The questionnaire was mainly intended to collect quantitative information from the participants through the use of questions (both closed and open-ended) and Likert scales. The use of closed and open-ended questions and Likert scales will be explained below.

The process of formulating questions is complex. A general requirement for a good questionnaire is inclusion of questions which the respondents will perceive as clear and logical. The process of designing the questionnaire in the current study may be divided into several stages. Having a clear aim and research questions for the study, as well as having a broad understanding of the relevant theoretical background (see chapter 2), was crucial. In addition, searching for information and methods from studies that had already been conducted was important. For the current study, questions from studies such as Dahl and Krulatz (2016), De Angelis (2011), Haukås (2016), Otwinowska (2014) and (Wang, 2019) were consulted. Some questions from these studies were adopted and integrated into the questionnaire, and others were reformulated to fit this particular group of participants. Also, additional questions were formulated to cover all components of the research questions. When formulating questions, it is important to always make sure that these correlate with the study's research questions.

The questionnaire was divided into two separate parts. Part A of the questionnaire included different questions which will be explained in turn. Part A included closed questions, which are questions that 'structure the answers by allowing only answers which fit into categories that have been established in advance by the researcher' (Denscombe, 2010, p. 166). In the current questionnaire, the options vary to some degree according to the question. Some questions include options such as *Yes*, *No*, and *Not sure*, other questions includes categories such as *Male*, *Female*, *Other*, and some questions include lists of alternatives from which the respondents may choose.

The participants were first presented with several questions that sought to acquire background information about each participant. This background information

included demographic variables such as age and gender, as well as language background, level of education and study program. These questions were included to control that all variables were represented in the sample, so as to make sure that the sample was as representative as possible. The questions furthermore sought to obtain information about the participants' perceptions of themselves, related to language background and experience. For instance, do they see themselves as multilingual speakers, and do they have any motivation for learning additional languages? They were also asked whether they had ever been introduced to the topic of multilingualism, multilingual teaching strategies, and whether they had come across multilingual literature on the syllabus in their studies. These next questions aimed to outline the students' knowledge of key terms that are common within multilingualism and a multilingual pedagogy. The students were first presented with these terms, and they were asked to specify whether these were terms they were familiar with. They were then asked to write short definitions of how they understood the terms they had reported on being familiar with in an open-ended question. In the second open-ended question, the participants were asked whether they had ever used a multilingual pedagogical approach themselves, and if not, how they think this could be done.

Part B of the survey was solely based on Likert scales. In this section, the respondents were presented with various statements to which they were asked to indicate to what extent they agreed or disagreed. The respondents were asked to rate these statements based on a scale from 1-5 (*strongly disagree*, *disagree*, *agree*, *strongly agree* and *don't know*). For instance, the students were presented with statement 6 'I will not allow my future pupils to speak other languages than English during English class', and they were asked to choose between the alternatives *strongly disagree*, *disagree*, *don't know*, *agree* and *strongly agree*.

Most of the statements that were used to collect data in part B of the survey were adopted from the questionnaire used in De Angelis (2011). Most of the statements that were deemed relevant, however, were modified to suit this particular group of participants. Several new statements were also introduced, and these were formulated based on results from other relevant studies. All statements were grouped in four different categories, three of whom were adopted from De Angelis (2011). The following categories were used: 'The role of prior language knowledge in language

learning', 'Perceived usefulness of language knowledge', 'Teaching practices' and 'Perception of Preparedness'. Each category will be explained individually below.

The first category of statements 'The role of prior language knowledge in language learning' includes five statements. All statements in this category were taken from De Angelis (2011). Statement 2 'Pupils who know several languages are also those who achieve better results across disciplines' is one of the statements that were taken from De Angelis (2011). In her study, she finds that for most teachers, language knowledge is not associated with better school results across disciplines. Furthermore, she explains that immigrant students seem to underperform when compared to native speakers and that this is often due to language difficulties. In the Norwegian context, Krulatz and Torgersen (2016, p. 55) make a similar observation. They point out that students of minority language backgrounds tend to show poorer achievement in disciplines such as Norwegian, English and math. Furthermore, results from De Angelis (2011) indicate that teachers in her study have misconceptions about the way languages interact in the main, and they tend to see languages as separate entities and believe that one language may somehow interfere with the learning of another. It was therefore interesting to see whether Norwegian student teachers share similar beliefs. Statements 3 'Pupils should learn one language at a time', 4 'The frequent use of other languages delays the learning of English' and 7 'The frequent use of other languages than English during English is a source of confusion for the pupil' were included to evaluate the student teachers' beliefs about language acquisition and how languages interact in the mind. Furthermore, statement 14 'Knowledge of English helps to learn other languages' was included to investigate whether the students see knowledge of English as a facilitator of multilingualism. As introduced in section 2.2, there is, within the field of TLA, a consensus that previous language experience facilitates further language learning (Haukås, 2016, p. 384).

The second category of statements 'Perceived usefulness of language knowledge' includes two statements. In this category, both statements have been taken from De Angelis (2011). Statement 5 'In our society it is important to know several foreign languages' was included to investigate whether, and to what extent, knowledge of various foreign languages is considered important by the student teachers. Their responses to this statement are thought to reflect how positive or negative they are

towards multilingualism in general, and whether multilingualism is considered important in the Norwegian society. Statement 1 ‘Pupils who are familiar with several languages will have more opportunities to succeed in their professional life’. This statement was also included to explore whether, and to what extent, the students perceive multilingualism as providing more opportunities in the professional life. The students’ responses to this statement are also thought to reflect whether multilingualism is considered particularly useful in their opinion.

The third category ‘Teaching practices’ includes four statements. In this category, all statements have been taken from De Angelis (2011). Statement 6 ‘I will not allow my future pupils to speak other languages than English during English class’ was included to ascertain how many students will not allow use of languages other than English in the ELT classroom. In De Angelis (2011), there is a large number of teachers who claim not to allow pupils to speak their home language in class. To assess whether the student teachers share similar beliefs, they were also presented with statement 8 ‘The ideal English classroom is one where English is the only language that is used’. Statement 9 ‘In the English classroom, teachers should make room for other languages’ was furthermore included as representing the opposite view. However, the two are not necessarily mutually exclusive, as teachers may refer to other languages for illustrative purposes although they are only using English. However, one may argue that a multilingual pedagogy is not fully acquired without including some kind of incorporation of additional languages, either by pupils, teacher or both. Therefore, agreement with statement 8 and disagreement with statement 9 will be considered as not in favour of a multilingual pedagogical approach. Statement 12 ‘To be able to make use of additional languages in English teaching, the teacher must have some basic knowledge of these languages’, was included due to the results from De Angelis (2011) which indicate that many teachers seem to believe that the teacher must be more or less proficient in a language to be able to make use of it in the classroom. Similar beliefs were also found among teachers in (Haukås, 2016). As this belief seemed to be a general tendency among many teachers, it was therefore considered relevant to explore whether the same belief is rooted among student teachers.

The fourth category ‘Perception of preparedness’ includes three statements. These statements were formulated based on findings from previous studies of teachers’

attitudes related to multilingualism and a multilingual pedagogy. Firstly, statements 10 'I feel sufficiently prepared to teach English to multilingual pupils' and 11 'I feel sufficiently prepared to teach English to pupils to whom Norwegian is not their first language' were included to deny or confirm if the same tendencies are present in the group of student teachers as were found in previous studies of teachers. Research conducted by Dahl and Krulatz (2016) and Krulatz and Torgersen (2016) found that many teachers do not feel prepared to educate pupils who have other first languages than Norwegian, and thus acquire English as a third language. Lastly, statement 13 'I would like more input on topics related to multilingualism in my studies' was included based on Dahl and Krulatz (2016), who found that most teachers in their study would be interested in additional input/education related to multilingualism and a multilingual pedagogy.

3.4.1.1 Limitations with the questionnaire

A combination of questions (closed and open-ended) and Likert scale seemed suitable and practical for acquiring the adequate information about the participants of this study. The reasons for choosing a combination of questions was to aim to provide the participants with a flexible questionnaire to which they had the chance to answer more freely and according to their honest opinions. However, as with every design, there are certain limitations to the combination of questions that were used in this questionnaire as well. These will be discussed below.

In part B of the questionnaire, the participants were presented with questions that might have seemed to occur in a more or less haphazard order. However, the order of the questions was decided based on the suggestion made by Denscombe (2010, p. 164), that a respondent might quit the survey if immediately faced with very complex questions at the beginning of a questionnaire. Nevertheless, the respondent may also feel the urge to quit if he/she is presented with a questionnaire that starts with straightforward questions and then gradually moves towards such questions at a later stage. Therefore, in the current questionnaire, questions that seemed easy to answer were distributed from start to end of part A of the survey, so that a more complex question was followed by an easier question. For example, the respondents were asked to specify age and gender towards the end of questionnaire part A. Denscombe (2010, p.

164) points out two additional potential advantages with variety in a survey questionnaire. First, it prevents the respondent from becoming bored. Second, it prevents the respondent from falling into a 'pattern' of answers. For instance, it prevents him or her from on a scale from 1 to 5 to put 4 down as the answer to all questions.

With some of the questions in the first part of the questionnaire, the participants were presented with nominal questions with several alternatives they had to choose from. Several of these simply included the alternatives *yes*, *no* and *not sure*. The third option was included to provide the participants with the opportunity to express a neutral response, no opinion, or insecurities about the question. By choosing this alternative, the respondents were asked to specify or elaborate. Thus, the respondents had the chance to freely express genuine, honest beliefs and not only choose from fixed alternatives that were set by the researcher. This was also done as an attempt to avoid early drop-outs, as respondents may feel the urge to leave the survey if they feel they are presented with alternatives that do not coincide with their own opinions. This claim is supported by Denscombe (2010, p. 170), who states that pre-coded questions can be frustrating for respondents and therefore deter them from answering.

The questionnaire also included open-ended questions. One of the strengths of open-ended questions is that when the participants are asked to provide free-text answers not based on set alternatives, one may achieve more honest, genuine opinions on a certain topic. However, when using open-ended question, there is the risk that the respondents might feel the urge to leave the questionnaire. Many respondents might not want to spend too much time on answering questionnaires or for other reasons might not want to write a free text response. A lot of open-ended questions demand more effort on the part of the respondents, and might thus reduce their willingness to take part in the research (Denscombe, 2010, p. 165). Therefore, in these questions, a skip-setting was included which allowed the participants to not answer the question and move on to the next one. This was done to reduce drop-out quotas.

Part B of the survey was merely focused on the students' attitudes, and sought to obtain information with the help of Likert scales from 1-5. As introduced in section 3.4, the respondents were asked to rate these statements based on a scale from 1-5. The alternative *don't know* was included to provide the respondents with the opportunity to express potential non-attitudes, or insecurities or doubts concerning the statements.

Therefore, the inclusion of this alternative was also an attempt to reduce drop-out quotas. The reasoning for choosing this scale was that including the fifth alternative would provide the respondents with a chance to express neutral opinions. While the researcher deemed this alternative as a suitable alternative for expressing a neutral response, one participant commented on the last free-text response that it might not be suitable:

> *By not having a neutral answer in the last part of your survey, you make people either give you an unrealistic answer to your "do not know" category, or make them either agree or disagree (completely).*

Thus, the medial alternative *neither agree nor disagree* might have been a more appropriate alternative for this study.

The statements that were included had been carefully formulated by the researcher. Some of the statements were so-called 'opposing statements'. The following two statements form an example of such statements. For instance, the respondents were first presented with the statement 'The ideal English classroom is one where English is the only language that is used', and they were later presented with the opposite statement 'In the English classroom, teachers should make room for other languages'. This was included to see to what extent the students gave consistent answers, or if they 'tended to agree'. If one participant, for instance, choose to agree with the first statement, him/her would also be expected to disagree with the latter statement. In addition, some statements had a quite similar wording, as in the following two statements: 'I feel sufficiently prepared to teach English to multilingual pupils' and 'I feel sufficiently prepared to teach English to pupils to whom Norwegian is not their first language'. The choice of including both these statements, although they seem quite similar if not equivalent, was to be able to discover potential misunderstandings, and to make sure that the participants understood the questions.

In hindsight, one of the statements that was used in the Likert scale section may have been a bit inadequately formulated, and the results were thus difficult to analyse. The wording of the statement 'I will allow my future pupils to use Norwegian during English class, but not additional languages' may be understood in relation to Garret's (2010, p. 44) discussion of asking 'multiple questions' in attitudinal studies. Such

questions should be avoided, he states, as a positive answer can refer to more than one component of the question, or they can be types of double negative questions to which a negative answer would be ambiguous. In practice, the statement consists of two components: 'I will allow my future pupils to Norwegian during English class' and 'I will not allow additional languages in English class'. In this case, it might be difficult to decide which part of the question *disagree* implies disagreement with. An inappropriate choice of words may thus decrease the validity of the results of this question. For this reason, the choice was made to not include the responses to this statement with the results in chapter 4.

