Faculty of Humanities, Social Sciences and Education

Investigating Pre-service Teachers' Preparedness for Teaching in Multilingual EFL Classrooms

Mixed-method research comparing pre-service teachers' preparedness

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Abstract

The thesis investigates pre-service teachers' preparedness for teaching in multilingual EFL classrooms. Former research has revealed that pre-service teachers lack the necessary competence in multilingual pedagogies when entering the profession. This results in teachers not knowing how to facilitate multilingualism in the classroom, which inhibits pupils' use of several languages when learning English. To shed further light on this issue, this thesis uses a comparative mixed-method research approach to conduct investigations amongst pre-service teachers enrolled in Primary and Lower Secondary Teacher Education levels 5-10 and Teacher Training Education levels 8-13. The thesis investigates potential differences in preparedness levels and identifies critical factors influencing preparedness across these educational programs. The following research questions are explored:

RQ 1: What factors influence pre-service teachers' preparedness for teaching in multilingual EFL classrooms?

RQ 2: Are there any differences between the two groups (Teacher Training Education levels 5-10 and Teacher Training Education levels 8-13) of pre-service teachers regarding their preparedness for teaching in a multilingual EFL classroom?

The mixed-method research is analyzed through a thematic analysis and Microsoft Excel. Findings suggest that external factors such as practical experience and course instruction in multilingual approaches positively influence pre-service teachers' preparedness level. In addition, internal factors such as language background and exposure to language diversity positively influence the level of preparedness. On the other hand, external factors such as the gap between theory and practice, including insufficient examples and instruction on multilingual approaches, lack of knowledge, and lack of focus on the increasing multilingual classroom, inhibit the level of preparedness. Even though findings cannot be generalized due to the small amount of research data, concluding remarks suggest that teachers enrolled in Primary and Lower Secondary Teacher Education levels 5-10 are more positive and open to multilingual EFL classrooms. In addition, more focus needs to be shed on the gap between theory and practice in teacher education programs. It would also be fruitful to look further into the instruction provided through foreign language didactics courses and how it promotes preparedness for teaching in multilingual EFL classrooms.

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1 Introduction

The Norwegian Ministry of Education and Training emphasizes how "in a time when the population is more diversified than ever before, and where the world is coming closer together, language skills and cultural understanding are growing in importance (2017)." In order to apprehend the extent of language and cultural diversity in the Norwegian classroom, statistics show that there were as many as 56 000 immigrants and 79 000 Norwegian-born to immigrant parents in the age of 6-15 years by the end of 2022 (Kalcic & Ye, 2023). In addition, 16 538 immigrant pupils aged 16-18 were enrolled in upper secondary school in 2022 (Kalcic & Ye, 2023). Throughout the decades, although especially in the last few years, we have seen an expansion in the number of immigrants to Norway, whereas the number of immigrants increased by 6.1% from 2023–2024 (SSB, 2024). Unfortunately, this is largely due to the ongoing war in Ukraine and the high number of refugees (Haug, 2024). In connection with this, there has also been an expansion in the number of introductory classes for minority language pupils (IFK), amongst other places, here in Tromsø (Tromsø Kommune, 2023). Considering the high level of cultural diversity in our society, it is important that teachers recognize how English will not necessarily be squired as a second language (L2) by all pupils.

Previous research has revealed that English teachers display a monolingual bias (Otwinowska, 2017), resulting in "excluding students' knowledge of other languages" when learning English (Haukås, 2016, p. 12). It is necessary to counteract this monolingual view and consider the complex interaction between languages. Therefore, teachers must also acknowledge how former languages influence English language acquisition. Pupils that have acquired Norwegian as an L2 will acquire English in addition to their former acquired languages, therefore increasing the complexity of language learning. Krulatz et al. (2018) shed light on this complexity of language interaction in multilinguals by describing how language influences each other cross-linguistically (p. 67).

As a pre-service teacher, I have been fortunate to experience the language and cultural diversity of pupils enrolled in introductory and mainstream classes in Norway. Through my different experiences, I have encountered numerous pupils with heritage languages other than Norwegian and seen how these pupils either utilize or exclude their heritage languages when learning English. In addition, I have seen the large variation in teachers' competence in multilingual pedagogies and personally experienced the frustration of not knowing how to

sufficiently facilitate multilingualism in the classroom. On one side, research shows that preservice teachers "consider plurilingual pedagogies relevant or very relevant to their future profession" (Draznik, 2022, p. 78) and "appreciate the notions of multilingualism" (Tiurikova & Haukås, 2022, p. 58). On the other side, research reveals how pre-service teachers do not have the adequate competence to utilize this multilingualism and support linguistically diverse classrooms (Hegna & Speitz, 2020; Draznik, 2022; Deng et al., 2021; Polat, 2010; Tiurikova & Haukås, 2022). Polat (2010) states that "teachers exit their education programs with inadequate preparation to support linguistically and culturally diverse learners" (p. 237).

In a school setting influenced by cultural and language diversity, English teachers are responsible for building pupils' "foundation for seeing their own and others' identities in a multilingual and multicultural context" (Udir, 2020). Moreover, the inclusion of language is an essential part of pupils' development of ownership and feeling of belonging, as the overarching principles of the national curriculum state, "language gives us a sense of belonging and cultural awareness" (Ministry of Education and Research, 2017). Therefore, it is vital that teachers have sufficient competence in multilingual approaches and incorporate them into the English subject. Draznik (2022) reveals how pre-service teachers "believe that the increased sense of preparedness and pedagogical confidence will stimulate teachers to use plurilingual pedagogies (p. 85). Since the lack of competence and use of multilingual approaches are already found at the teacher training stage, one should address the need to focus more on pre-service teachers' preparedness regarding multilingualism and multilingual English foreign language classrooms. Hence, the motivation for this research is grounded in former experiences and the relevance of further investigation of pre-service teacher preparedness for teaching in multilingual English foreign language classrooms.

Previous studies have investigated pre-service teacher preparedness and factors for preparedness. Nevertheless, I have not found a study that compares level of preparedness between pre-service teachers enrolled in different teacher training educations. The initial thought was that it would be interesting to see if a comparison between education programs would reveal differences in the level of preparedness between pre-service teachers. Providing important findings and potential factors influencing preparedness would be relevant for revising teacher training education programs in order to better equip pre-service teachers to meet the needs of linguistically diverse learners. This leads to the aim of the study, which is to

investigate pre-service teachers' preparedness for teaching in multilingual EFL¹ classrooms. The study will carry out investigations by conducting comparative mixed-method research amongst pre-service teachers enrolled in Primary and Lower Secondary Teacher Education levels 5-10² and Teacher Training Education levels 8-13³. The goal is to shed light on potential differences in preparedness levels and identify factors influencing preparedness across these educational programs. Research questions connected to the aim of the study are:

RQ 1: What factors influence pre-service teachers' preparedness for teaching in multilingual EFL classrooms?

RQ 2: Are there any differences between the two groups [Teacher Training Education levels 5-10 and Teacher Training Education levels 8-13] of pre-service teachers regarding their preparedness for teaching in a multilingual EFL classroom?

The thesis is organized into five chapters. Chapter 1 introduces the background, previous research, motivation, thesis statement, and research questions. Chapter 2 provides a theoretical framework and relevant literature and explains important terms. Chapter 3 presents the methodology of mixed-method research and research ethics. Chapter 4 presents the findings of the mixed-method research. Chapter 5 discusses the findings in light of RQ1 and RQ2 and provides insight into the generalization and limitations of the research. The final chapter, chapter 6, concludes the thesis and offers didactical implications and suggestions for future research. Works Cited and Appendixes are attached at the end of the thesis.

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¹ English foreign language

² The abbreviation 'TTE levels 5-10' will be used to describe Primary and Lower Secondary Teacher Education levels 5-10

³ The abbreviation 'TTE levels 8-13' will be used to describe Teacher Training Education levels 8-13

2 Theoretical framework

The theoretical framework is chosen based on its relevance to the study. This chapter will explain important terms and theoretical ideas connected to pre-service teacher preparedness and competence in multilingual pedagogies and teaching. It is structured in the following order: multilingualism, multilingual competence, EFL classrooms, and preparedness.