The choice of using various question designs was made as an attempt to give the participants the opportunity to answer according to their genuine opinions, and to not force them to answer according to strict alternatives. Thus, these considerations were made as an attempt to increase the study's validity. However, although certain actions were undertaken to try to minimise these effects and to ensure authenticity, one might still question how certain we can be that these are the students' *real* attitudes. The framework for the study has been set up by the researcher. The topic and the questions were decided by the researcher, and the participants were asked to answer according to these. In the last section of the survey, they did not have the opportunity to elaborate and write freely. However, a free text response was included at the end of the questionnaire so that they had the opportunity to give feedback. This point has been made by Denscombe (2010), who makes the following argument regarding pre-coded questions:

> Pre-coded questions can bias the findings towards the researcher's, rather than the respondent's, way of seeing things. Questionnaires, by their very nature, can start to impose a structure on the answers and shape the nature of the responses in a way that reflects the researcher's thinking rather than the respondent's. Good research practice will minimize the prospect of this, but there is always the danger that the options open to the respondent when answering the questions will channel responses away from the respondent's perception of matters to fit in with a line of thinking established by the researcher (p. 170).

This may be a common difficulty with questionnaire surveys, and using a web-based survey as an instrument to investigate attitudes may be useful but may at the same time have certain limitations.

3.4.2 Pilot and Pre-Pilot

According to Cohen et al. (2011) it is important to pilot and pre-pilot a survey. Furthermore, they state that the difference between the two is significant, and that 'while the pre-pilot is usually a series of open-ended questions that are used to generate categories for closed, typically multiple-choice questions, the pilot is used to test the actual survey instrument itself' (Cohen et al., 2011, p. 261). In the current study, prior to the actual data collection, both pre-pilot and pilot studies were conducted. In addition, the survey had been shown to both supervisors before the pilot and pre-pilot took place. Firstly, a group of four students enrolled at University A was gathered, and they provided useful feedback on the survey design as well as how the questions were formulated. Some changes were made according to their feedback, to make the questions clearer and more logical to the participants. Then, the survey was shared with five new students, one student from University A and four students from University College B. These were students from various teacher education programs, and they differed in how far they had come in their studies. They also provided feedback, and a few more adjustments were made according to their feedback. For instance, the wording of some questions was changed to make them clearer, before the actual survey collection took place.

3.4.3 Sampling Strategies

Sampling strategies may be divided into two groups: probability sampling and non-probability sampling. The latter strategy aims to find a reasonably representative sample by using resources that are within the means of the ordinary researcher (Dörnyei, 2007, p. 97). For the current study, the sampling strategy that was used to gather participants may be defined by what Dörnyei (2007, p. 98) terms 'Snowball sampling'. This strategy involves a 'chain reaction', by which 'the researcher identifies a few people who meet the criteria of the particular study and then asks these participants to identify further appropriate members of the population'. This technique is effective for building up a

reasonable sized sample, and one advantage is that the accumulation of number is quite quick, as one person nominates others (Denscombe, 2010, p. 37).

3.4.4 Conducting the Survey

Prior to the study, several universities and university colleges in Norway were contacted by email. Some information about the study was included, and they were asked whether they wanted to participate. Responses were mostly positive, and those who agreed to participate shared the link to the survey with their students along with an invitation letter. Both were posted on each institution's Learning Management System. Students were also contacted directly by the researcher and they were asked whether they wanted to participate in the survey themselves, as well as whether they wanted to help distributing the link to fellow students. These students participated by publishing the link and information letter in smaller Facebook groups. Visits to lectures at University College A were also made to provide information about the project and to encourage students to participate.

3.4.4.1 Challenges with Survey Studies

There are several challenges a researcher might face when conducting a survey study. For instance, in the sample, some groups may be overrepresented compared to others. The following section will introduce some common (sampling) errors in survey research, and how these might affect a study's validity and reliability. These errors will be related to the current study, and the section also presents attempts that were made to try to reduce the effects of these errors.

Low response rates represent a common challenge in survey studies. However, several actions may be initiated as an attempt to increase response rates, and thus increase the study's validity. Low response rates represent a threat to the validity of a survey study because non-response may not be haphazard - non-responders in a sample may share similar characteristics (Cohen et al., 2011). This has also been suggested by Dörnyei (2007, p. 53) who sees 'participant mortality' or 'attrition' as a threat, in that the subject dropout may reduce the size of the sample that has a complete dataset, and

may not be haphazard but differential. In the current study, as much as 40% of the students who opened the survey did not complete the whole questionnaire (see Appendix 3), and their responses could therefore not be included in the results. Due to the relatively high degree of drop-out in the current study, some groups of students may not be represented in the sample. Accordingly, some groups of students may be overrepresented. However, several actions may be taken in order to increase response rates. For instance, the promise of anonymity has been said to increase response rates (Manzo, Burke, & Gideon, 2012).

Another common threat to the research's validity includes each participant's desire to meet certain expectations, which Dörnyei (2007, p. 54) refers to as 'the social desirability bias'. This bias includes the tendency for people to give answers to questions in ways that they believe to be 'socially appropriate'(Garrett, 2010, p. 44). In such instances, the participants may give answers according to the attitudes they think they should have instead of the ones they really do have. Moreover, participants may try to meet social expectations and over-report desirable attitudes and behaviours while underreporting those that are socially not respected (Dörnyei, 2007, p. 54). Naturally, this represents a challenge in studies where we seek to investigate real, authentic attitudes. However, the promise of anonymity has been said to motivate respondents to give more honest answers. Sue and Ritter (2007) suggest that a social desirability bias can be avoided by repeatedly stating that participation is anonymous, so that the researcher is unable to identify each respondent based on the answers they provide. Oppenheim (1992, p. 126) argues that the social desirability bias is more significant in interviews than in questionnaires. Garrett (2010, p. 45) also introduces *the acquiescence bias* as another common threat to attitudinal studies. According to this bias, some respondents prefer to agree with an item, regardless of its content. The respondents may see this as a way of gaining the researcher's approval, that they are providing the answer they think the researcher want. Thus, the responses do not reflect the respondent's real attitudes, and therefore raises issues of validity. Furthermore, he indicates that it is especially pronounced in face-to-face interviews. Thus, there is reason to believe that the promise of anonymity might motivate more genuine answers also in relation to the acquiescence bias.

The following measures were taken as an attempt to reduce the effects of the challenges presented above, which are issues associated with both quantitative and qualitative research methods. These actions were taken in order to increase the study's validity. Firstly, several attempts were made to try and increase the number of participants in the study. Prior to the data collection, visits to lectures were made to provide the students with some information about the project and to encourage them to participate. It was crucial not to say too much, to avoid influencing their answers, but some basic information about the study was provided with the intention to arouse their interest. Teachers were also very helpful, and encouraged their students to participate. They also reminded them to submit their answers before the deadline. The researcher also spoke directly to students to ask them to participate. These students further encouraged other students to participate. Reminders to answer the survey were also sent out to students who in turn reminded other students to participate. The promise of anonymity was given on several occasions, as a way of maximising the number of responses. The promise was first given verbally by the researcher when information about the study was given in person. The promise of anonymity was further stated in the information letter, and in the introduction to the survey. The promise was also repeated at the introduction of part B of the survey in order to remind the participants that the survey sought to investigate their honest opinion on the topic. Anonymity was ensured with the help of Enalyzer's anonymity setting. This setting ensured that both the respondents' IP addresses and other background information that might identify them as a person were concealed.

3.4.5 The Sample of Participants

As Dörnyei (2007, p. 96) defines it, 'the *sample* is the group of participants whom the researcher actually examines in an empirical investigation and the *population* is the group of people whom the study is about'. In the current study, the population consists of Norwegian student teachers and the actual sample involves 102 students from three different universities, two different university colleges, and different teacher education programs. The ideal sample for this study would have been a representative group of all English student teachers in Norway. However, as this is a large and heterogeneous

population, it is difficult to achieve a representative sample. Cohen et al. (2011) emphasise that a large sample is to be preferred where there is heterogeneity in the population. For the population in the current study, therefore, a representative sample might have been a larger sample which could account for all variables in the population, to ensure that all groups of students are represented. In addition to demographic variables such as age and gender, there are variables such as university/university college, study program, year of study, etc. To account for all such variables, an overall larger sample would have been preferable. This, however, would also have required an overall larger study.

During the period the survey was open for access, which was from 10 October 2018 until 14 November 2018, a total number of 102 respondents completed the survey. The respondents included students enrolled at various teacher education programs at different universities and university colleges in different parts of Norway. In this thesis, the universities will be anonymised, and only referred to by letters (University A, University B, etc.). Although the group of participants is quite heterogeneous, showing variation in terms of university/university college, study program and year of study, the participants were all students studying to become English teachers. The MA students that were included in the study (see Table 3.4) were students who were planning to take PPU (Practical Teacher Training).

Table 3.1 below shows the distribution of participants according to gender. As the table shows, the majority of those who participated in the survey were female. Statistics Norway show that of those students enrolled in teacher education programs in 2017, there were 27.5% male, and 72.6% female students. In 2018, there were 28% male and 72% female (Statistics Norway., 2019).

Table 3.1: *Distribution of student teachers according to gender.*

Gender	**Distribution of students**	
	N	**%**
Female	75	73.53%
Male	27	26.47%
In total	**102**	**100.00%**

Table 3.2 shows the distribution of participants according to age. As the table shows, the majority of students were in the age group 18-25. Furthermore, a considerable large

group of participants consists of student teachers in the age group 26-35. Only some participants are in the last remaining age groups, between 36-49 and 50-60.

Table 3.2: *Distribution of students according to age.*

Age	**Distribution of students**	
	N	**%**
18-25	84	82.35%
26-35	12	11.76%
36-49	3	2.94%
50-60	3	2.94%
In total	**102**	**100.00%**

Table 3.3 below shows the distribution of students according to university/university college. As illustrated, the largest group of students were students enrolled at University College A (35.29%), and the second largest group of students were those enrolled at University College B (25.49%). These groups were followed by students at University A (23.53%) and University B (12.75%). The smallest group of students were those enrolled at University C (2.94%).

Table 3.3*: Distribution of student teachers according to university/university college.*

University	**Distribution of students**	
	N	**%**
University College A	36	35.29%
University College B	26	25.49%
University A	24	23.53%
University B	13	12.75%
University C	3	2.94%
In total	**102**	**100.00%**

Table 3.4 below shows the distribution of students according to teacher education program. As indicated by the table, more than half of the students were students enrolled at the *lektorutdanning* (years 8-13; 54.90%). The second largest group of students were those enrolled at *Grunnskolelærerutdanning 5.-10.*, which were 26.47% of the students. These groups of students were followed by students enrolled at *Grunnskolelærerutdanning 1.-7.* (8.82%), MA students in didactics (4.90%), students enrolled at *Kompetanse for Kvalitet* (continuing education for teachers; 3.92%), and one student enrolled at PPU (0.98%).

Table 3.4: *Distribution of student teachers according to teacher education program.*

Teacher education program	Distribution of students	
	N	%
Grunnskolelærerutdanning 1. – 7. trinn	9	8.82%
Grunnskolelærerutdanning 5. – 10. trinn	27	26.47%
Lektorutdanning	56	54.90%
PPU	1	0.98%
KfK (videreutdanning)	4	3.92%
Master i didaktikk	5	4.90%
In total	**102**	**100.0%**

Table 3.5 below illustrates the distribution of students according to year of study. As indicated in the table, half of the students were those enrolled in their fourth (24.51%) or fifth (24.51%) year of study. Moreover, 22.55% of the students were first year students. These groups of students were followed by students in their third (15.69%) and second (9.80%) year of study. Two students (1.96%) were enrolled in the *KfK* program, and did not specify their year of study. The smallest group of students consists of one PPU student, which is enrolled in his/her sixth year of study (0.98%).

Table 3.5: *Distribution of students according to year of study.*

Year of study	Distribution of students	
	N	%
First year	23	22.55%
Second year	10	9.80%
Third year	16	15.69%
Fourth year	25	24.51%
Fifth year	25	24.51%
Sixth year	1	0.98%
KfK (not specified)	2	1.96%
In total	**102**	**100.0%**

The following section seeks to map out each teacher education program to see if there is a focus on multilingualism in the courses. The outline is based on both obligatory and optional courses. The outline is based on the information which was available on each university/university college's website. Only a short, superficial summary will be provided here in order to ensure all universities are sufficiently anonymised.

The largest group of students who participated in the study were students enrolled in the lector program at University College A. There are no courses to be found in the program description that focus on multilingualism or TLA. However, in an

obligatory course in didactics, the students are introduced to topics such as bilingualism and intercultural competence, as well as to multicultural literary texts.

The second largest group of students who participated in the study were lector students enrolled at University College B. A focus on multilingualism or TLA is not to be found in the course descriptions from the various courses that are obligatory in the study program.

The third largest group of lector students were those enrolled at University B. This study program does not seem to have any courses that explicitly focus on either multilingualism or TLA.

However, at the *Grunnskolelærer 5. – 10.* program at University College A, a clear focus on multilingualism was to be found. As part of an obligatory course in didactics, there is an aim that the student should have knowledge of how to analyse differences and similarities between English and other languages. Another aim states that the student should have acquired knowledge about multilingualism as a resource in classroom teaching. This course is not available for first year students, however, as the course is specifically integrated in the second and third year of the study program.

From the course descriptions available on the *Grunnskolelærer 5. – 10.* program at University C, there is a focus on diversity and an aim for an inclusive learning environment is expressed in several of the obligatory pedagogical courses. There is also a focus on SLA in these courses, but TLA is not mentioned. However, the course descriptions make reference to CEFR, which suggests that a focus on multilingualism is found in these courses.