2.1 Multilingualism

Multilingualism is a term frequently used in this study. Therefore, it is important to define multilingualism and being multilingual. In the Common European Framework of Reference for Languages (CERF, companion volume), The Council of Europe defines multilingualism as: "the coexistence of different languages at the social or individual level" (Council of Europe, 2020, p. 30). In other words, this definition of the term can be understood as when a society or specific geographical area is multilingual and contains the use of several languages. At the same time, this definition of the term also opens for up the interpretation of multilingualism as the use of several languages on an individual level. In contrast to this, the Council of Europe uses the term plurilingualism to refer to "the repertoire of varieties of language in which many individuals use, (...) thus in some multilingual areas some individuals are monolingual and some are plurilingual" (Haukås & Speitz, 2020, p. 51). This definition defines plurilingualism as the usage of several languages on an individual level, similar to the term multilingualism. Haukås and Speitz (2020) comment on this dilemma and state how the term *multilingual* is used with different and sometimes conflicting meanings (p. 51). Tiurikova and Haukås (2022) further explain the complexity of the term multilingualism:

The term "multilingualism" is defined in a variety of ways based on criteria such as the number of languages in one's repertoire, proficiency, frequency of use and what is considered a valued language (Cenoz, 2013; Haukås, 2022). Also, which people are referred to as multilingual, may vary across contexts. In political and academic discourses in Norway, for example, Haukås (2022) argues that the term "flerspråklig" (meaning "multilingual") mainly refers to people with immigrant backgrounds, thus excluding Norwegians with majority language backgrounds and with knowledge of multiple languages from identifying as multilingual (p. 43).

Nevertheless, the important demarcation is knowing how the term multilingualism is used in this study, i.e., to understand how the authors define the various terms (Haukås & Speitz, 2020, p. 52). In this study, the term multilingualism is interpreted and used similarly to the Council of Europe's definition of the term plurilingualism. Multilingualism describes all people who are competent in and who use more than two languages. The term can also be used to describe a person learning an additional language(s) on top of the ones they already know (Tiurikova & Haukås, 2022, p. 43).

Several researchers point out that the modern language classroom is shifting its focus to a more multilingual approach (Brevik et al., 2020; Krulatz et al., 2018; Speitz, 2020; Haukås & Speitz, 2020). The need for multilingual education is, amongst other things, emphasized through official documents such as the National Curriculum (Kunnskapsløftet 2020), where one of the core values for education and training is:

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. (Ministry of Education and Research, 2017).

Krulatz et al. (2018) comment that "these overarching principles are firmly rooted in the Education Act (1998), and are thus a legally binding official program" (p. 122). The Education Act (1998) states that "education and training must provide insight into cultural diversity and show respect for the individual's convictions" (Section 1-1), whereas this implies that "linguistic and cultural differences among students are acknowledged and valued" (Krulatz et al., 2018, p. 122).

2.1.1 Summary of relevant research

Teacher students' beliefs about pupils' plurilingualism as a resource in all subjects (2020)

Hegna and Speitz (2020) conducted a study examining "Teacher students' beliefs about pupils' plurilingualism as a resource in all subjects" (p. 18). The research was conducted by sampling 79 students for online questionnaires and 10 students for focus group interviews. The research questions were as stated:

RQ 1: What do PPE students (practical-pedagogical education) know, think, and believe about pupils' multilingualism?

RQ 2: To what extent do the pedagogy and practicum prepare students to perceive multilingualism as a resource? (Hegna & Speitz, 2020, p. 20).

The results showed that PPE students were open and positive about theories and principles regarding plurilingualism in school. Although students interpret plurilingualism as connected to pupils where Norwegian is an L2, the informants do not mention using pupils' plurilingual repertoire as a resource (Hegna & Speitz, 2020, p. 27). Moreover, students connected plurilingualism to differentiated instruction, which they viewed as challenging to carry out in the classroom (Hegna & Speitz, 2020, p. 27). Another challenge was using pupils' plurilingualism, which they viewed as connected to not having competence in pupils' L1 (Hegna & Speitz, 2020, p. 27). Lastly, PPE students expressed that the study had been beneficial due to the knowledge gained and the change of view regarding pupils' plurilingualism as a resource (Hegna & Speitz, 2020, p. 27). However, they expressed a wish for more practical examples of how to implement plurilingualism as a resource in the classroom (Hegna & Speitz, 2020, p. 27).

Concluding statements expressed the need for more knowledge and research regarding plurilingualism. The study suggested that training education must address this need regarding pre-service teachers' increased competence in seeing plurilingualism as a resource.

Pre-service teachers' perceptions of plurilingual pedagogies (2022)

Another interesting study regarding multilingualism and education is a study examining "preservice teachers' perceptions of plurilingual pedagogies", conducted by Tjaša Dražnik (2022, p. 69). The research questions of the study were:

RQ 1: What are pre-service teachers' perceptions of the relevance of plurilingual pedagogies for their profession?

RQ2: What are pre-service teachers' understandings of the competence for plurilingual teaching?

The participants consisted of 27 students enrolled in "the 4th year of the Primary Education Study Program from the University of Ljubljana" (Dražnik, 2022, p. 76). Data was sampled

through a reflection questionnaire containing "3 reflection prompts accompanied by 9 openended questions to stimulate and guide their critical engagement" (Dražnik, 2022, p. 76).

Regarding RQ1, results showed that participants considered "plurilingual pedagogies relevant for their profession", and there were 5 main reasons for this relevance: "(1) Developing linguistic and cultural sensitivity, (2) Improved inclusion of second language learners, (3) Developing language competences, (4) Improved teachers' expertise", and "(5) Improved teaching-learning process" (Dražnik, 2022, p. 79). As for RQ2, results showed that factors "such as knowledge, positive attitudes towards diversity, and acquisition of certain skills, are considered beneficial for the promotion of plurilingual pedagogies", while "teachers' attitudes of insecurity or fear can importantly inhibit their implementation" (Dražnik, 2022, p. 87). Dražnik (2022) concludes that findings "illustrate pre-service teachers' understanding of the complexity of teachers' competence for plurilingual teaching", pointing to teachers identifying "factors that encourage the use of plurilingual pedagogies" and "some deterrents, such as fear (...) and lack of confidence" (p. 88). In conclusion, Dražnik (2022) addresses "the need to address pre-service teachers' feelings of insecurity within plurilingual teacher training" (p. 88).

2.2 Multilingual competence

Multilingual competence, or *multicompetence*, is defined as: "the knowledge of more than one language in a person's mind or in a community (Krulatz & Christison, 2023, p. 1). As an example, Krulatz et al. (2018) explain how "children who are exposed to more than two languages from birth develop the same type of competence in all languages that monolinguals do in their native language and simultaneous bilinguals do in theirs" (p. 59). In addition, Otwinowska (2017) explains how "once you have learned another language, your multicompetence will never be the same as the competence of a monolingual native speaker of that language, precisely because you can use two languages" (p. 305). In other words, learning more than one language gives one multilingual competence. The term was proposed by Cook (1991), who wanted to:

Stress the importance to not only focus on the second language (L2) component treated in isolation from other language resources in the mind of a bilingual, but also to acknowledge the role of the first language (L1), and the interplay of different language systems with each other (Krulatz & Christison, 2023, p. 8).

Multicompetence is a complex process and system regarding the use and knowledge of several languages. It is the interaction of several languages and the fluctuations between languages "shaped by a multilingual's communicative needs" (Krulatz & Christison, 2023, p. 13). People can develop "their multicompetence through varied paths that are subject to influence by a range of factors" (Krulatz & Christison, 2023, p. 13). In pedagogy, the idea of multicompetence is important because it "creates a space for the implementation of multilingual pedagogies which '[recognize] and [build on] the dynamic and complex language practices that are prevalent in multilingual contexts' (Garcia & Flores, 2012, p. 239)" (Krulatz & Iversen 2020, p. 375).