It is important to bear in mind, however, that a large group of the student teachers who participated in the study were only first year students. This means that many of the student teachers who participated in this study had not yet attended the courses that have been listed as having a focus on multilingualism.

3.5 Analysing the Questionnaire Data

Due to the lack of representativeness in the current study's sample, this thesis will not aim to generalise the results. The aim is to discuss and describe the sample, and not to draw conclusion to the whole population of English student teachers in Norway. This

type of statistics is referred to as the field of descriptive statistics, where the aim is to describe samples of data, but where no attempt is made to answer questions (make inferences) about the larger populations from which the samples are drawn (Johnson, 2013, p. 288).

Before conducting the analysis, it was crucial to define and describe the type of data which had been collected. In the current study, there is a distinction between quantitative and qualitative data, as the questionnaire survey included both closed and open-ended questions. Since the questions are suited for quantitative and qualitative analyses, the data analysis has been conducted in two instances. Firstly, an analysis of the quantitative data of part A of the survey was conducted, followed by an analysis of part B of the survey (which only included quantitative data). Then, an analysis of the qualitative data of part A of the survey was conducted. These analyses will be further described in the following two sections.

3.5.1 Analysing the Quantitative Data

The main purpose for the analysis of the quantitative data in this study is to highlight the general trends and main tendencies in the sample. More depth will be provided through the analysis of the qualitative data.

As introduced in section 3.5 above, the choice was made to analyse the data through *descriptive statistics*. A descriptive analysis involves trying to map out the main tendencies of a sample based on the data material, as opposed to drawing conclusions about a larger, unknown population based on the analysis of data from a sample. The latter analysis is referred to as *inferential statistics*, which means that we make inferences about the larger population. In the current study, there is no aim to generalise the results for a larger population, as the results are analysed descriptively.

According to Johnson (2013, p. 88), descriptive statistics constitute the second step in quantitative analysis; the first step is to display the data. In the current study, a percentage analysis was therefore performed on both parts of the survey in order to display the percentage frequency distribution of responses. Descriptive statistics often include measures of central tendency. Measures of central tendency include mean, median, and modal scores. A measure of central tendency describes the average (mean),

middle (median), or most typical (modal) value of a variable (Johnson, p. 298). The median score, by referring to the middlemost number in a dataset, is suitable for normally distributed data, and is not affected by outliers. However, as the dataset in the current study is not normally distributed, the median score was deemed as not particularly useful.

The mean and modal score were at first considered suitable measures for the current analysis, and an analysis of these was conducted. However, after having had a closer look at the dataset, the choice of referring to these measurements were reconsidered. The mean score might not have been a suitable measurement either, since the data in the current study is not normally distributed. In a dataset, the mean score refers to the average score, whereas the modal score refers to the score which appears most frequently. The latter is useful for all scales of data and is unaffected by outliers (Cohen et al., 2011, p. 627). The modal score was therefore considered more useful. The modal score is suited for non-normally distributed data, and is also suitable for discrete and non-numerical data. However, if a dataset has two or more values that share the highest frequency, referring to a modal score may be a bit misleading. This was certainly the case with the current dataset, where with some questions, responses were spread across several categories, and thus received high frequencies.

In the current study, therefore, the choice was made to only refer to percentages when describing the distribution of responses, as this was seen as the most suitable way to map out the general tendencies in the dataset. A percentage analysis was conducted of the quantitative questions of both part A and part B of the survey. These results are first presented in chapter 4 and then further discussed in chapter 5.

For part A of the survey, a combination of closed and open-ended questions had been applied. The categories of nominal variables have no natural order. For instance, there is no natural order between the terms bilingualism, multilingualism, L3 acquisition, code-switching, plurilingualism, metalinguistic awareness and translanguaging, which were terms the students were asked to rate (see section 4.1.1). Thus, the distribution of the responses to this question were presented in a table which included raw numbers and percentages, and no attempt was made to calculate measures of central tendency.

To show the distribution of the next questions, a pie chart was used (see Figure 4.1, 4.2 and 4.3). In these charts, since these are nominal data, the order between the three alternatives *yes*, *no* and *not sure* is arbitrary, and the distance between them is undefined. Therefore, with nominal questions, the distribution of the responses was described with numbers and percentages.

For part B of the survey, to carry out a quantitative analysis of the data, the Likert scale was applied. After having collected the data, the data was registered in Microsoft Excel. Part B included a total number of 15 statements. All 15 statements were completed, which means that the challenge of handling missing data was not present.

The answers were given numeric values in order to be sorted in a spreadsheet, and then they were counted and analysed. The five-point Likert scale statements were numbered 1 for *strongly disagree*, 2 for *disagree*, 3 for *don't know*, 4 for *agree* and 5 for *strongly agree*, as illustrated in Table 3.4 below.

Table 3.6: *Response option codes*

Response options	Numeric Score
Strongly disagree	1
Disagree	2
Don't know	3
Agree	4
Strongly agree	5

Furthermore, the process of double-checking the data is a requirement before the data analysis can be conducted. This involves an examination of the database for potential errors. An example of such errors may be having entered incorrect values into the Excel cells, for instance. Thorough proof reading of all answers, as well as careful visual inspection were therefore done before the data analysis took place.

With reference to attitudes, when most responses lie on the left side of the scale (between 1-2), this indicates a more negative attitude towards the statement. When most responses lie on the right side of the scale (between 4-5), this indicates a more positive attitude towards the statement

3.5.2 Analysing the Qualitative Data

In addition to the closed questions, the questionnaire included some open-ended questions. There are certain qualitative aspects to open-ended questions, because the respondents are asked to provide more elaborate answers as compared to closed questions where the response is guided by response options or pre-set categories. Due to these considerations, the choice was made to present the answers to the open-ended questions in a separate section.

The data material consisted of responses to three open-ended questions. The process of exploring the data started with reading through the responses to each question, to achieve an overview of the data. The data material was then grouped into various categories. In relation to the first open-ended question, for example, the various definitions of bilingualism were grouped in several more general categories. These were categories such as *usage of two languages*, *fluency in two languages*, *usage of more than one language* (see Table 4.11). The choice to group the data in more general categories was made to make it more comprehensible, and therefore more easily be able to get an overview. To some of the open-ended questions, the students had provided more detailed answers than what was expected. Many of the students' responses provided valuable insights into their attitudes. Therefore, the choice was made to add such comments and additional examples in the last part of the results.

4 Results

This study aims to investigate student teachers' knowledge, experience and attitudes related to multilingualism and a multilingual pedagogy. The results are based on 102 students' responses to a questionnaire that contained closed and open-ended questions. Further details on the questionnaire may be found in section 3.4, and a complete version of the questionnaire can be found in appendix 1.

In this chapter, the results of the study are presented. The quantitative and qualitative results are presented in two separate sections, and both sections are structured according to the study's research questions. The quantitative results section is also divided into two sections, the first introducing the responses to part A of the survey and the latter introducing the responses to part B. The qualitative results section is solely based on responses to part A of the survey. The results are elaborated on in chapter 5 where they will be discussed and related to the relevant theory presented in chapter 2.

4.1 Quantitative Results

In the following section, the quantitative results from the questionnaire responses will be presented. This section includes the distribution of responses given in numbers and percentages. The results are presented in tables as well as figures, and a short explanation of each table is provided. These explanations summarise the main tendencies as well as some surprising results. These will be further discussed in chapter 5. In these tables and figures, unless otherwise specified, n = 102.

The questionnaire that was used to collect data in this study was divided into two separate sections, part A and part B (see section 3.4.1). The first part of the questionnaire was based on closed and open-ended questions. The second part of the questionnaire was solely based on Likert scales from 1-5. Further details about the questionnaire can be found in section 3.4. The quantitative results will be presented according to the structure of the questionnaire, in two separate sections.

4.1.1 Results from Part A

The following section is related to the first research question of this thesis, namely 'To what extent do students have knowledge of multilingualism and a multilingual pedagogical approach?'. To answer this research question, the results from several questions are presented.

Firstly, the students were given several terms that are relevant within the paradigm of multilingualism, and they were then asked to specify which of these terms they were familiar with. Table 4.1 below shows the distribution of how many students were familiar with each term.

Table 4.1: *Which of these terms are you familiar with?*

Which of these terms are you familiar with?	Distribution of responses	
Bilingualism	99	97.1%
Multilingualism	96	94.1%
L3 acquisition	43	42.2%
Code-switching	41	40.2%
Plurilingualism	25	24.5%
Metalinguistic awareness	22	21.6%
Translanguaging	5	4.9%

As Table 4.1 shows, the two terms *bilingualism* (97.1%) and *multilingualism* (94.1%) seem to be the terms the students are most acquainted with, as almost all students claimed that these are terms they have heard of. These two terms were followed by *L3 acquisition* and *Code-switching*, which are terms more than 40% of the students reported to be familiar with. However, less than a quarter of the students reported that *Plurilingualism* and *Metalinguistic awareness* were terms they had heard of. *Translanguaging* was rated the least known term which very few students (4.9%) claimed to be familiar with.

Furthermore, the students were asked to answer the question whether they had ever been introduced to the topic of multilingualism in their studies. Figure 4.1 illustrates the distribution of the students' responses to this question.

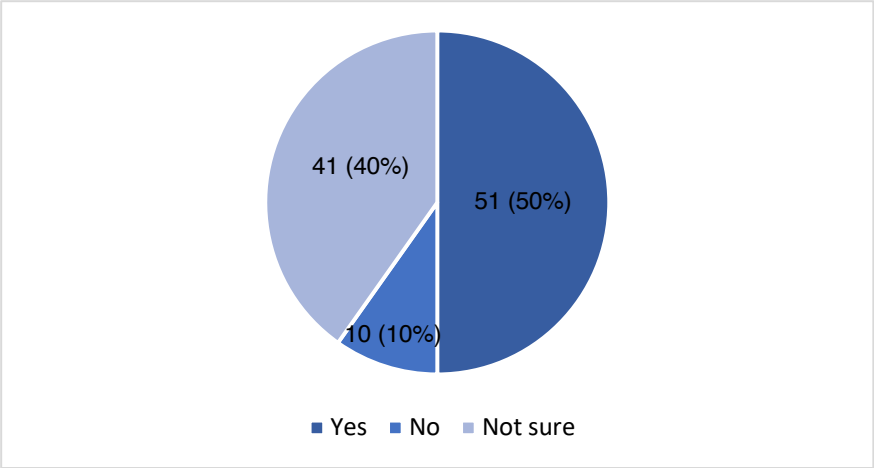

Figure 4.1: *Students' responses to whether they have been introduced to multilingualism.*

As illustrated in Figure 4.1 above, only 10% (N=10) of the students indicated that they had not been introduced to the topic of multilingualism in their studies, whereas 40% (N=41) of the students reported that they were not sure whether or not they had learnt about the topic in their studies. As many as 50% (N=51) of the students answered *yes*, thus indicating that they had in fact learnt about multilingualism in their studies. To acquire more information about the focus on multilingualism in the teacher education programs, the students were then asked to specify whether or not they had ever come across literature on the syllabus about multilingualism in their studies. The distribution of the students' responses to this question is illustrated in Figure 4.2 below.

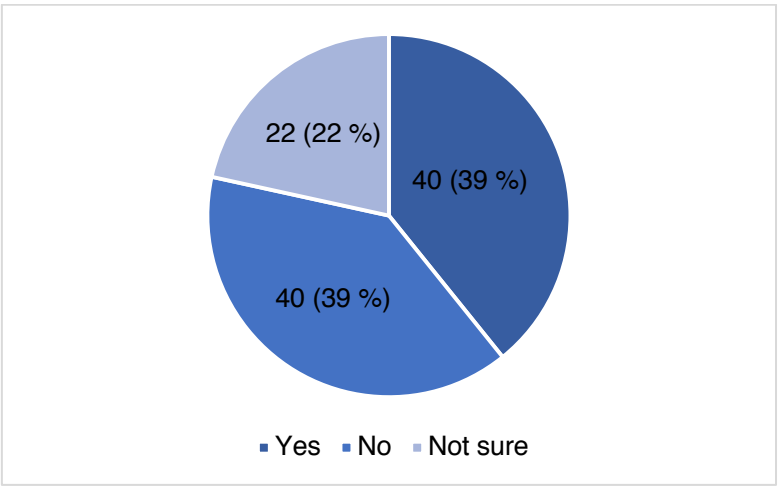

Figure 4.2: *Students' responses to whether they have seen literature on the syllabus on multilingualism.*

As Figure 4.2 shows, 39% (N=40) of the students answered that they had not come across such literature on the syllabus, whereas 22% (N=22) of the students were not sure whether or not they had come across such literature on the syllabus. Surprisingly, as multilingualism did not appear to be in focus in the course description of each teacher education program, as many as 39% (N=40) of the students stated that they had in fact come across literature on the syllabus about multilingualism. The student teachers were furthermore asked to specify whether they had ever in their studies been introduced to specific teaching strategies aimed at multilinguals. The distribution of the students' responses to this question is shown in Figure 4.3 below.

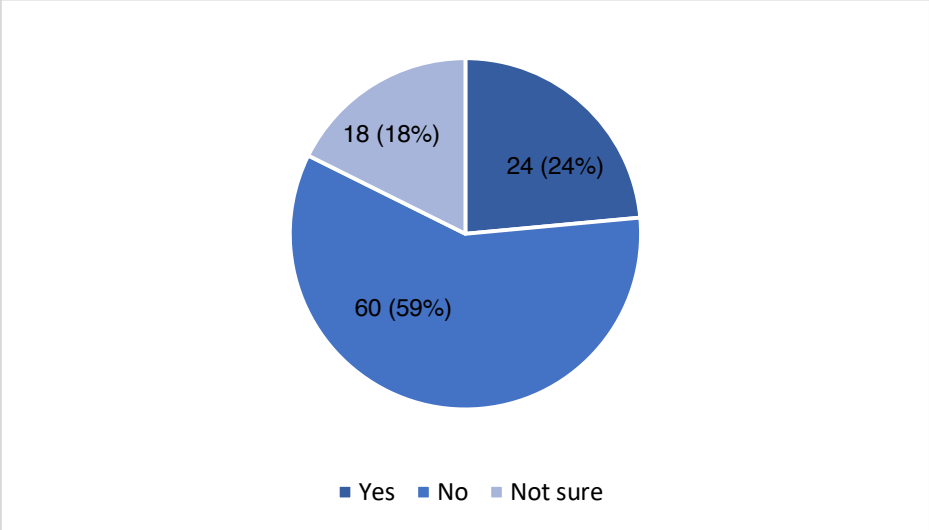

Figure 4.3: *Students' responses about teaching strategies aimed at multilinguals (1).*

As Figure 4.3 illustrates, the majority of the students, 59% (N=60), answered *no* to the question if they had ever been introduced to specific teaching strategies aimed at multilinguals in their studies. Furthermore, 24% (N=24) of the students answered *yes*, thus indicating that they had been presented with such teaching strategies, whereas 18% (N=18) of the students were not sure whether they had learnt about such strategies or not. The question was followed by a similar question, which asked the participants to specify whether they had ever in their studies been introduced to specific teaching strategies aimed at speakers to whom Norwegian is not their first language. Figure 4.4 shows the distribution of the students' responses to this question.

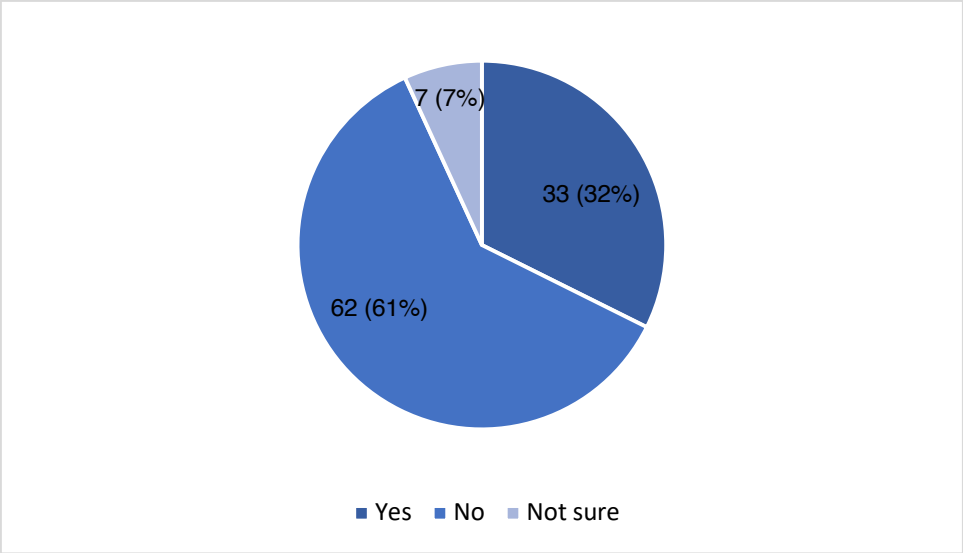

Figure 4.4: *Students' responses about teaching strategies aimed multilinguals (2)..*

As Figure 4.4 illustrates, the majority of the students, 61% (N=62), answered that they had never been introduced to specific teaching strategies aimed at speakers to whom Norwegian is not their first language in their studies. Furthermore, 32% (N=33) of the students reported that they had been introduced to such teaching strategies, and 7% (N=7) of the students were not sure whether or not they had covered this.

In sum, the quantitative results from part A of the questionnaire indicate that the students do have knowledge related to multilingualism as most students have reported to be familiar with the terms bilingualism and multilingualism. However, only half of the students reported that they had been introduced to the topic of multilingualism in their studies, and less than half of the students answered that they had come across literature on the syllabus about multilingualism in their studies. Furthermore, more than sixty per cent of the students reported that they had not been introduced to specific teaching strategies aimed at multilinguals or pupils who do not have Norwegian as their L1 in their studies.

4.1.2 Overall Summary of Part B

The following section aims to answer the third research question of this thesis, namely 'What attitudes do students express towards multilingualism and a multilingual pedagogy?', and the results related to the students' attitudes are provided. These are

quantitative data which were collected in part B of the survey through the use of Likert scales.

In Table 4.2 below, the distribution of the participants' responses is presented in numbers and percentages. The statements are listed in the same order as they were given in the questionnaire.

Table 4.2: *All statements (Numbers and percentage)*

N	Statements	1 Strongly disagree		2 Disagree		3 Don't know		4 Agree		5 Strongly agree	
		N	%	N	%	N	%	N	%	N	%
1	*Pupils who are familiar with several languages will have more opportunities to succeed in their professional life.*	0	0.0%	3	2.9%	3	2.9%	47	46.1%	49	48.0%
2	*Pupils who know several languages are also those who achieve better results across disciplines.*	2	2.0%	25	24.5%	2	20.6%	44	43.1%	10	9.8%
3	*Pupils should learn one language at a time.*	17	16.7%	62	60.8%	9	8.8%	9	8.8%	5	4.9%
4	*The frequent use of other languages delays the learning of English.*	20	19.6%	54	52.9%	12	11.8%	13	12.7%	3	2.9%
5	*In our society it is important to know several foreign languages.*	5	4.9%	25	24.5%	1	1.0%	43	42.2%	28	27.5%
6	*I will not allow my future pupils to speak other languages than English during English class.*	7	6.9%	51	50.0%	10	9.8%	25	24.5%	9	8.8%
7	*The frequent use of other languages than English during English class is a source of confusion for the pupil.*	8	7.8%	47	46.1%	23	22.5%	22	21.6%	2	2.0%
8	*The ideal English classroom is one where English is the only language that is used.*	4	3.9%	31	30.4%	4	3.9 %	46	45.1%	17	16.7%
9	*In the English classroom, teachers should make room for other languages.*	2	2.0%	26	25.5%	12	11.8%	52	51.0%	10	9.8%
10	*I feel sufficiently prepared to teach English to multilingual pupils.*	12	11.8%	41	40.2%	12	11.8%	30	29.4%	7	6.9%
11	*I feel sufficiently prepared to teach English to pupils to whom Norwegian is not their first language.*	9	8.8 %	48	47.1%	13	12.7%	27	26.5%	5	4.9%
12	*To be able to make use of additional languages in English teaching, the teacher must have some basic knowledge of these languages.*	0	0.0%	17	16.7%	5	4.9%	65	63.7%	15	14.7%
13	*I would like more input on topics related to multilingualism in my studies.*	0	0.0%	3	2.9%	4	3.9%	62	60.8%	33	32.4%
14	*Knowledge of English helps to learn other languages.*	0	0.0%	3	2.9%	5	4.9%	47	46.1%	47	46.1%

Table 4.2 above gives an overview of all the statements in part B of the survey. All statements will be ordered according to category and discussed in more detail below. The responses to these statements reflect the participants' attitudes towards

multilingualism and a multilingual pedagogical approach as given in the questionnaire. In all tables and figures of this section, n = 102.

4.1.2.1 The Role of Prior Language Knowledge in Language Learning

The student teachers were asked to rate the statements that are listed in Table 4.3. The statements seek to investigate the student teachers' perceptions of the role of prior language knowledge in language learning. Is multilingualism seen as an advantage or a disadvantage in further language learning? Do the student teachers perceive language knowledge as separate entities, or as part of an integrated system of competences? A summary of the results is reported in Table 4.4, and discussed below.

Table 4.3: *Statements on the role of prior language knowledge in language learning.*

Number	Statements
3	Pupils who know several languages are also those who achieve better results across disciplines.
4	Pupils should learn one language at a time.
5	The frequent use of other languages delays the learning of English.
6	The frequent use of additional languages than English during English class is a source of confusion for the pupil.
10	Knowledge of English helps to learn other languages

Table 4.4 *Student teachers' ratings about the role of prior language knowledge in language learning.*

Statement number	1 Strongly disagree		2 Disagree		3 Don't know		4 Agree		5 Strongly agree	
	N	%	N	%	N	%	N	%	N	%
3	2	2.0%	25	24.5%	21	20.6%	44	43.1%	10	9.8%
4	17	16.7%	62	60.8%	9	8.8%	9	8.8%	5	4.9%
5	20	19.6%	54	52.9%	12	11.8%	13	12.7%	3	2.9%
6	8	7.8%	47	46.1%	23	22.5%	22	21.6%	2	2.0%
10	0	0.0%	3	2.9%	5	4.9%	47	46.1%	47	46.1%

As Table 4.4 shows, the results indicate that more than half of the students expressed a positive attitude towards the statement that pupils who know several languages are also those who achieve better results across disciplines, as most students either agreed or strongly agreed with the statement (43.1% and 9.8%, respectively). However, a quarter of the students disagreed with the statement, which means that many students expressed a negative attitude towards the statement. Furthermore, a considerable large number of

students answered *don't know* (20.6%), thus indicating that they were not sure to what extent they agreed or disagreed with the statement. In relation to statement 4, more than three quarters of the students disagreed or strongly disagreed that pupils should learn one language at a time (60.8% and 16.7%, respectively). Furthermore, more than two thirds of the students disagreed or strongly disagreed with the statement that frequent use of other languages delays the learning of English (52.9 % and 19.6%). Similarly, with statement 6, the largest group of students were those who disagreed (46.1%) with the statement that frequent use of additional languages during English class is a source of confusion for the pupils. However, there is a large group of students who expressed uncertainty about the statement, and these account for 22.5% of the respondents. In addition, there is also a large number of students who agree with the statement (21.6%). With statement 10, however, the students seem to be more in agreement. Almost all students expressed a positive attitude towards the statement that knowledge of English helps to learn other languages. This is indicated in that an equal number of students either agree (46.1%) or strongly agree (46.1%) that knowledge of English is helpful for further learning additional languages.

4.1.2.2 Perceived Usefulness of Language Knowledge

The student teachers were asked to rate the statements that are listed in Table 4.5 below. The statements aim to investigate how the student teachers perceive language knowledge. In their opinion, is multilingualism particularly useful? This section seeks to give an indication of their perceptions of multilingualism in general, and whether they believe knowledge of several languages is useful. A summary of the results is presented in Table 4.6 below.

Table 4.5: *Statements on perceived usefulness of language knowledge.*

Number	Statements
1	In our society it is important to know several foreign languages.
2	Pupils who are familiar with several languages will have more opportunities to succeed in their professional life.

Table 4.6: *Student teachers' ratings about perceived usefulness of language knowledge.*

Statement number	1 Strongly disagree N %	2 Disagree N %	3 Don't know N %	4 Agree N %	5 Strongly agree N %
1	5 4.9%	25 24.5%	1 1.0%	43 42.2%	28 27.5%
2	0 0.0%	3 2.9%	3 2.9%	47 46.1%	49 48.0%

As shown in Table 4.6 above, the majority of the students either agreed (42.2%) or strongly agreed (27.5%) with the statement that in our society it is important to know several foreign languages. However, as much as a quarter of the students strongly agreed with the statement. Furthermore, it is clearly illustrated in the table that most students either agree (46.1%) or strongly agree (48.0%) with the statement that pupils who are familiar with several languages will have more opportunities to succeed in their professional life.

4.1.2.3 Teaching Practices

The student teachers were asked to rate the statements that are listed in Table 4.7. These statements aim to map out the student teachers attitudes related to teaching practices. Do they express a preference for an English-only policy, or do they express a preference for using other languages as well? A summary of the results is presented in Table 4.8.

Table 4.7: *Statements on teaching practices.*

Number	Statements
7	The ideal English classroom is one where English is the only language that is used.
8	In the English classroom, teachers should make room for other languages.
9	To be able to make use of additional languages in English teaching, the teacher must have some basic knowledge of these languages.
11	I will not allow my future pupils to speak other languages than English during English class.

Table 4.8: *Student teachers' ratings on teaching practices.*

Statement number	1 Strongly disagree		2 Disagree		3 Don't know		4 Agree		5 Strongly agree	
	N	%	N	%	N	%	N	%	N	%
7	4	3.9%	31	30.4%	4	3.9%	46	45.1%	17	16.7%
8	2	2.0%	26	25.5%	12	11.8%	52	51.0%	10	9.8%
9	0	0.0%	17	16.7%	5	4.9%	65	63.7%	15	14.7%
11	7	6.9%	51	50.0%	10	9.8%	25	24.5%	9	9.8%

As Table 4.8 shows, more than half of the students either agreed (45.1%) or strongly agreed (16.7%) with statement 7 that the ideal English classroom is one where English is the only language that is used. There is, however, a large group of students (30.4%) who disagreed with this statement. In relation to statement 8, more than half of the students agreed (51.0%) or strongly agreed (9.8%) that in the English classroom, teachers should make room for other languages. Also in relation to this statement, there is a large group of students (25.5%) who disagree, thus expressing a negative attitude towards the use of other languages than English in the ELT classroom. A relatively large number of students (11.8%) did not state whether they agreed or disagreed with the statement. With statement 9, it is clear that most students either agree (63.7%) or strongly agree (14.7%) that to be able to make use of additional languages in English teaching, the teacher must have some basic knowledge of these languages. Only 16.7% of the students disagreed with the statement, thus indicating that they did not perceive knowledge of the various languages as a necessity to make use of these in the ELT classroom. In relation to statement 11, more than half of the students disagreed (50.0%) or strongly disagreed (6.9%), which indicates that they will allow their future pupils to speak other languages than English during English class. However, more than a third of the students either agreed (24.5%) or strongly agreed (9.8%) with the statement, thus indicating that they will not allow their pupils to use other languages than English in the ELT classroom.