In both the online questionnaire and group interview, the term multilingual competence is used differently than what the definition above presents. Unfortunately, during the questionnaire and group interview, the term multilingual competence was used to explain 'teachers' competence in multilingual pedagogies, approaches, and teaching.' This is an unfortunate mix-up, and the term should not have been used as a synonym for teachers' competence in multilingual pedagogies and teaching. Even though it is a regrettable error, the research is luckily not afflicted by it due to the main focal point being pre-service teachers' preparedness.

2.3 EFL classrooms

When we talk about English foreign language (EFL) classrooms, we often visualize the stereotypical Norwegian classroom in which pupils who speak Norwegian as their L1 learn English. Krulatz et al. (2018) mark an important distinction regarding the EFL classroom and comment on how "an EFL (...) class in Norway may consist of students who are learning English as their L2 and students for whom English is their L3 – at the same time" (p. 78). Regarding pedagogics and language strategies, this important remark shapes how English is taught or ought to be taught in the classroom. The specific teaching approach should preferably be adapted to whether the students are acquiring English as an L2 or L3, as the teacher should separate between a bilingual or multilingual teaching approach. Krulatz et al. (2018) further comment, "in a Norwegian setting, students with Norwegian as their L1 learn English as their L2 and then (...) other languages as their L3." (p. 79). If the student does not have Norwegian as their heritage language, Norwegian becomes the L2 and English the L3. Since there are differences between learning an L2 versus learning an L3, it is important to know whether the students in one's classroom are acquiring English as an L3 or L2.

Krulatz et al. (2018) also distinguish between "a positive or resources view of multilingualism and a negative or deficit view" (p. 81). The resource view of multilingualism is to perceive and use pupils' multilingualism as a resource when learning English as an L3. There are several positive attributes to being multilingual; among them are "increased metalinguistic awareness," "becoming aware of significant differences and useful similarities between languages," "cognitive flexibility," "communicative sensitivity," and "capacity for language learning" (Krulatz et al., 2018, p. 81). The other view, deficit view, is to view multilingualism with monolingual biases. Krulatz et al. (2018) give an example of this: "teachers who think that being multilingual means that multilingual students' language competence is just one third or one fourth of a monolingual person's capacity are certainly taking the deficit view of multilingualism" (p. 82). Another example of a deficit view is when "teachers think that speaking a language other than Norwegian (or English in English classes) at school detracts learners from their ability to learn Norwegian (or English)" (Krulatz et al., 2018, p. 82). If multilingual students are learning English as an L3, choosing to use a resources view will shape the pedagogy, language learning, and students' ownership of language learning in a positive way.

In this thesis, the term *multilingual EFL classroom* is used to describe a classroom in which there are multilingual students learning English as an L3.

2.4 Preparedness

Preparedness is first and foremost defined as "the state of being prepared for a particular situation" ("Preparedness", 2024). In the English didactical field, one of these "particular situations" can be having to navigate a linguistically diverse classroom, while facilitating optimal language learning among students where English is a foreign language. Former research shows that English language teachers do not feel adequately prepared to teach in linguistically diverse classrooms (Faltis & Valdés, 2016; Polat, 2010; Hansen-Thomas et al., 2016; Deng et al., 2021). Nevertheless, there is a need to train teachers so that they are prepared to meet the linguistically diverse classroom (Faltis & Valdés, 2016). In the context of this study, the term preparedness is used to describe the level of preparedness, i.e. how prepared, or unprepared, pre-service teachers are to teach English in a multilingual classroom.

2.4.1 Summary of relevant research

Quantitative comparative analysis of pre-and in-service teacher beliefs about readiness and self-competency (2010)

In 2009, Nihat Polat conducted a quantitative comparative analysis of pre-and in-service teacher beliefs about readiness and self-competency (regarding helping English language learners) (Polat, 2010, p. 228). Even though the study was conducted a while back, the findings of pre-service teachers' beliefs about readiness (or preparedness if we adapt it to this study) remain relevant for this study.

The quantitative study consisted of 83 in-service content area teachers, 52 male, and 31 female, and 88 pre-service content area teachers, whereas 56 were female and 32 were male (Polat, 2010, p. 230). The participants were sampled to answer three questionnaires, regarding "beliefs about self-competency and readiness in supporting ELLs' education" (Polat, 2010, p. 230). The research questions were as stated:

- 1. How different are pre-and in-service content area teachers' beliefs about their overall self-competency in supporting ELLs in mainstream classes?
- 2. How different are pre-and in-service content area teachers' beliefs about different competencies and readiness to support ELLs' language and academic development?
- 3. After controlling for the personal background (e.g.: exposure to linguistic and cultural diversity) and educational factors, do the differences in pre-and-in-service teachers' beliefs concerning different competencies and readiness change?
- 4. How different are pre-and in-service content area teachers' beliefs about what teacher education programs should do to get pre-service teachers ready to help ELLs in content area classes?
- 5. What are the gender differences in these beliefs? (Polat, 2010, p. 231)

The first questionnaire was a "background information questionnaire", which included basic information about participants (Polat, 2010, p. 231). This was formed as a Likert scale ranging from 1=not at all to 5=a lot (Polat, 2010, p. 231). The next questionnaire was the "beliefs about readiness and competencies", aiming to "identify participants' beliefs about their current level of self-competency and readiness in helping ELLs in mainstream classes"

(Polat, 2010, p. 231). This was formed as a Likert Scale ranging from 1=not important at all/not competent at all to 7=very important/very competent (Polat, 2010, p. 231). The last questionnaire was the "beliefs about program improvement", involving "beliefs about general suggestions to improve current teacher education programs to help pre-service teachers become more competent" (Polat, 2010, p. 231). This was also formed as a Likert scale ranging from 1=not important at all to 7=very important (Polat, 2010, p. 231). All questionnaires took approximately 35 minutes (Polat, 2010, p. 231). The data "were analyzed using several different analyses of variance models, including a 2 x 2 between-subjects factorial ANOVA, and a series of multivariate analyses of variance and covariance (MANOVA/MANCOVA)" (Polat, 2010, p. 231).

Regarding readiness and competencies, "in-service teachers in this study appeared to have higher beliefs than the pre-service teachers about their overall self-competency in supporting ELLs in mainstream classes" (Polat, 2010, p. 237). In addition, neither group "felt strongly positive about their overall self-competency in helping ELLs in mainstream classes" (Polat, 2010, p. 237). In contrast, pre-service teachers scored higher regarding "the sociocultural awareness competency" (Polat, 2010, p. 237). Furthermore, regarding readiness, the results showed that:

In-service teachers (...) reported stronger beliefs than the pre-service teachers, indicating that content area teachers may not be ready to help ELLs due to lack of: (1) teacher educators' K-12 teaching experience, (2) practicum in mainstream classes with ELLs, and (3) required courses regarding supporting ELLs in mainstream classes (Polat, 2010, p. 237).

Lastly, females "reported to be more confident than males concerning self-competency in language assessment and evaluation" (Polat, 2010, p. 237).

As for background factors, readiness, and competencies, "differences between pre-and inservice teacher beliefs about language and linguistic competency" were non-significant (Polat, 2010, p. 237). Further, some differences in scores were found between males and females based on different background factors (these will not be discussed further) (Polat, 2010, p. 238).

Finally, the scores regarding program improvement suggestions showed increased support from pre-service teachers on the "argument that more awareness of research-based practices is

needed" (Polat, 2010, p. 238). Further, "female teachers more strongly than the male ones reported to believe that more field and practicum experience is needed to improve pre-service teacher education programs" (Polat, 2010, p. 238). In contrast, "male in-service teachers (...) not only held the strongest beliefs in support of a more balanced approach between theory and practice, but they also reported to feel most strongly about increasing the program hours to improve pre-service teacher education programs" (Polat, 2010, p. 238).

This study's results show significant differences between pre- and in-service teachers, as well as some differences in response based on background factors such as gender (Polat, 2010, p. 239). The overall results show a low degree of "(a) overall self-competency, (b) readiness, and (c) competencies" regarding supporting ELLs, especially for pre-service teachers (Polat, 2010, p. 239).