4.1.2.4 Perception of Preparedness

The student teachers were asked to rate the statements that are listed in Table 4.9. This section seeks to investigate the student teachers' perceptions of their own preparedness

to teach English in multilingual classrooms, and whether they feel prepared to implement a multilingual pedagogy. A summary of the results is reported in Table 4.10.

Table 4.9: *Statements on perception of preparedness.*

Number	Statements
13	I feel sufficiently prepared to teach English to multilingual pupils.
14	I feel sufficiently prepared to teach English to pupils to whom Norwegian is not their first language.
15	I would like more input on topics related to multilingualism in my studies.

Table 4.10: *Student teachers' ratings on perception of preparedness.*

Statement number	1 Strongly disagree		2 Disagree		3 Don't know		4 Agree		5 Strongly agree	
	N	%	N	%	N	%	N	%	N	%
13	12	11.8%	41	40.2%	12	11.8%	30	29.4%	7	6.9%
14	9	8.8%	48	47.1%	13	12.7%	27	26.5%	5	4.9%
15	0	0.0%	3	2.9%	4	3.9%	62	60.8%	33	32.4%

As illustrated in Table 4.10 above, more than half of the students either disagreed (40.2%) or strongly disagreed (11.8%) with statement 13, thus indicating that they do not feel sufficiently prepared to teach English to multilingual pupils. However, more than a third of the students either agree (29.4%) or strongly agree (6.9%), thus indicating that they do in fact feel prepared. The remaining 11.8% consist of students who are unsure as to whether they feel sufficiently prepared or not. The results from statement 14 reveal similar findings regarding the student teachers' sense of preparedness to teach English in a multilingual classroom. Also in relation to this statement, more than half of the students either disagreed (47.1%) or strongly disagreed (8.8%), thus indicating that they do not feel sufficiently prepared to teach English to pupils to whom Norwegian is not their first language. Also with this statement, there is a large group of students who either agreed (26.5%) or strongly agreed (4.9%), and there is a large group of students (12.7%) who are not sure whether or not they feel prepared. Most students express a positive attitude towards statement 15. Most students either agree (60.8%) or strongly agree (32.4%) with the statement, thus indicating that they would like more input on topics related to multilingualism in their studies.

4.1.2.5 Summary of Part B

Overall, the results from part B of the questionnaire indicate that the student teachers have positive attitudes towards multilingualism, as statements which present a positive view of multilingualism tend to mostly receive responses such as 'agree' or 'strongly agree'. The main tendencies also seem to be that statements that present the opposite view (e.g. statements such as 'Pupils should learn one language at a time' and 'The frequent use of other languages than English during English class is a source of confusion for the pupil') mostly receive responses such as 'disagree' or 'strongly disagree'. However, based on their evaluation of statements related to the use of other languages than English to foster multilingualism in the classroom context, the students' attitudes seem to be somewhat more conflicting. These findings will be further discussed in chapter 5.

4.2 Qualitative Results

The following section presents the students' responses to the open-ended questions. The analysis of the open-ended questions provided rich insight into the students' knowledge of and experience with multilingualism. Nevertheless, due to space constraints, only those answers that are directly linked to this thesis' research questions and aim are presented in the text. The responses have been reported as they were written by each student, which means that grammar or spelling mistakes have not been corrected. An attempt has been made to put the answers into several general categories to get an overview over what seems to be the main tendencies.

4.2.1 Responses to open-ended questions

In the first open-ended question, the students were asked to define how they understood the terms which they had in the previous question reported to be familiar with (see section 4.1.1). The students provided a total of 92 open answers, which means that 10 students chose not to answer this question. Some responses included comments such as 'can't remember', and others simply listed the terms without providing definitions.

The students provided different definitions of the various terms. In accordance with Table 4.1, the most frequently defined terms were by far bilingualism and multilingualism. The majority of students distinguished between bilingualism, multilingualism and plurilingualism, and they provided different definitions of each term. One student was not sure about the distinction between the three terms, but stated that they all referred to 'speaking or understanding more than one language'. Another student saw bilingualism and multilingualism as both referring to being able to speak and write fluently in more than one language.

As discussed in section 2.1, there has been controversy as to how to define bilingualism. Some scholars set native-like competence in the two languages as a criterion, and others provide a broader definition of the term, which simply involves usage of two different languages. The idea of the balanced bilingual was also introduced in the same section, which is a bilingual speaker who has equal competence in both languages. However, Lanza (1997, p. 6) emphasised that the balanced bilingual should be seen as a hypothetical construct, because bilinguals rarely have the same degree of proficiency in both languages. For the purpose of this thesis, a broader definition has been applied, namely the definition of bilingualism as 'the ability to use two languages' (Krulatz, Dahl, et al., 2018, p. 53). Thus, no requirement is set for fluency in the two languages, and the definition does not specify for which purpose these languages should be used.

Due to the disagreement among scholars on how to define bilingualism, and the fact that many scholars operate with different definitions of bilingualism, it was thus interesting to see what sorts of definitions the students provided. For instance, do they set a requirement for proficiency in the two languages? Furthermore, do they see bilingualism as including only two languages, or more? Or do they operate with a similar definition as to the one which has been used for the purpose of this thesis? Table 4.11 below shows the various definitions of bilingualism provided by the students.

Table 4.11: *Definitions of 'bilingualism'*

Category	How do you define 'bilingualism'?	Distribution of responses	
1	Usage of two languages	40	40.40%
2	Fluency in two languages	16	16.16%
3	Usage of more than one language	7	7.07%
4	Native-like competence in two languages	6	6.06%
5	Equal competence in the two languages	3	3.03%
6	Usage of two or more languages	3	3.03%
7	Usage of more than two languages	2	2.02%
8	Usage of various languages	2	2.02%
9	Native-like competence in two or more languages	1	1.01%
10	Fluency in more than one language	1	1.01%
11	Native-like competence in more than one language	1	1.01%
12	A more narrow form of multilingualism	1	1.01%
13	Only speaking one language	1	1.01%
	No response	15	15.15%
	Total	**99**	**100.00%**

Altogether, 84 students provided definitions of bilingualism. As illustrated in Table 4.11 above, the majority of the students defined bilingualism by definitions which involve usage of two languages (47.62%). These statements were put in category 1, which includes definitions such as 'use of two languages', 'being able to speak two languages' and 'that you are able to speak and understand two languages'. However, a large group of students set fluency as a requirement to be called a bilingual speaker, as 19.05% of the students provided definitions which involved fluency in two languages. Within category 2, there are definitions such as 'to know two languages fluently' and 'being able to speak two languages fluently'. Some students provided definitions which referred to 'more than one language'. These definitions constitute 8.33% of the answers, and were put in category 3. Examples of such definitions are 'that you can speak more than one language' and 'the use of more than one language'. Category 4 includes definitions which set a requirement for native-like competence in two languages, and this category includes definitions such as 'you are able to speak two languages, and have a native-like knowledge about the two languages'. Furthermore, some students provided definitions which set a requirement for equal competence in the two languages, and these statements were put in category 5. Definitions within category 5 may be exemplified by statements like 'equally fluent in two languages' and 'knowing two languages equally'. Some students (3.57%) included usage of two or more languages, and these were grouped in category 6. However, some students' definitions

(2.38%) referred to usage of more than two languages, and these definitions were put in category 7. Moreover, 2.38% of the students did not specify the exact number of languages, and their definitions referred to 'various languages'. These definitions were put in category 8. The categories 9-13 contain only one definition each. These categories include definitions which were different from what most students answered, and they were therefore difficult to group with others. They were put in 'independent' categories, and they were given names according to how the definitions were formulated by the students.

As introduced in section 2.1, this thesis is based on theory of bilingualism and multilingualism as separate phenomena. Accordingly, multilingualism was defined as 'the ability to use more than two languages' (Krulatz, Dahl, et al., 2018, p. 53). Therefore, the focus in the following question has been to see if the students operate with a similar definition in their understanding of multilingualism. Do they operate with a distinction between the two terms, or do they see the two concepts as equal phenomena? When defining multilingualism, do they set a criterion for proficiency in the languages included? Table 4.12 below shows the various definitions of multilingualism that were provided by the student teachers.

Table 4.12: *Definitions of 'multilingualism'*

Category	How do you define 'multilingualism'?	Distribution of responses	
		N	%
1	Usage of more than one language	31	32.29%
2	Usage of more than two languages	16	16.67%
3	Fluency in more than one language	10	10.41%
4	Fluency in more than two languages	7	7.29%
5	Usage of two or more languages	4	4.17%
6	Usage of three or more languages	4	4.17%
8	Fluency in two or more languages	3	3.13%
9	Native-like competence in more than one language	2	2.08%
10	Usage of more than one or two languages	2	2.08%
11	Equal competence in three or more languages	1	1.04%
12	Usage of more than three languages	1	1.04%
13	Being able to understand and speak the language to some degree	1	1.04%
	No response	14	14.58%
	Total	**96**	**100.00%**

In total, 82 students provided definitions of how they understood the term multilingualism. As illustrated in Table 4.12 above, the largest group of students were those who provided definitions of multilingualism that involve usage of more than one language. These definitions did not specify an exact number of languages, and these were put in category 1. Within category 1, many students simply wrote definitions such as ‘usage of more than one language’, ‘knowing several languages’ and ‘the use of several languages’. Furthermore, the second largest group of students were those who defined multilingualism as involving usage of more than two languages. These definitions were put in category 2, and included responses such as ‘you speak more than two languages’ and ‘a multilingual person speaks more than two languages’. A considerably large group of students (10.41%) set a requirement for fluency in their definitions of multilingualism as usage of more than one language, and these definitions were grouped in category 3. Similarly, several students (7.29%) set a requirement for fluency when they defined multilingualism as usage of more than two languages, and these answers were grouped in category 4. Categories 5 and 6 includes definitions that refer to usage of two or more and three or more languages. Furthermore, category 9 consists of two students who defined multilingualism as having native-like competency in more than one language. Category 10 included those students who stated that they were not sure about the distinction, but thought it might include usage of more than one or two languages. Each of the last remaining categories (11-13) include only one definition. These definitions differed substantially from the others and were therefore not grouped with others.

As discussed in section 2.1, plurilingualism is a term which is used by some researchers to indicate individual multilingualism. Table 4.13 below illustrates the various definitions that the participants provided of plurilingualism.

Table 4.13: *Definitions of 'plurilingualism'.*

Category	How do you define 'plurilingualism'?	Distribution of responses	
1	Being able to speak more than one language	5	20.00%
2	Being able to speak more than one language, and switch between them	4	16.00%
3	Being able to speak in more than two languages	1	4.00%
5	Having competence in more than one language	1	4.00%
6	Fluency in two or more languages	1	4.00%
7	Being able to switch easily between two or more languages	1	4.00%
8	Having pluricultural awareness, being able to switch languages according to the social situation, company and level of formality	1	4.00%
9	When a person can switch between two languages for the purpose of a social matter	1	4.00%
	No response	10	40.00%
	Total	**25**	**100.00%**

As illustrated by Table 4.13, only 15 students provided definitions of plurilingualism, although as many as 25 students had reported to be familiar with this term (see Table 4.1). As illustrated in Table 4.13, the largest group of students contained five students and were those who defined plurilingualism as being able to speak several (more than one) languages. The second largest group of students consisted of four students who defined the term as being able to speak several languages, and switch between them (category 2).

As with the previous two terms, this term also received definitions which were difficult to group in more general categories. The definitions that were difficult to categorise with others, were given independent categories, such as in category 3-9. The name of each category is the same as the formulation of each definition. Many students specify in their definitions that code-switching is an essential part of being plurilingual. Code-switching, however, was not mentioned in any of the definitions of bilingualism and multilingualism. The definition in category 7 specifies that the plurilingual speaker should be able to switch easily between two or more languages, and the definition in category 8 states that it involves the ability to switch according to social situation, company, and level of formality. The definition in category 9 also specifies that being plurilingual involves the ability to switch between two languages 'for the purpose of social matter'.

As introduced in section 2.2, third language acquisition involves acquiring or learning a third language. Table 4.14 shows the two definitions the students provided of the term.

Table 4.14: *Definitions of 'L3 acquisition'.*

Category	How do you define 'L3 acquisition'?	Distribution of responses	
1	Learning/acquiring a third language	28	65.12%
2	Acquiring a third language (going from bilingual to multilingual)	2	4.65%
	No response	13	30.23%
	Total	**43**	**100.00%**

This term seemed to be one the students could agree on as most students defined the term as learning/acquiring a third language, as illustrated in Table 4.14 above. However, two students specified in their definitions that this involved going from bilingual to multilingual.