Factors associated with novice general education teachers' preparedness to work with multilingual learners (2021)

Another study relevant to the theory of this thesis is a multilevel study conducted by Deng et al. (2021) examining "factors associated with novice⁴ general education teachers' preparedness to work with multilingual learners" (Deng et al., 2021, p. 489). The research questions were as stated:

- 1. To what extent did teachers report feeling prepared to work with multilingual learners in their first year of teaching?
- 2. To what extent were teacher-perceived preparedness to work with multilingual learners related to their preservice teacher education experiences?
- 3. To what extent were teacher-perceived preparedness to work with multilingual learners related to their first-year teaching experiences?
- 4. To what extent were teacher-perceived preparedness to work with multilingual learners related to school contexts where they taught? (Deng et al., 2021, pp. 492-93).

⁴ Teachers in their first year of teaching

Relevant data was sampled by retrieving two "nationally representative datasets", one from "the 2015 to 2016 National Teachers and Principal Survey (NTPS) from the NCES" and the other from "CRDC to extract school-level information in the 2015 to 2016 school year in terms of the enrollment of students labeled as 'English Learner'." CRDC is "a survey of all public schools and school districts in the United States that collects information about school characteristics, programs, services, and student outcomes" (Deng et al., 2021, p. 493). In the sample, 6,670 teachers and 3,770 schools were included.

The different variables, "teacher preparedness," "teacher-level variables," "school-level variables," and "linking variables," including all scores, were extracted from the data (Deng et al., 2021, pp. 493). Statistical analysis was used to analyze the data, and "multilevel modeling considering the hierarchical nature of educational data" was applied using the software Mplus (Deng et al., 2021, p. 493). (No additional remarks on statistical analysis will be added).

The results of the study revealed that the "average score of teacher-perceived preparedness was 2.16 on a four-point scale", which suggests that novice teachers did not feel as prepared to work with multilingual learners (Deng et al., 2021, p. 494). In addition, teachers who "had taken a course(s) on teaching multilingual students" scored significantly higher on "teacher-perceived preparedness to work with multilingual students" (Deng et al., 2021, p. 495) than those teachers who had not. Further, "teacher-perceived preparedness to work with multilingual learners was significantly linked to the total number of kinds of teacher support they received during the first year of teaching" (Deng et al., 2021, p. 495). Moreover, "teachers' students who were multilingual learners had a significant positive effect on their perceived preparedness", meaning more multilingual students in the classroom, a higher level of feeling prepared (Deng et al., 2021, pp. 495-96). Similarly, on a school basis, more multilingual learners provided a higher score of teacher-perceived preparedness (Deng et al., 2021, p. 496). As for "school location, teachers in suburban/city areas reported higher preparedness than teachers in towns/rural areas", and for school levels, "elementary teachers reported higher perceived preparedness than secondary teachers" (Deng et al., 2021, p. 496).

The study's overall findings suggested that "public school general education teachers reported not being well prepared to work with multilingual learners" (Deng et al., 2021, p. 496). However, results show that there are variables that "positively impact teacher-perceived preparedness that are worth noting and information ongoing teacher education practice and research" (Deng et al., 2021, p. 497). There was a higher level of perceived preparedness if

teachers had taken courses regarding multilingual learners, received specific support during their first year as a teacher, and if there were multilingual students at the school (Deng et al., 2021, pp. 497-98).

3 Methodology

In this chapter, I will explain and present the chosen methods for the data collection and analysis. The collection of data was carried out through a mixed-method design, mainly emphasizing a qualitative approach in the form of two group interviews, although including elements of a quantitative approach, in this case, an online questionnaire. The mixed method design takes its name from the way it mixes both forms of methods, qualitative and quantitative, "in a single study or in a multistage series of studies" (Creswell & Guetterman, 2021, p. 46). Creswell and Guetterman (2021) underline that "the core argument for a mixed method design is that the combination of both forms of data provides a better understanding of a research problem than either quantitative or qualitative data alone" (p. 46). Thomas (2009) also emphasizes that mixing design frames and methods in some cases is preferable because it can benefit the investigation and analysis of data (pp. 140-41). Since the primary objective of this research was to investigate and compare pre-service teachers' preparedness regarding teaching in multilingual EFL classrooms, I found that using qualitative and quantitative methods would help streamline the work with data collection and contribute to the credibility of the data and findings. The specific research questions I wanted to investigate were:

RQ 1: What factors influence pre-service teachers' preparedness for teaching in multilingual EFL classrooms?

RQ 2: Are there any differences between the two groups [Teacher Training Education levels 5-10 and Teacher Training Education levels 8-13] of pre-service teachers regarding their preparedness for teaching in a multilingual EFL classroom?

These comparative and exploratory research questions had the goal of examining the chosen data and would hopefully provide new insight into the educational research field. In addition, Thomas (2009) states how comparative studies are useful because "new insights can be obtained", "potential explanations may occur for (...) understanding", and "they give us a window on our own unspoken and unquestioned cultural expectations when these are seen against the backdrop of expectations and practices of others" (p. 138).

Further, specific research hypotheses are often connected to quantitative research. Therefore, one might think it would be natural to include the formulated research predictions in the

methodology chapter prior to the presentation of the questionnaire. In this case, the quantitative questionnaire was made to assist in designing the qualitative group interview and strengthen its findings. Therefore, it was fruitful to use the mixed-method methodology approach to gain a "better understanding of [the] research problem" (Creswell & Guetterman, 2021, p. 46), although not to prove a specific hypothesis wrong or right since that is not what the research was intended for. Therefore, no specific research hypotheses have been made. As stated, the chosen method for the data collection consists of a quantitative part in the form of an online questionnaire and a qualitative part in the form of group interviews. In this chapter, the quantitative method will first be presented, followed by the qualitative method. Thereafter, the data analysis method will be presented, and finally, research quality and ethics.

3.1 Quantitative data

As mentioned above, I found that using both qualitative and quantitative methods would help gather data more efficiently and contribute to the credibility of the data and findings. When I formulated the overall direction for the thesis, I first created an online questionnaire.

3.1.1 Online questionnaire

Before conducting the qualitative interviews, it was ideal to have background information to map out a guideline for what type of questions would be fruitful for the interview guide. Therefore, I decided to create an anonymous online questionnaire regarding the topic of 'multilingual competence' to get a sense of pre-service teachers' thoughts and preparedness surrounding teachers' competence in multilingual pedagogies and multilingual classrooms. I used the free online service *Nettskjema* to design and conduct the quantitative research.

3.1.1.1 Designing the questionnaire

The questionnaire was created with research questions 1 and 2 in mind. The goal of the questionnaire was to map out the level of competence in multilingual approaches among pre-

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⁵ As stated in Chapter 2, the term 'multilingual competence' was in this study used to describe *teachers' competence in multilingual pedagogies and teaching*. As explained in Chapter 2, this is not the correct definition of the term. It is important to note that the term *was not* used to describe the original definition of 'multilingual competence' but to describe *teachers' competence in multilingual pedagogies and teaching*.

service teachers and to gain important information regarding the difference in preparedness and attitudes regarding multilingualism between the two educational programs. In addition, it would be interesting to see if there was any difference between the scores depending on gender, language used at home, and languages comprehended. Based on these factors, 17 questions were designed, which the participants would answer through Nettskjema⁶. On the first page of the online questionnaire, there were 2 dichotomous questions to separate gender and education programs, 1 multiple-choice question in which the participants could check off as many boxes as needed, and lastly, a question to map how many languages the participants could comprehend.

Since the research revolves around the comparison of two educational programs, it was important to include a question that would distinguish which program the participants were enrolled in (Q2: What education program are you enrolled in?). Additionally, I decided to add the question regarding gender identity to see if there was any difference between the responses of males, females, or others (Q1: Gender identity). Question 3 (What is the main language(s) you use at home?) was included to distinguish between participants with Norwegian as their mother tongue and other languages. This was to see if there were any differences between participants' responses with Norwegian as their heritage language and participants with another heritage language. Lastly, question 4 (How many languages do you comprehend?) was added to see if there were any differences in responses based on how many languages the participants could comprehend. It was especially interesting to see if any differences in scores would occur based on the participants being bilingual or multilingual.

On the second page of the questionnaire, I made thirteen Likert Scale questions to measure respondents' level of disagreement/agreement regarding the statements provided in the questionnaire. Instead of using the regular five-point scale, I decided to expand the scale ranging from θ =strongly disagree to 1θ =strongly agree, with the idea that a greater choice of answer options might provide more nuance to the data. Below is a figure of how the statements were designed, in addition to a table that presents all questions and answer options of the online questionnaire:

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⁶ The original questionnaire retrieved form Nettskjema is attached as *Appendix 1*



Keep in mind the program you are enrolled in. (0 = strongly disagree 10 = strongly agree)



 $\label{lem:figure loss} \textit{Figure 1-display of a Likert Scale question retrieved from the online question naire}.$

Page	Questions	Answer option
1	Q1. Gender identity	Male, Female, Other
	Q2. What education program are you enrolled in?	Lector 8-13, Lector 5-10
	Q3. What is the main language(s) you use at home?	Norwegian, Sami, Kven, English,
	Check more boxes if necessary.	Spanish, German, Arabic, Tamil,
		Swedish, Finnish, Other
	Q4. How many languages do you comprehend?	1, 2, 3, 4, 5, more
	How many languages are you able to either understand, speak,	
	read, or write?	
2	Q5. I understand what multilingual competence is	0 = strongly disagree $10 = $ strongly agree
	Q6. Multilingual competence is mainly developed through the	0 = strongly disagree 10 = strongly agree
	teacher education program	
	Keep in mind the program you are enrolled in.	
	Q7. Multilingual competence is mainly developed through practical	0 = strongly disagree 10 = strongly agree
	experience	
	Q8. I consider developing multilingual competence a valuable part	0 = strongly disagree $10 = $ strongly agree
	of the teacher education program	
	Q9. I consider developing multilingual competence a valuable part	0 = strongly disagree 10 = strongly agree
	of the EFL (english foreign language) classroom	
	Q10. There should be more focus on multilingual competence in	0 = strongly disagree 10 = strongly agree
	the teacher education program	
	Keep in mind the program you are enrolled in.	
	Q11. Through the course of my teacher education, I have gained	0 = strongly disagree 10 = strongly agree
	knowledge of what multilingual competence is	
	Q12. Through the course of my teacher education, I have gained	0 = strongly disagree 10 = strongly agree
	knowledge of what multilingualism is	
	Q13. Throughout the course of my teacher education, I have been	0 = strongly disagree 10 = strongly agree
	given specific multilingual methods and tools that I can use in the	
	multilingual classroom	
	Q14. During my practicums, I have had the opportunity to use my	0 = strongly disagree 10 = strongly agree
	multilingual competence	

	Q15. I have used multilingual exercises, methods, or strategies	0 = not at all, 10 = very much so
	during my practicum	
	Q16. It is easier to use multilingual strategies when you are	0 = strongly disagree 10 = strongly agree
	multilingual	
	Q17. I feel prepared to teach in a multilingual EFL (english foreign	0 = strongly disagree 10 = strongly agree
	language) classroom	

Table 1 – online questionnaire with answer options listed.

3.1.1.2 Recruiting participants

At the beginning of the project, there was some uncertainty about what type of respondents should be recruited, from where, and how they would be recruited. Initially, the research project would sample data regarding preparedness among students enrolled in Teacher Training Education levels 8-13 and Teacher Training Education levels 5-10 at different teacher education institutions in Norway. Having a large sample of respondents would validate and strengthen the findings and provide valuable insight into the difference in preparedness between different educational institutions. However, considering the timeframe of the thesis, a decision was made to adjust the project so that it would be possible to conduct and sample the research data necessary to build a thesis. Therefore, the final decision involved choosing one teacher education institution in Norway that provided both educational programs, Teacher Training Education levels 8-13 and 5-10. This type of sampling approach is called *nonprobability sampling* and involves selecting "individuals because they are available and convenient and represent some characteristic the investigator seeks to study" (Creswell & Guetterman, 2021, p. 173).

To further narrow what participants would be recruited, the nonprobability sampling approach *convenience sampling* was used to select a specific group of participants. Creswell and Guetterman explain that:

In convenience sampling, the researcher selects participants because they are willing and available to be studied. In this case, the researcher cannot say with confidence that the individuals are representative of the population. However, the sample can provide useful information for answering questions and hypotheses (2021, p. 173).

The quantitative research would only include participants majoring in English in their final year (5th year) of teacher education levels 5-10 or 8-13. This would make data collection more efficient and achievable.

After deciding on the sampling strategy, an administrative staff member at a particular teacher education institution was contacted to get a list of all final-year students enrolled in Teacher Training Education 5-10, majoring in English. Further, an e-mail regarding the online questionnaire was sent out to these students⁷. In the e-mail, the students were also requested to provide feedback on participation in the latter group interview. In all, 14 participants enrolled in Teacher Training Education level 5-10 received an e-mail questioning to participate in the survey and group interview. As for the recruitment of participants enrolled in Teacher Training Education levels 8-13, I used internal sourcing to find their e-mail addresses. 20 participants enrolled in TTE levels 8-13 received the same e-mail.

3.1.1.3 Conducting the questionnaire

The questionnaire was published on November 8th, 2023, and closed on December 20th, 2023. Participants responded to the questionnaire sporadically within a time frame stretching from the 8th of November to November 22nd. During this timeframe, I sent out an additional e-mail to all 34 participants urging them to kindly respond to the questionnaire⁸. All responses were stored online in *Nettskjema*, which is password-protected through a two-step authentication.

3.2 Qualitative data

For the second part of the mixed-method research, qualitative data was gathered in the form of two group interviews. The small-scale quantitative study conducted through the online questionnaire was used as a basis to draft and design the interview guide.

3.2.1 Group interview

Since the online questionnaire only contained Likert Scale answer options, it was important to choose a qualitative method for data collection that, together with the questionnaire, would provide more nuanced data. For this part, group interviews were chosen as the method. Cohen et al. (2017) state how "the research interview (...) involves the gathering of data through direct verbal interaction between individuals and, in this sense, it differs from the questionnaire where the respondent is required to record in some way her responses to set questions" (p. 508). While deciding what type of interview would benefit the research, the

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⁷ The e-mail is attached as *Appendix 2*

⁸ The additional e-mail is attached as *Appendix 3*

group interview became a suitable choice due to the time frame and goal of the project. As Cohen et al. point out, "the group interview can be cost-efficient, time-efficient, generate a wider range of responses than in individual interviews (2017, p. 527). Instead of conducting individual interviews with participants enrolled in the teacher education programs, recruiting two groups of participants was more efficient. The qualitative data was sampled through two rounds of semi-structured group interviews, one group representing Teacher Training Education levels 5-10 and the other Teacher Training Education levels 8-13.

3.2.1.1 Recruiting participants

Opposite to the quantitative nonprobability approach for sampling, *purposeful sampling* was used as the approach for sampling qualitative data. Creswell and Guetterman explain, "in purposeful sampling, researchers intentionally select individuals and sites to learn or understand the central phenomenon" (2021, p. 240). The purposeful sampling approach, homogeneous sampling, was further used to select participants. Creswell and Guetterman further explain, "in homogeneous sampling, the researcher purposefully samples individuals or sites based on membership in a subgroup that has defining characteristics" (2021, p. 242). As stated earlier, the quantitative research was conducted by recruiting fifth-year students enrolled in TTE levels 5-10 and 8-13, majoring in English. Therefore, homogeneous sampling was used to sample the same specific group of students for the group interviews. This was initially done by requesting students to participate in a group interview, a request attached to the original e-mail regarding the online questionnaire.

While recruiting participants for the online questionnaire was manageable, recruiting for the group interview was a bit more challenging. Only one of the students enrolled in TTE levels 8-13 answered the inquiry to participate in a group interview, and therefore, each student in TTE levels 8-13 was individually messaged and asked to participate in the group interview. Eventually, 7 students volunteered to participate in a scheduled group interview taking place at an educational institution. As for the students enrolled in TTE levels 5-10, an associate located the students' master's offices, and the English graduate students were thereafter contacted directly and asked to participate in the group interview. One of the students created a Facebook Messenger chat including all students relevant to the study, and through the platform, a total of 6 participants were recruited for the interview.