This thesis uses the term code switching based on Grosjean's (1982, p. 204) definition 'the alternate use of two languages in the same utterance or conversation', as introduced in section 2.1. In the same section, however, it was also stated that code-switching may also include switching between dialects, styles or registers (Myers-Scotton, 1998, p. 218). Thus, it was interesting to see whether the students conform to a similar definition as was defined above, they also include other aspects than language in their definitions. Table 4.15 shows the various definitions of code-switching provided by the participants.

Table 4.15: *Definitions of 'code-switching'*

Category	How do you define 'code-switching'?	Distribution of responses	
		N	**%**
1	Alternating between languages (or varieties, dialects) in writing/speaking	21	51.22%
2	Alternating between languages depending on the situation and/or who you are talking to	5	12.20%
3	Alternating between languages subconsciously or without any difficulty	3	7.32%
4	Alternating between languages (or varieties, dialects), speech style, and other 'social artefacts'	2	4.88%
	No response	10	24.39%
	Total	**41**	**100.00%**

Altogether, 31 definitions of code switching were provided, as illustrated in Table 4.15 above. The majority of the students (51.22%) provided definitions that referred to alternating between languages in writing or speaking, and these were placed in category 1. The 21 students who made up category 1 provided definitions like e.g. 'using words or phrases from an L2 in L1 or opposite', 'changing between language as you talk' and 'Alternating between more than one language or variety within one conversation'. These definitions show that the students have knowledge of what the concept refers to. Furthermore, some students elaborated on what the phenomenon refers to, and provided more expanded definitions. Some students mentioned that code switching may be dependent on contextual or situational factors, such as the interlocutor or the social milieu, and these definitions were put in category 2. The following is an example of one of the definitions that were grouped in category 2: 'Switching between dialects, languages, sociolects, politeness and other aspects of language when changing from e.g. home to work to friends to public life or when required'. Another definition which was put in category 2 had expanded the meaning of code switching to include other behaviour, such as changing clothes:

> *when you go back and forth between several languages in the same conversation, and even with the same sentence. (this often occurs in my own family, but is actively discouraged in my language class…) I guess the term could also be used when we shift our language or other social artefacts (clothes) according to social situation, formality and different jargon used in different social sets.*

Furthermore, category 3 includes definitions that specifies that the code-switch occurs subconsciously or without any difficulty. Two students stated that code-switching involves alternating between languages (or varieties/dialects), speech style, and other 'social artefacts', and these were put in category 4.

In section 2.2, metalinguistic awareness was defined as 'the ability to focus on linguistic form and to switch focus between form and meaning' (Jessner, 2008, p. 277; see section 2.2). Furthermore, this ability might involve identifying differences and similarities across languages. The various definitions that were provided of metalinguistic awareness are shown in Table 4.16 below.

Table 4.16: *Definitions of 'metalinguistic awareness'*

Category	How do you define 'metalinguistic awareness'?	Distribution of responses N	%
1	The ability to talk *about* language and how it is built (from a meta-perspective)	14	56.00%
2	The awareness of differences and similarities between languages, and the ability to compare languages	4	16.00%
3	The awareness of own language use	3	12.00%
4	The awareness of sounds produced in a language	1	4.00%
	No response	3	12.00%
	Total	**25**	**100.00%**

As illustrated in Table 4.16 above, the students provided a total of 22 definitions. The students wrote quite different definitions of the term 'metalinguistic awareness'. However, most definitions seem to involve similar aspects, and they refer to the ability to talk *about* language and how it is built (from a meta-perspective) (56.00%). These definitions were grouped in category 1. Category 2 includes definitions that referred to the awareness of differences and similarities between languages and the ability to compare languages, and such definitions constituted 16.00% of the responses. Three students defined metalinguistic awareness as the awareness of own language use, and these responses were put in category 3. One student defined the term as the awareness of sounds produced in a language, and this definition was put in an independent group, category 4.

Not surprisingly, as this was also a term few students had reported to be familiar with, only three students chose to define translanguaging. The term was defined as the process of using one's entire linguistic repertoire 'to gain knowledge, make sense, to articulate one's thoughts and to communicate about using language' (Wei, 2011, p. 1223). The definitions the students provided are illustrated in Table 4.17 below.

Table 4.17: *Definitions of 'translanguaging'*

Category	How do you define 'translanguaging'?	Distribution of responses N	%
1	To see connections and differences between languages	1	20.00%
2	It is a process where multilinguals use their languages as a communication system.	1	20.00%
3	A process of making sense and analyse	1	20.00%
	No response	2	40.00%
	Total	**5**	**100.00%**

One student defined translanguaging as ‘to see connections and differences between languages’. Another student defined the term as ‘a process where multilinguals use their languages as a communication system’. The third student defined the term as ‘a process of making sense and analyse’.

Furthermore, the students were presented with the question whether they had ever been introduced to the topic of multilingualism in their studies (see section 4.1.1). Those students who answered yes to this question (50%, Figure 4.1), were then asked to specify how/where they were introduced to the topic in a free text response. These answers were grouped in Table 4.18 below.

***Table 4.18**: Students’ responses to how they were introduced to multilingualism in their studies.*

Category	How/where you introduced to the topic of ‘multilingualism’?	Distribution of responses N	%
1	In class/ In lecture/At University	15	22.73%
2	In English didactics courses	10	15.15%
3	In English studies/courses	8	12.12%
4	In Global English course	6	9.09%
5	In English courses on language acquisition	4	6.06%
6	In Pedagogy courses	4	6.06%
7	FREPA workshop/course	3	4.55%
8	In Norwegian courses	3	4.55%
9	In books (not specified)	2	3.03%
10	In upper secondary school	2	3.03%
11	In Literature courses	2	3.03%
12	In Sociolinguistics courses	1	1.52%
13	Ex. fac.	1	1.52%
14	In Social anthropology courses	1	1.52%
15	In Psychology courses	1	1.52%
16	Class presentations (not specified)	1	1.52%
17	Texts on reading list (not specified)	1	1.52%
18	In Linguistics courses	1	1.52%
	Total	**66**	**100.00%**

As shown in the table, students answered that they had been introduced to multilingualism through various sorts of courses, lectures, and teaching material. Some students mentioned several examples, and thus their answers belong in several categories. Some students’ answers are vague and simply state ‘by lecture’, ‘at a course we had in school’, etc. These answers constitute the largest group of answers (22.73%), and were grouped in category 1. Other answers are classified according to subjects, and put in categories as ‘English didactics’, ‘psychology’, etc. The second largest group of answers were English didactic courses (category 2, 15.15%), followed by unspecified

English courses (category 3, 12.12%). As illustrated by Table 4.10, students answered that they had been introduced to the topic through various sorts of courses, lectures, and teaching material. Most students mentioned courses that are a part of their study program, but others mentioned additional courses they had previously taken before they were student teachers. Others mentioned extraordinary courses such as a FREPA-course, which is not a part of their study program, but a course some Grunnskolelærerutdanning 5.-10 students have attended. However, the courses through which the students had been introduced to the topic include pedagogy, didactics, courses on language acquisition, sociolinguistics, literature, psychology and social anthropology. Some students stated that they were introduced to the topic before their studies, in upper secondary school, and one student also stated that he/she had read books about the topic.

In the next open-ended question, the students were asked whether they had ever used a multilingual approach themselves and, if not, whether they could describe how they think this could be done. As the students showed varied degrees of knowledge of and experience with a multilingual approach, an attempt was made to categorise the open answers. The students in categories 2, 3 and 4 introduced various teaching strategies, and various levels of experience with using these. Those students who stated that they had neither knowledge nor experience were put in category 1, and labelled *No knowledge and no experience*, and those students who said that they had both experience and knowledge were put in category 2 and labelled *Knowledge and experience*. The students of category 2 demonstrated a high level of knowledge and give examples of having experience with various pedagogical strategies. However, some students did not have any experience, but they did have suggestions as to how to implement a multilingual approach. Thus, these students were put in category 3 and labelled *Some knowledge and no experience*. The students in category 3 demonstrate some knowledge of pedagogical strategies, yet they state that they have no experience with using these. Lastly, some students did not indicate to what extent they had experience, and these were thus difficult to categorise. However, as these students did respond to the question of how to implement a multilingual approach, they were put in category 4 and labelled *Some knowledge*, *unknown experience*. The students in category 4 had some suggestions as to how to implement a multilingual pedagogical approach,

but they do not mention whether or not they themselves have experience with using these strategies.

The question received 85 responses in total, which means that 17 students chose not to answer it. The answers to this question were summarised as illustrated in Table 4.19 below.

Table 4.19: *Students' knowledge and experience related to a multilingual pedagogical approach*

Category	In your teaching, have you ever used a multilingual approach? If you have no teaching experience, please write a few lines describing how you think this could be done.	**Distribution of responses** **N**	**%**
1	No knowledge and no experience	42	41.18%
2	Knowledge and experience	19	18.63%
3	Some knowledge and no experience	12	11.76%
4	Some knowledge, unknown experience	12	11.76%
	No response	17	16.67%
	Total	**102**	**100.0%**

As shown in Table 4.19, the majority of the students who answered the question reported that they had no knowledge of and no experience with a multilingual pedagogical approach (41.18%). The second largest group of students were those who reported to have both experience with and knowledge of a multilingual approach (18.63%). Some students reported that they had no experience but some knowledge, and this group of students made up 11.76 % of the answers (category 3). The last group of students are those who did not indicate their degree of experience, but had some knowledge of and suggestions as to how they thought a multilingual approach could be implemented, and these constituted 11.76 % of the answers.

The distribution of students across categories is shown in Table 4.19 above. Category 1 includes responses such as 'No, I have not' and 'No, never. Have no idea how that would be done either'. Within category 2, there are responses such as the following:

> *Yes, in the sense that I have tried to involve pupils previous knowledge of other languages in understanding the orthographic and etymological sense of words and how they are constructed (Latin languages, Spanish and French is helpful in understanding the construct of many English words).*

Furthermore, category 3 includes responses such as 'No I have not done that. You could use the multilingual students as a resource in the teaching, and combine their knowledge with the syllabus'. Some students indicated that they did not know what a multilingual approach is. However, they write examples of strategies which correspond well with a multilingual pedagogical approach, and they are thus categorised as having some knowledge. Lastly, category 4 includes responses such as the following statement:

> *Those who have another L1 than Norwegian, should be seen as an asset and the teacher should use these pupils' knowledge in the classroom. Comparative work with different languages can enhance the metalinguistic awareness and the interest in language in general.*

Furthermore, the answers the students provided were summarised and categorised, as illustrated in Table 4.20 below. Across categories, the students mentioned different strategies that might form a multilingual pedagogical approach.

Table 4.20: *Examples of strategies.*

Category	How to implement a multilingual pedagogical approach?	Distribution of responses	
		N	%
1	Making use of several languages	20	46.5%
2	Using images and pictures	2	4.6%
3	Code-switching	2	4.6%
4	Multicultural/multilingual texts	2	4.6%
5	Translation, keywords, and dictionary games	4	9.3%
6	'Yes', 'I do', etc.	13	30.2%
	Total	**43**	**100.0%**

In total, 43 students reported to have knowledge on how to implement a multilingual pedagogical approach. However, 30.2 % of these students simply provided answers such as 'yes' 'I do', etc. Yet, other students mentioned more than one strategy in their statements. Of those students who did have suggestions as to how to implement a multilingual pedagogical approach, 46.5% of these students mentioned making use of various languages as a resource. The strategy of contrasting and comparing languages has been incorporated into this category. Table 4.21 below presents example statements from each category of strategies.

Table 4.21: *Statements on each strategy category.*

Key statements	Category
I have used several languages and language examples from different languages when explaining phenomena.	1
I know of some strategies to how you can teach English to multilinguals through using their other acquired languages as a starting point for learning grammar, for instance.	1
Potentially using words from another language that a student would understand, in order to help them with something, if they do not understand Norwegian, for example, well enough.	1
In teacher practice, I have used images and pictures in the classroom. This made it easy for the students who struggled with Norwegian to be able to understand the connection between the images and the English words.	2
I have used a multilingual approach in the sense that when dealing with younger students or 'weaker' students who are not as fluent as they need to be to understand a monolingual approach, I've used code-switching to make sure they understand.	3
I'd assume code switching would be a big part of the student activities. If some students are more fluent in a certain language than others, they should be used (if willing) as a central resource, and frequent meaningful interaction should take place between those of different main/first languages.	3
You could show stories that the pupils will understand, stories from different cultures.	4
Translating text to several languages. Word games.	5

As indicated in Table 4.21, statements which were grouped in category 1 involve using various languages for illustrative purposes and teaching grammar and the structure of language. Statements which were put in category 2 involved using images to explain the meaning behind words. Within category 3, there are statements which involve using code-switching between different languages, where the multilingual pupil may be used as a resource. Category 4 consists of statements which comment on the use of multicultural/multilingual texts. Within category 5, there are statements which involve the use of translation as a resource. This category involves translation activities, dictionary activities and word games.