3.2.1.2 Designing the interview guide

Before designing the interview guide, it was important to know what the actual aim of the interview was. Therefore, questions such as "What is the goal of this research?" and "What are the objectives?" were considered before formatting specific questions. Cohen et al. describe this as "Stage 1" of planning and conducting an interview and point to how thematizing "is the most important step, for only careful formulation of objectives at this point will eventually produce the right kind of data necessary for satisfactory answers to the research problem" (2017, p. 512). Unfortunately, due to a lack of knowledge and relevant theory, this was only to a certain degree considered before formatting questions for the online questionnaire. However, data from the questionnaire made it possible to see what type of questions should be included in the interview and if some aspects of the overall direction of the thesis should be reviewed and revised.

As the group interview was to investigate pre-service teachers' preparedness regarding teaching in multilingual EFL classrooms, the main part of the interview was divided into four subtopics: 'competence,' 'preparedness,' 'mindsets/emotions,' and 'comparison of TTE levels 5-10 and 8-13'. The main idea was to conduct a semi-structured interview, where "the topics and questions are given, but the questions are open-ended and the wording and sequence may be tailored to each individual interviewee and the responses given, with prompts and probes" (Cohen et al., 2017, p. 511). As for the actual question format, the questions were open, direct, and specific. When constructing the questions connected to each subtopic, attention was given to: "vocabulary, (...) avoiding ambiguity and imprecision, (...) leading questions, (...) avoiding double-barrelled questions, (...) sensitive or personal questions, (...) recall (how easy it will be for the respondent to recall events, etc.)." (Cohen et al., 2017, p. 513). In addition, specific anticipated probes were added to some of the questions, whereas "probes are subquestions under each question that the researcher asks to elicit more information" (Creswell & Guetterman, 2021, p. 256), and anticipated probes "pre-scripted probes to follow up on an initial question" (Cohen et al., 2017, p. 514). When the main part containing 17 questions was designed, formalities such as information regarding the research project and a summary and conclusion were added to the interview guide. Two questions regarding gender and native language were added to the introductory part to see if any responses would differ based on these variables and to see if there was a correlation between the qualitative and quantitative results. A final remark is that the interview guide was originally designed in

Norwegian since the interviews were conducted in Norwegian. A translated version is presented below, while the original document is attached as *Appendix 5*.

Interview		Formalities	
guide			
Before startup	Present myself, secretary, and project	Walkthrough of info letter, obtain written consent to participation, and audio recording	Note gender and native language
General Introduction	What do the informants understand by the term "multilingual competence"?	Clarify the meaning of the term and form starting on the questions	n thoughts before
Main part		Probes	
Competence	Q1. Some believe that multilingual competence is mainly developed through Teacher Training Education, others believe that it is mainly developed through practice. Q2. Through your TTE, in what ways have you gained knowledge of what multilingual competence is?	What do you think about this? Where do you think multilingual competed developed? Can you give an example?	tence mainly is
	Q3. In the online form, most people answered that there should be a bit more focus on multilingual competence, why do you think that?		
	Q4. What specific tools, methods, exercises, etc. in terms of multilingualism have you acquired through the TTE?	Have you used any of the methods in pra- Give examples.	actice?
	Q5. Is developing multilingual competence a valuable part of the TTE?	Is it valuable for the EFL classroom?	
Preparedness	Q6. Scenario/thought experiment:	What challenges do you expect to face in	n the multilingual
	You are a newly qualified teacher and enter the multilingual classroom as an English teacher:	classroom, and how do you plan to meet	these challenges?
	Q7. How do you perceive your preparedness for teaching English in multilingual EFL classrooms?		
	Q8. Can you share specific aspects of your education that you believe contribute to your preparedness to address linguistic diversity in the classroom?		
	Q9. Are there any challenges or gaps in your education that you feel might affect how well prepared you are to teach in multilingual classrooms?		
	Q10. In what ways do you think the expectations and requirements for TTE levels 5-10 affect your preparedness to handle linguistic diversity in the classroom?	Are there enough expectations and dematoo little?	ands? Too much,
Mindsets/emoti ons	Q11. How do you feel about teaching in multilingual EFL classrooms?		

	Q12. What feelings or concerns arise when thinking about	
	the potential for linguistic diversity to be present in your	
	future classrooms?	
	Q13. Have there been any experiences or aspects of your	Give examples.
	TTE that have influenced your feelings about teaching in	
	multilingual classrooms, positively or negatively?	
Comparison of	Q14. In what ways do you think that the	
TTE levels 5-	requirements/expectations for how well-prepared one must	
10 and 8-13	be to face the multilingual English classroom differ between	
	TTE levels 5-10 and 8-13?	
	Q15. Do you perceive any noticeable differences in the	How might this affect your teaching approach?
	emphasis on cultural competence between the two TTEs?	
	Q16. Considering the specific curriculum and training at	
	your specific TTE, how do you think it has prepared you for	
	the various challenges a multilingual EFL classroom can	
	have?	
Conclusion	Q17. Is there anything else you would like to share about	Summarizing thoughts, open for comments from the
	your experiences, thoughts, or concerns regarding your	informants.
	preparedness and feelings about teaching in a multilingual	
	EFL classroom within your educational level?	Reminder of rights and consent form
		Wrap up positively and give thanks for the participants
		contribution

Table 2 – Translated version of the interviews guide for sampling qualitative data

3.2.1.3 Conducting the interviews

Before conducting the first interview, a registration form was filed to *Sikt* (the knowledge sector's service provider, directly translated), regarding the processing of personal data. Initially, a secretary would join the group interviews and record data by hand. Therefore, there was no need to file for permission since no personal data (i.e., name, date of birth, contact info, audio recording, etc.) would be included in the data sampling. After some careful consideration, I found it convenient to use both a secretary and an audio recording to get an accurate transcription of the whole interview. The registration form was quickly approved, and an information letter containing a consent form was made. The participants reviewed and signed this consent form before the official interview and audio recording started. It is attached as *Appendix 6*. The audio recording device used was an iPhone XR.

Both group interviews took place at the same teacher education institution. Ensuring the interview proceeded comfortably, a soundproofed room was booked to avoid any distractions and interruptions. In addition, participants were asked to turn their phones on silent. Cohen et

al. (2017, p. 520) list several criteria regarding "problems in the actual conduct of an interview that can be anticipated" and several things "the interviewer should...", which were studied previous to the interview in order to be well prepared. Snacks and beverages were offered to ensure that the interviewees were comfortable and focused. The first interview took place with a group of participants enrolled in TTE levels 5-10. The group consisted of 6 participants, 2 female and 4 male students. All participants reported Norwegian as their first language, whereas 1 female participant reported using English at home, and 1 male participant reported being fluent in German. The second interview was with the group of participants enrolled in TTE levels 8-13. This group consisted of 5 participants, 3 females and 2 males. 4 of 5 participants reported Norwegian as their L1, whereas 1 female participant reported Kurdish as her L1, and 1 male participant reported using English at home. Both interviews opened with formalities being put in place, then the audio recording started, and an introduction followed.

While I was the one to conduct both interviews, asking questions, using probes, etc., the secretary took notes and was instructed to write down anything significant. During the interview, participants both individually answered set questions and commented on each other's responses. This way, the interview occasionally gained the characteristics of a group conversation, which also seemed to make the interview overall more comfortable and less frightening for participants. After all subtopics had been discussed by the participants, the interview was concluded, and the interviewees were thanked for their participation. Both interviews lasted approximately 1.5 hours.

3.3 Method for analysis

Using a mixed-method approach for conducting research, the sampled data required two different methods for analysis. These are explained below.