In addition to answering the question by providing information about their knowledge of and experience with a multilingual pedagogical approach, some students

also made additional comments which should be paid attention to. Some students also mentioned other aspects one might want to take into consideration when trying to implement a multilingual pedagogical approach. For instance, in relation to strategies for comparing languages, which includes using several languages and highlighting differences and similarities between these (category 1, Table 4.14), three students mentioned distance between languages as a relevant factor, as illustrated by the key statement below. The following was a statement expressed by a student about the relevance of typological distance between languages:

> *Often when we Norwegians learn new languages such as for example French, there are words that are more closely connected to English than to Norwegian and therefore it makes more sense to have pupils associate that word to their English knowledge also*

Three students also emphasised the teacher's role in fostering a multilingual pedagogical approach, and state that the multilingual pupil can be used as a resource in the classroom and be encouraged to draw on his/her knowledge of various languages, as illustrated by the following example statement:

> *Those who have another L1 than Norwegian, should be seen as an asset and the teacher should use these pupils' knowledge in the classroom. Comparative work with different languages can enhance the metalinguistic awareness and the interest in language in general.*

However, three students expressed that an 'English-only' policy is preferred in the ELT classroom. This is evident in the following two example sentences made by two different students:

> *No, I try to use only the target language in teaching.*

> *When teaching English I try to not use Norwegian at all. rather than translating a difficult English word into Norwegian, I attempt to find an easier English word with which to describe the difficult work. The times I have used Norwegian during an English class is primarily when teaching middle school and special needs groups, where the pupils don't have the necessary English skills to understand instructions in English.*

Furthermore, students also indicated that they do not see the necessity for a multilingual pedagogical approach. From the response, it would appear that this student might see the need for a multilingual pedagogical approach if the pupils came from other countries than Norway. The following statement is an example of such a statement:

> *At the schools where I work, almost all of the pupils are Norwegian, and those who are not, have lived here for so many years, that they have not needed any other teaching.*

Nevertheless, two students explicitly state that they do not think they learn enough about this topic in their studies, as illustrated by the following statement:

> *No, I have not done that. I do not think we learn enough about this theme in our education, but I would like to challenge my pupils with multilingual texts when I start teaching.*

Lastly, one student expressed concerns regarding his/her ability to apply a multilingual approach. For this student, it seems that a narrow definition of multilingualism prevents him or her from taking a multilingual pedagogical approach to teaching, as exemplified by the following statement:

> *No, I have never used it. Mostly because there has never been a need to. I think for me it could be difficult unless the common language is English and I can use it to teach pupils Norwegian. Otherwise it is difficult as I am not multilingual myself, and therefore can only communicate in Norwegian and English.*

In sum, the results from the qualitative questions show that although only half of the students indicated that they had been introduced to the topic of multilingualism in their studies, many students did nevertheless have knowledge of multilingualism and a multilingual pedagogical approach. This is clear from the various definitions provided by the students of the various terms which are seen as relevant within the field. Furthermore, in addition to defining the terms, they introduced several strategies that may be used to implement a multilingual approach. Although many students did not have experience with using these strategies themselves, they did nevertheless have suggestions as to how this could be done. Some students, however, still express that they prefer a classroom where English is the only language that is used.

5 Discussion

This chapter provides a discussion of the results presented in chapter 4. The results will be related to the theoretical background this thesis builds upon, which was introduced in chapter 2. The discussion is carried out with reference to the aim of this study, which is to investigate the student teachers' knowledge, experience, and attitudes related to multilingualism and a multilingual pedagogical approach. This chapter is structured following the three research questions of this thesis, which were first introduced in Chapter 1.

Firstly, as was introduced in section 1.3, this study sought to investigate the following research question: 'To what extent do students have knowledge of multilingualism and a multilingual pedagogical approach?'. As stated in section 1.3, it was hypothesised that the students would demonstrate little knowledge of multilingualism and a multilingual pedagogical approach. This was expected due to results from previous studies as well as relatively limited focus on multilingualism in the course descriptions of each teacher education program. When presented with several terms which are relevant within the paradigm of multilingualism, the results show that most students are familiar with the two terms bilingualism and multilingualism (see Table 4.1). However, other terms which are relevant within the paradigm were less known among the students. Also when they are asked to provide definitions of the terms they had previously stated to be familiar with, bilingualism and multilingualism are the most frequently defined terms. Most of the definitions the students provide conform well to the theory presented in chapter 2 of this thesis. These definitions represent some sort of awareness of what multilingualism entails. Most definitions of plurilingualism, L3 acquisition, code-switching and metalinguistic awareness also conform to the theory, but the definitions of translanguaging were less representative. The argument that students do in fact have knowledge of multilingualism and a multilingual pedagogical approach is supported in these qualitative findings.

Although almost all students claimed to be familiar with the term multilingualism, and were able to define the concept in short terms, only half of the students reported that they had been introduced to multilingualism in their studies (see Figure 4.1), and less than half of the students answered that they had come across

literature on the syllabus about multilingualism in their studies (see Figure 4.2). These are high numbers, and based on these findings, we might expect the students' knowledge of multilingualism and a multilingual pedagogical approach to be rather limited. In addition, these results may also indicate that many students might have been introduced to multilingualism under other circumstances than in their studies. Therefore, there is reason to expect them to be unaware of the complexity related to multilingualism. As was introduced in section 2.1, multilingualism is a highly complex and multifaceted paradigm. Of those who did state that they had been introduced to multilingualism in their studies, when asked to specify under what circumstances they had been introduced to the topic, a large group of students simply wrote 'in class', 'in lecture', etc., and did not specify during which courses they had been introduced to the term (see Table 4.18). With this group of students, one may question the depth of the information they have received, since they do not seem to remember during what sorts of courses or classes they received input about the topic. In addition, a considerable large number of students stated that they had been introduced to the term in extraordinary courses, which are courses that are not a part of the teacher education program in which they are enrolled.

The findings that most of the students have not been introduced to multilingualism in their studies are not surprising, as they are in line with previous research which indicates little focus on multilingualism in teacher education programs in Norway. For instance, Dahl and Krulatz (2016) found that very few of the teachers they surveyed had education and knowledge that focus on multilingualism. Another finding from the same study is that the majority of the teachers wants to learn more about and gain experience with specific methods, strategies and activities they can use in diverse classrooms. Hence, there is reason to believe that the teachers understand knowledge of and experience with such strategies as necessary in order to better meet the needs of the pupils in diverse, multilingual classrooms. It is therefore worrisome that more than sixty percent of student teachers in the current study (see Figures 4.3 and 4.4) reported that they have not been introduced to such strategies in their studies.

The results that were shown in Table 4.19 provide insights into the depth of the student teachers' knowledge related to a multilingual pedagogy. These results are also related to the second research question of this thesis, namely 'To what extent do

students have experience with a multilingual pedagogy?'. The students were expected to have little experience with using a multilingual pedagogical approach, as multilingualism did not seem to be a topic in the course descriptions of each teacher education program (see section 3.4.5). The results indicated that few of the student teachers had both knowledge and experience with a multilingual pedagogy (see Table 4.19). However, almost a quarter of the answers the students provided indicated that they had both experience with using such an approach, and knowledge of how to implement it. Many students did in fact come up with suggestions as to how to implement a multilingual pedagogical approach (see Table 4.20), and they discussed the usefulness of such an approach. However, some of the students who indicated that they have experience with using a multilingual pedagogical approach did at the same time express a preference for an 'English-only' policy (see p. 80). Furthermore, some students saw using a multilingual pedagogical approach as a way to 'handle weaker students' and these student teachers seemed to believe that the approach should ideally be avoided. This was exemplified by the first statement in category 3 in Table 4.21. Such comments suggest that many students may not have fully understood the theory behind a multilingual pedagogy. As Krulatz et al. (2018) point out, a multilingual pedagogy is not only for bi- or multilingual pupils, but might also be useful for monolingual pupils, as their awareness of linguistic and cultural diversity might increase, as well as their curiosity and motivation for learning other languages.

Thirdly, this study sought to investigate the following research question: 'What attitudes do students express towards multilingualism and a multilingual pedagogical approach?'. Based on the two previous hypotheses, which stated that the students were expected to demonstrate little knowledge and experience related to multilingualism and a multilingual pedagogy, the students' attitudes were expected to deviate from the theory on multilingualism and a multilingual pedagogy (see section 1.3). Based on the findings discussed above, the students demonstrate knowledge of multilingualism and a multilingual pedagogical approach, and experience with using such an approach in the ELT classroom only to some extent. The results that give an indication about the students' attitudes are mostly based on the results from part B of the survey, but also supported by findings from the qualitative results from part A of the survey.

Following the first category of statements, which was presented in section 4.1.2.1 (see Table 4.3), more than half of the students either agreed or strongly agreed that pupils who know several languages are also those who achieve better results across disciplines (see Table 4.4). This finding is in contrast to the teachers in De Angelis (2011), for instance, where the majority did not associate knowledge of several language with better results across disciplines. Furthermore, while the teachers in De Angelis (2011) seemed to have conservative beliefs about language knowledge, and furthermore seemed to believe that languages should be kept separate in order to not interfere with the learning of the majority language, most student teachers in the current study do not seem to have such beliefs. The majority of student teachers expressed a negative attitude towards the idea that pupils should learn one language at a time, that frequent use of other languages delays the learning of English, or that the frequent use of other languages than English in the ELT classroom is a source of confusion for the pupil. Accordingly, most students express a positive attitude towards the statement that knowledge of English is helpful for further learning additional languages. Thus, most students seem to share the beliefs which were introduced in sections 2.2 and 2.4, the core-ideas of TLA, namely that languages do not exist in a vacuum but influence each other in a dynamic system, and that knowledge of some languages thus may be useful for learning additional languages. Most students do not perceive knowledge of several languages as an issue when learning an additional language, and they do not seem to believe that several languages should not be acquired simultaneously. However, there is still a considerable large number of students who express uncertainty related to several of the statements, and these results may be due to limited knowledge and experience related to multilingualism and a multilingual pedagogy.

In relation to the second category of statements, most students expressed a positive attitude towards multilingualism in the Norwegian society, and most students believed that multilingualism may lead to increased opportunities to succeed in a professional life. These findings are in line with previous studies on Norwegian teachers' attitudes to multilingualism, which tend to indicate that teachers have positive attitudes to multilingualism in general (see e.g. Haukås, 2016; Krulatz & Torgersen, 2016; Krulatz, Steen-Olsen Torgersen, 2018).

In the third category of statements, the student teachers were presented with several statements that sought to reveal their attitudes related to teaching practices, in particular (see section 4.1.2.3). The majority of students believed that the ideal ELT classroom is one where English is the only language that is used, although there is a large group of students who disagreed with this statement. Hence, the majority did not seem to recognise the value of using additional languages when teaching English. As was indicated in relation to the second research question of this study, several statements from the qualitative questions support the observation that students seem to prefer an 'English-only' policy in the ELT classroom. With reference to one of the statements that were made by the students (see p. 80), some students seemed to believe that using other languages during English teaching may be useful under certain circumstances, but only if absolutely necessary, since they believed that the most efficient way of teaching English is by solely relying on English. As introduced in section 4.2.1, a similar statement was made by a student in relation to defining code switching (see p. 73). At the same time, the majority of student teachers also stated that teachers should make room for other languages in the ELT classroom, and these student teachers thus expressed a positive attitude towards a multilingual pedagogical approach. Thus, the students' attitudes, as these are understood from the responses to these two statements, seem to be somewhat conflicting, as they expressed opposing views.

However, when discussing the results from these two statements as indicating that the students are both in favour of a multilingual pedagogical approach, yet at the same time in favour of an English-only policy, we must consider the possibility that these results might have been partly influenced by what was introduced in section 3.4.4.1 of this thesis as the acquiescence bias, which involves that some respondents tend to agree with an item, regardless of its content (Garrett, 2010, p. 45). According to this bias, some students might feel the urge to agree with some statements, regardless of the content.

Nevertheless, most student teachers agree that teachers, in order to be able to make use of additional languages in English teaching, must have some basic knowledge of these languages (see Table 4.8). This finding conforms to findings from research such as De Angelis (2011) and Haukås (2016), which indicate that teachers often believe that they must be familiar with the pupils' languages to be able to make use of

these in the classroom. As knowledge of several languages might be seen as a requirement to make use of these languages in a multilingual pedagogical approach, students may also find it difficult or even unattainable for themselves to make use of different languages as a resource in English language teaching. These findings are supported by the statement made by a student about his/her ability to implement a multilingual pedagogical approach, which was presented in section 4.2.1 (see p. 80). This student seemed to represent the common belief that in order to make use of various languages in language teaching, the teachers must themselves be speakers of these languages, and this belief prevents him/her to apply a multilingual pedagogy. Furthermore, the students' attitudes related to a multilingual pedagogy is even more conflicting in relation to statement 11, when most students state that they will allow their future pupils to speak other languages than English during English class. Although the majority of student teachers' believed that the ideal ELT classroom is one where English is the only language that is used, they will allow their future pupils to speak other languages than English during English class.

The student teachers' responses to the fourth category of statements (see Table 4.10) provide important findings. This category of statements sought to reveal the student teachers' perception of their own preparedness to implement a multilingual pedagogy. Most students stated that they did not feel prepared to teach English to multilingual pupils or to pupils who have other L1s than Norwegian. These results are not surprising, and they are in line with results from studies such as Dahl & Krulatz (2016) and Krulatz & Torgersen (2016), which indicated that many teachers feel unprepared to work with pupils who have other L1s than Norwegian and thus learn English as a third language. In addition, the majority of student teachers state that they would like more input on topics related to multilingualism in their studies, and this finding is also in line with the results of Dahl & Krulatz (2016), where most teachers stated that they would be interested in more input about multilingualism and a multilingual pedagogy.

However, the fact that the majority of student teachers feel unprepared to implement a multilingual pedagogical approach, or to meet the needs of pupils who have other L1s than Norwegian, may be related to insufficient knowledge in several respects. Firstly, the quantitative results from part A of the study indicated that

multilingualism has not been a significant focus in their studies. This was also indicated by some of the students themselves. Some of the students, on their own initiative, wrote in their response of their ideas of a multilingual approach, that they did not think they had learnt enough about this topic in their studies (see p. 81). This is further supported by the responses to statement 15, where most students agreed, thus indicating that they would like more input on topics related to multilingualism in their studies. Hence, there is reason to believe that most of these students are aware that they have little knowledge and little experience from their studies which prepares them to foster multilingualism in the ELT classroom in the future. One might also observe that some of the students have misconceptions of what a multilingual approach is. This has been indicated in the study, as many student teachers seem to think that implementing a multilingual approach requires that the teacher is proficient in several languages. Thus, some students may think that implementing such an approach might be difficult and too demanding. Although this is not a finding from the study, an implication of these beliefs may be that they may be may be hesitant or sceptical to introducing the approach in future teaching, even though they do in fact see it as beneficial and have mostly positive attitudes towards it.

6 Conclusions

6.1 Conclusions

The purpose of this study has been to investigate Norwegian student teachers' approaches to multilingualism and a multilingual pedagogy. More specifically, the study aimed to investigate student teachers' knowledge, experience and attitudes related to the topic. These aspects have been investigated through a web-based survey. In this chapter, the results are summarised with reference to the three research questions which were first introduced in section 1.3.

In relation to the first research question of this thesis, it was hypothesised that the students would demonstrate little knowledge of multilingualism and a multilingual pedagogical approach. As presented in the previous chapter, most students claimed to be familiar with the terms bilingualism and multilingualism. Their knowledge of these term is supported in that the majority of students are able to define the concepts in short terms. Thus, most students expressed some awareness related to multilingualism. However, fewer students indicated to be familiar with terms which are relevant within the paradigm of multilingualism (terms such as L3 acquisition, code-switching, plurilingualism, metalinguistic awareness and translanguaging). One may therefore question the depth of their knowledge related to multilingualism.

Although about half of the students did not have any suggestions as to how to implement a multilingual pedagogical approach, those students who did have suggestions as to how this could be done, provided a broad spectrum of relevant pedagogical strategies. These students provided valuable information, although results from previous questions indicated that the majority of students had not been introduced to such strategies as part of their education. However, since the majority of students seemed to express limited knowledge of multilingualism and a multilingual pedagogical approach, the general tendencies seem to be that students lack the desired knowledge about multilingualism in general and a multilingual pedagogical approach in particular, to indeed be able to facilitate multilingualism in the ELT classroom. In addition, the majority of students report to not have been introduced to concrete pedagogical strategies which might form a multilingual pedagogical approach. When assessing

hypothesis 1, the results indicate that the student teachers expressed only limited knowledge of multilingualism and a multilingual pedagogical approach. Hypothesis 1 has therefore been corroborated.

In relation to the second research question this thesis aimed to investigate, hypothesis 2 was presented. It was hypothesised that the student teachers would have little experience with a multilingual pedagogical approach. The results indicate that most students do not have experience with using a multilingual pedagogical approach. However, of those students who did have experience with using a multilingual pedagogical approach, these provided various strategies which the teacher may draw on, as indicated in relation to the previous research question. However, some of the students who did have the experience, expressed a clear preference of only using English in the ELT classroom. When considering hypothesis 2, the results indicate that the students had little experience with using a multilingual pedagogical approach. Hypothesis 2 was therefore corroborated.

Regarding the third research question of this thesis, the student teachers' attitudes were expected to reveal limited knowledge and experience. Hypothesis 3 stated that the student teachers' attitudes were expected to deviate from the theory on multilingualism and a multilingual pedagogy.

However, most students, through their responses to the 15 statements, and through their responses to several open-ended questions, seem to express positive attitudes towards multilingualism. In general, their attitudes appear to be that the ability to speak several languages is seen as a resource, also in relation to learning additional languages. For most students, their attitudes seem to coincide with the theory behind multilingualism.

Their responses related to a multilingual pedagogical approach, however, appear to be less consistent. On one hand, the majority of students expressed positive attitudes towards learning several languages at the same time, and they do not seem to believe that using several languages in the ELT classroom is a source of confusion for the pupils. On the other hand, the majority of students investigated in this thesis still appear to believe that the ideal ELT classroom is one where English is the only language that is used. Students also emphasised that using other languages than English should ideally be avoided, but that a multilingual pedagogical approach could be used if necessary to

include all students. Thus, one may question to what extent the students understand a multilingual pedagogical approach as something which all students might benefit from. Such inconsistent attitudes might stem from the fact that most students had only received limited information about multilingualism and a multilingual pedagogical approach in their studies. Thus, hypothesis 3 has also been corroborated.

6.2 Further research

This study is based on a descriptive analysis, which means that the results are not generalisable. Thus, a suggestion for further research involves a more representative group of students, which might require an overall larger study to all English teacher education programs in Norway. Another suggestion for further research, which also requires a larger sample, could involve comparing different groups of students. For instance, do variables such as year of study and teaching experience influence language attitudes? Such studies could involve several variables: year of study, teaching experience, knowledge, study program, etc.

It may also be interesting to compare first year and last year students to see if there is a development of knowledge, experience, and attitudes over the years. The ideal study might be a longitudinal study of the same groups of students, to see how their attitudes change over the years. It could also have been interesting to compare the student teachers' attitudes with teachers' attitudes, as teachers might have more knowledge and experience on the topic (although this study included some KfK students, these were very few).

Further research should focus on the universities and university colleges themselves. For instance, interviews may be conducted with lecturers about curricula and course descriptions – do they focus on multilingualism while educating student teachers? What are their attitudes? Do they express similar concerns as was done by the students in this study?

6.3 Closing remarks

In the Norwegian language curriculum (LK06), as well as in the new core curriculum and English subject curriculum (*fagfornyelse*), knowledge of several languages is appreciated, and there is clearly an aim to foster multilingualism in Norwegian schools today. If multilingualism is an aim for Norwegian pupils, language teachers have an important responsibility to implement a multilingual pedagogy by using the multilingualism that exists in the classroom as a resource.

However, the results from this study indicated that most students do not seem to have received the adequate knowledge or experience related to multilingualism in their studies. With increasing immigration, we might expect increasingly multilingual classrooms in the future. The result that most students do not feel prepared to teach in multilingual classrooms is worrying, and it is important to ensure that student teachers feel well prepared to meet their pupils' needs in the future. Incomplete knowledge may result in misconceptions about what a multilingual approach is, and one may also speculate that lacking input and experience might even make the student teachers feel unconfident and insufficient when aiming to implement a multilingual pedagogy. The students also seem to be aware that they might not have learned as much as they think they should to be able to implement a multilingual pedagogical approach, which may further make them feel unconfident. Language teachers have a great responsibility for supporting the pupils' language learning, and many students might benefit from an overall greater focus on multilingualism and a multilingual pedagogical approach in teacher education programs. However, it is important to keep in mind that the students in the current study had not yet completed their education, and their knowledge, experience and attitudes may change towards the end of their studies.

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Appendices

Appendix 1: Survey questionnaire

Thank you!

Thank you for taking the time to participate in this anonymous survey. The survey is distributed to students enrolled at several universities and university colleges in Norway. The answers you provide will be part of a Master's thesis in English, which will be published in 2019, on www.bora.uib.no.

The survey takes 10-15 minutes to complete.

Keep in mind that I am only interested in your personal opinion, and that there is no correct or wrong answer.

You may go back and revise your answers at any point before submitting them. To do this, click the button marked PREVIOUS.

By clicking END SURVEY, your answers will be submitted.

You may at any point withdraw from the survey.

Part one:

Please answer the following questions. I want to remind you that this is an anonymous survey, and your answers will never be connected to individual email addresses or names.

1. **What is your first language? (The language you acquired in early childhood). If you have more than one first language, please write all of them.**

2. **Do you consider yourself a multilingual speaker?**

- o Yes
- o No
- o I would like to add some comments

3. **At what university are you currently enrolled?**

- o University College A
- o University College B
- o University A
- o University B
- o University C

4. **In what teacher education program are you currently enrolled?**

- o Grunnskolelærerutdanning 1. – 7. trinn
- o Grunnskolelærerutdanning 5. – 10. trinn
- o Lektorutdanning
- o PPU
- o KfK (videreutdanning)
- o Other, please specify

5. **How far have you come in your studies?**

- o First year

- Second year
- Third year
- Fourth year
- Fifth year
- Sixth year
- Other, please specify

6. **Please specify how long you have studied English (higher education). If you are enrolled in PPU or KfK and/or already have a degree, please specify your degree.**

7. **What subjects will you teach in addition to English? (You may choose multiple options)**

- ☐ Norwegian
- ☐ Foreign languages
- ☐ Mathematics
- ☐ Social Sciences
- ☐ Natural sciences
- ☐ Music
- ☐ Religion
- ☐ Other, please specify

8. **Do you have any teaching experience? (This includes teaching practice, part-time work as a teacher assistant etc.)**

- o No
- o Yes, please specify

9. Have you studied abroad?

- o No
- o Yes, please specify

10. Which of these terms are you familiar with? (You may choose multiple options)

- ☐ Multilingualism
- ☐ Bilingualism
- ☐ Translanguaging
- ☐ Metalinguistic awareness
- ☐ L3 acquisition
- ☐ Plurilingualism
- ☐ Code switching

11. Write short definitions of the terms you have heard of before (terms: multilingualism, bilingualism, translanguaging, metalinguistic awareness, L3 acquisition, plurilingualism, code-switching).

12. Are you able to hold a basic conversation in one or more languages that is not your first language?

- No
- Yes, please specify which languages

13. Do you have any desires to learn new languages in addition to those you already speak? If yes, please specify for what purpose.

- No
- Yes, please specify

14. In your studies, have you ever been introduced to the topic of 'multilingualism'? If yes, please specify how/where you were introduced to the topic.

- No
- Not sure
- Yes, please specify

15. In your studies, have you ever come across literature on the syllabus about multilingualism?

- Yes
- No
- Not sure

16. In your studies, have you ever been introduced to specific teaching strategies aimed at multilinguals?

- Yes
- No
- Not sure

17. In your studies, have you ever been introduced to specific teaching strategies aimed at speakers to whom Norwegian is not their first language?

- o Yes
- o No
- o Not sure

18. In your teaching, have you ever used a multilingual approach? If you have no teaching experience, please write a few lines describing how you think this could be done.

19. Are you male or female?

- o Male
- o Female
- o Other

20. What is your age?

- o 18-25
- o 26-35
- o 36-49
- o 50-60
- o 60 <

Part two:

Please indicate whether you agree or disagree with the following statements. There is no correct answer; I am only interested in your personal opinion.

1. Pupils who are familiar with several languages will have more opportunities to succeed in their professional life.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

2. Pupils who know several languages are also those who achieve better results across disciplines.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

3. Pupils should learn one language at a time.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

4. The frequent use of additional languages delays the learning of English.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

5. In our society it is important to know several foreign languages.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

6. I will not allow my future pupils to speak other languages than English during English class.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

7. I will allow my future pupils to use Norwegian during English class, but not additional languages.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

8. The frequent use of other languages than English during English class is a source of confusion for the pupil.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

9. The ideal English classroom is one where English is the only language that is used.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

10. In the English classroom, teachers should make room for other languages.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

11. I feel sufficiently prepared to teach English to multilingual pupils.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

12. I feel sufficiently prepared to teach English to pupils to whom Norwegian is not their first language.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

13. To be able to make use of additional languages in English teaching, the teacher must have some basic knowledge of these languages.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

14. I would like more input on topics related to multilingualism in my studies.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

15. Knowledge of English helps to learn additional languages.

Strongly disagree	Disagree	Agree	Strongly agree	Don't know
1	2	3	4	?

If you wish to add any comments, please use the space provided below.

By clicking END SURVEY on the next page, your answers will be submitted.

Thank you for your participation! ☺

By clicking END SURVEY, your answers will be submitted.

If you wish to go back and revise your answers, click the button marked PREVIOUS.

I am still looking for participants for in-depth interviews. If you are interested, please contact me at Synne.Nordlie@student.uib.no

Appendix 2: Survey invitation

Dear teacher students at ...,

I am writing to request your participation in a survey which is distributed to students enrolled at several universities and university colleges in Norway. The answers you provide will be part of a Master's thesis in English.

The aim of the survey is to investigate teacher students' attitudes towards multilingualism in the EFL classroom, a topic where little research previously has been done. There is no correct or wrong answer; I am only interested in your personal beliefs and opinions on the topic.

This is an anonymous survey, and none of the responses will be connected to identifying information.

The survey will take 10-15 minutes to complete, and it can be accessed through a computer, smart phone or tablet.

To participate, please click on the following link:
https://surveys.enalyzer.com?pid=np3c3n3f

If you have any questions about this survey, or difficulty in accessing the site or completing the survey, please contact Synne.Nordlie@student.uib.no.

Thank you in advance for providing this important feedback.

Sincerely,
Synne Nordlie

Appendix 3: Response rates