3.3.1 Analysis of quantitative data

Creswell and Guetterman's "steps in the process of qualitative data analysis" were used when analyzing the quantitative data (2021, p. 205). First, one must "prepare the data for analysis", and the first step here is to "score the data" (Creswell & Guetterman, 2021, p. 205). This was already done because the questionnaire was a 10-point Likert Scale, naturally giving each question a numeric score. The next step was to "determine the types of scores to analyze", and since each question was scored 1-10 by respondents, it was defined as a *single-item score*

(Creswell & Guetterman, 2021, p. 207). Creswell and Guetterman explain how "these scores [single-item scores] provide a detailed analysis of each person's response to each question on an instrument" (2021, p. 207). Since the questionnaire was anonymous, the response of each respondent is presented as a number. Below is an example of some singe-item scores retrieved from the online questionnaire:

Single-Item Scores

	Question 7	Question 8	Question 9	Question 10	Question 11	Question 12	Question 13	Question 14	Question 15
Respondents	Multilingua	I consider of	I consider o	There shou	Through the	Through the	Throughout	During my	I have usec
1	8	9	9	8	10	10	8	8	4
2	8	9	10	9	8	10	6	4	3
3	5	10	10	8	10	10	7	8	6
4	9	8	9	8	9	10	6	6	5
5	9	10	9	8	8	10	7	7	6

Figure 2 – example of single-item scores retrieved from the online questionnaire.

The next step was to "select a statistical program" and "input data" (Creswell & Guetterman, 2021, pp. 208-09). Through *Nettskjema*, the data was easily downloaded as an Excel file (see *Table 3*) and, therefore, already put into a statistical program (Excel).

A	В	С	D	E	F	G	H	1	J	K	L	M	N	0	P	Q	R	S	T	U	V	W	Х	Y	Z	AA	AB	AC	AD
submiss	c \$created	Gender id	le What educa	t What is the	What is th	ne What is th	he What is t	h What is t	he What is the	What is th	e What is th	e What is t	he What is th	e What is th	ne How man	y Lunderst	an Multillings	Multilingua	I consider o	I consider o	There sho			Throughou	at During m	/ I have us	d It is easier	I feet prepa	a \$answer_tin
	********			Norwegian							Tamit				3	9	8	8	9	9	8	10	10	8	В	4	7	8	128482
	********			Norwegian											3	8	5	8	9	10	9	8	10	6	4	3	7	4	83939
	********			Norwegian									Finnish	Other	More	10	5	5	10	10	8	10	10	7	8	6	8	9	335550
	********			Norwegian											2	10	7	9	8	9	8	9	10	6	6	5	8	6	107657
	********			Norwegian											5	6	6	9	10	9	8	8	10	7	7	6	8	8	239586
2939520	********	Male	Lector 8-13	Norwegian											4	8	7	6	9	8	8	10	8	8	8	7	9	7	334403
2940581	********	Female	Lector 5-10	Norwegian			English								2	10	7	8	10	10	7	10	10	10	6	6	8	10	113637
2941163	********	Male	Lector 5-10	Norwegian											2	6	5	8	7	5	5	6	7	6	6	6	6	6	514021
2941261	********	Female	Lector 5-10	Norwegian			English								3	6	5	8	10	8	8	8	7	8	5	6	7	6	1230192
2941519	********	Female	Lector 8-13	Norwegian											2	8	0	8		10	10	6	6	3	6	7	8	10	120108
2941792	********	Female	Lector 8-13	Norwegian			English								5	10	0	10	10	10	10	3	2	3	7	7	10	5	145203
2944156	********	Male	Lector 8-13	Norwegian											2	8	5	5	4	6	4	7	8	3	3	3	6	3	146841
2946994	********	Male	Lector 5-10	Norwegian											3	6	2	8	2	4	1	6	6	4	2	2	7	6	157084
2947236	********	Female	Lector 5-10	Norwegian			English								5	10	ñ.	5	10		10	10	10	10	10	10	8	8	198466
2947298	********	Male	Lector 8-13	Norwegian											3	10	5	5	8	10	7	7	10	8	10	4	8	10	242460
2947333	********	Female	Lector 8-13											Other	3	7	5	5	10	10	8	10	10	7	3	3	5	5	119368
	********		Lector 8-13	Norwegian											2	7	6	4	9	9	8	5	9	9	6	6	10	8	129268
2948637	********	Male		Norwegian											4	8	3	8	7	8	8	7	10	3	3	3	10	8	210825
2948846	********	Male	Lector 8-13	Norwegian											2	6	5	7	7	8	7	6	8	4	7	5	6	7	162576
2948887	********	Female	Lector 5-10	Norwegian											2	9	6	4	10	10	2	8	10	6	6	4	5	7	147864
2948914	********	Female		Norwegian			English								3	9	6	7	9	10	8	10	10	10	8	6	8	5	102568
2948918	********	Male	Lector 5-10	Norwegian											2	8	5	7	8	8	7	7	8	4	8	7	8	8	804241
	********			Norwegian			English								3	5	3	8	7	10	7	6	10	5	7	6	5	7	107430
	********			Norwegian											4	10	4	8	9	10	7	10	10	3	8	6	7	8	107245
	********			Norwegian			English								2	7	5	5	10	5	8	6	10	3	5	1	10	5	244688
	********			Norwegian											3	9	4	6	9	9	7	9	9	8	8	8	8	8	174318
2959075	*******	Male	Lector 5-10	Norwegan			English								4	3	5	5	5	5	5	4	B	3	6	4	5	5	166347

Table 3 – Unfiltered Excel file downloaded from Nettskjema containing all responses of the online questionnaire.

The final step of preparing data for analysis was to "clean and account for missing data" (Creswell & Guetterman, 2021, p. 211). Since Nettskjema already had "cleaned the data", it was not necessary to do this manually. Furthermore, because all questions in the questionnaire were mandatory and respondents could not submit without answering all questions, there was no missing data since it is defined as "data that are missing in the database because participants do not supply them" (Creswell & Guetterman, 2021, p. 212).

Apart from those mentioned above, a step in preparing the data for analysis is sorting the data based on variables. As seen in the presentation of questions in Table 1, the first four questions were made to map out important characteristics of the participants, i.e., 'gender identity,' 'educational program,' 'main languages used at home,' and 'number of languages comprehended.' Separate variables were further created from these characteristics, and from there, the data could be sorted based on the scores that were connected to a specific variable. For example, all scores from female respondents were gathered in a separate column to analyze the data further.

After the data had been prepared, *descriptive analysis* was conducted in order to calculate findings relevant to the research questions. Creswell and Guetterman (2021) explain how:

Questions or hypotheses in quantitative research require that you do the following: Describe trends in the data for a single variable or question on your instrument (e.g., "What is the self-esteem of middle school students?"). To answer this question, we need descriptive statistics that indicate general tendencies in the data (mean, median, and mode) (...) we seek to describe any of our variables (p. 213).

When choosing a descriptive statistics test to provide relevant statistics for answering the research questions, the *central tendency* was measured, which "are summary numbers that present a single value in a distribution of scores. (...) They are expressed as an average score (mean), (...) median (...) or mode." (Creswell & Guetterman, 2021, p. 214). When measuring central tendencies, *mean* (M) was "used to describe responses of all participants to items on [the] instrument" (Creswell & Guetterman, 2021, p. 214). Creswell and Guetterman (2021) further explain a *mean as* "the total of the scores divided by the number of scores". Further, "to calculate the mean, you sum up all the scores and then divide the sum by the number of scores." (Creswell & Guetterman, 2021, p. 214). In Excel, if column B, rows 2 to 14, contained scores connected to question four, the code "=*AVERAGE*(*B:2B:14*)" was used to calculate the mean. This way, the mean of each question was calculated.

The final part of the quantitative analysis was measuring variability. Variability was measured by "looking at the range of scores" or "the difference between the highest and the lowest scores to items on [the] instrument" (Creswell & Guetterman, 2021, p. 216). If the males scored a mean of 7.4 on question 1, while females scored a mean of 8.4, the scores ranged by 1 point.

3.3.2 Analysis of qualitative data

Unlike the quantitative analysis, where data is first collected and then analyzed, qualitative data were collected and, to some degree, simultaneously analyzed (Creswell & Creswell, 2023, p. 205; Creswell & Guetterman, 2021, p. 274). When analyzing and interpreting the qualitative data, Creswell and Guetterman's "six steps in analyzing and interpreting qualitative data" were used (2021, p. 273). The first step was to "prepare and organize the data for analysis", in which the data would be organized and transcribed (Creswell & Guetterman, 2021, p. 274). Organizing data means "organizing materials by type," "maintaining participant confidentiality by storing data in password-protected electronic files or locked file drawers," etc. (Creswell & Guetterman, 2021, pp. 274-75). Conversely, transcribing "is the process of converting audio recordings or field notes into text data" (Creswell & Guetterman, 2021, p. 275). After the interview, the two audio recordings and the notes from the secretary were downloaded to a password-protected program on a personal MacBook. The audio recordings were transcribed by listening to them on a noise-canceling headset and writing them down in Microsoft Word on MacBook. This was a time-consuming process because a lot of attention had to be aimed toward capturing the actual words spoken, their meaning, and context. In addition, the interviewees often talked over each other, making the transcription harder. A copy of the interview guide was used as the main document to transcribe the responses since it helped organize the data and connect it to each question. All words were written down, in addition to laughter, pauses, filler words, etc. Thereafter, I was to decide whether to "analyze by hand or computer", for which I decided to analyze the data by hand (Creswell & Guetterman, 2021, p. 276). Creswell and Guetterman explain, "the hand analysis of qualitative data means that researchers read the data, mark it by hand, and divide it into parts" (2021, p. 276). It was not intentional to analyze the data by hand, but this decision was made due to not knowing about other options for analyzing qualitative data.

The next step was to "explore and code that data" (Creswell & Guetterman, 2021, p. 279). To explore the data, both transcriptions were read several times while highlighting parts I found interesting or important for the analysis. Further, to code that data, the comment function in Word was used to jot down important ideas and meanings in the margins. In addition, phrases that occurred frequently, similar phrases, and "good quotes" were highlighted in different colors. Creswell and Guetterman (2021) explain that "the object of the coding process is to make sense of text data, divide it into text or image segments, label the segments with codes, examine codes for overlap and redundancy, and collapse these codes into broad themes" (p.

279). Therefore, the next natural thing to do was to find underlying themes in the codes and to narrow down some of these themes, which takes us to the final step used in the analysis of the qualitative data: step three, "[using] codes to build description and themes" (Creswell & Guetterman (2021, p. 283).

This qualitative data does not build a description as part of the analysis but tries to answer the research questions by forming themes, in other words, conducting a thematic analysis. After coding the qualitative data, the codes were narrowed down into themes. Creswell and Guetterman (2021) state that "there are several types of themes": "ordinary themes," "unexpected themes," "hard-to-classify themes," and "major and minor themes" (p. 287). These themes were again narrowed down into a few main themes, which would be used as the foundation for discussion. As for the presentation of findings, important quotes connected to the overall themes were chosen as part of the presentation. In addition to the different themes that occurred during the analysis, these quotes are presented in Chapter 4.

3.3.3 Reliability

As Creswell and Guetterman (2021) state, "a goal of good research is to have measures or observations that are reliable", which almost goes without saying (p. 188). Creswell and Creswell (2023) explain that "reliability (...) refers to the consistency or repeatability of an instrument" (p 165). Quantitative and qualitative data must be reliable and consistent when dealing with reliability in mixed-method research. There are several ways to test the reliability of an instrument, among them test-retest reliability, alternative forms reliability, interrater reliability, etc. (Creswell & Guetterman, 2021, pp. 188-89). In this small-scale study, the online questionnaire was only conducted one time, with no intention of testing reliability due to it being an addition to the qualitative data. Ideally, the reliability could have been tested in advance by piloting the online questionnaire on a group of participants enrolled in TTE and then sent out to the recruited participants. Nevertheless, some reliability can be credited to the online platform, as it is recognized nationally by universities, hospitals, and research institutions (University in Oslo, 2024).

Reliability in the qualitative field does not have the same definition as in the quantitative. Although reliability and validity in qualitative research are also connected to the credibility and accuracy of data, "qualitative reliability indicates that the researcher's approach is consistent across different researchers and among different projects" (Creswell & Creswell, 2023, p. 213). To check and determine if the qualitative approach is reliable, Creswell and

Creswell (2023) suggest to "check transcripts to ensure they do not contain obvious mistakes made during transcription" and "make sure that there is no change in the definition of codes, a shift in the meaning of the codes during the coding process" (p. 215). Both procedures were followed up, whereas the transcribed audio recording was reviewed several times, and there was no change in the definition of codes.

3.3.4 Validity

Validity is closely connected to the reliability of an instrument, though it "[examines] whether the scores from the instrument (not the instrument itself) are valid" (Creswell & Guetterman, 2021, p. 190). The validity of the quantitative data, as well as its reliability, can also be measured in several ways. In this case, evidence for validity was found by looking at the relations to other variables (Creswell & Guetterman, 2021, p. 192). This implies "collecting valid evidence from (...) many studies [to provide] support for the validation of scores on an instrument." (Creswell & Guetterman, 2021, p. 192). Looking at the transcribed qualitative data and former literature regarding pre-service teacher preparedness and its results would, to some extent, reveal whether the scores in the quantitative data were accurate or not, as a "researcher can look at similar or dissimilar tests to see if the scores can be related positively or negatively" (Creswell & Guetterman, 2021, p. 192).

Qualitative data also needs to be validated to prove "accuracy or credibility" (Creswell & Guetterman, 2021, p. 297), which means "that the researcher checks for the accuracy of the findings by employing certain procedures" (Creswell & Creswell, 2023, p. 213). Although "the strategies used to validate qualitative accounts vary in number", some specific validity strategies were used in the process of analyzing the data. The first strategy used was "peer debriefing" (Creswell & Creswell, 2023, p. 214). This involved finding a peer, in my case, two peers in my class, and asking them to review, interpret, ask questions about, and report on the qualitative study. I included two peers (in addition to my supervisor in some parts) to comment on and review the different parts of the qualitative study. This was done before sampling participants for the group interviews, when deciding on the type of interview I would conduct, during the design of the interview guide, and after conducting the interview and having transcribed the data. In addition, a debrief of the interview, and an overlook of themes in the transcription was conducted together with the secretary who participated in the interview. This way, I could check if my perceptions of the interview and analysis were

similar to those of my secretary and peers, in addition to gaining important critical commentary on the study.

The next validity strategy used was to "clarify the bias the researcher brings to the study" (Creswell & Creswell, 2023, p. 214), which is commented on more in subchapter 3.4 below. Another strategy used was "[using] a rich, thick description to convey the findings" (Creswell & Creswell, 2023, p. 213). In the findings chapter, I have tried to validate the findings of the qualitative study by elaborating on the findings and adding illustrative quotes. The last validity strategy used was triangulating different data sources. This means to "[examine] evidence from the sources and [use] it to build coherent evidence for themes" (Creswell & Creswell, 2023, p. 213). Since the discussion's themes are based on quantitative and qualitative data, the themes are established by using two different sources of data and are, therefore, triangulated.

3.4 The researcher's role

As stated above, "clarification of researcher bias" is important to ensure internal validity within qualitative research (Creswell & Creswell, 2023, p. 222). To do this, I need to reflect on my role as a researcher in the study (Creswell & Creswell, 2023, p. 219). As a student enrolled in a teacher education program, I bring knowledge and experiences from teacher training education. This knowledge involves knowing about challenges faced by students enrolled in different teacher training education programs and positive and negative experiences regarding teacher training education, both on a systematic and individual level. I am also a vice representative for my class, normally aiming my focus to critically review the educational program and provide feedback to the administration of the teacher training institute. Further, I am a peer to the participants participating in the group interview, which influences the relationship and power between me and them. Even though I make every effort to be professional, participants might perceive the situation differently, act, and answer questions differently than if I were not a peer.

On the other hand, I am a substitute teacher, working with multilingual students. From the teachers' side, I bring experiences and knowledge of what sort of competence and experience is needed for the multilingual classroom. As well as the challenges a teacher faces regarding multilingual EFL classrooms. As Creswell and Creswell state, "although every effort will be made to ensure objectivity, these biases may shape the way I view and understand the data I

collect and the way I interpret my experiences" (2023, p. 219). There is no way of fully avoiding these biases to shape the way I understand and interpret the data, but measures and strategies have been used to ensure the objectivity of the research. I understand the importance of the researcher's role, and as Atkins and Wallace (2012, p. 224) state, "we must ensure that the authentic voice of our participants is, as far as possible, retained."

3.5 Research ethics

To conduct good research, "researchers need to anticipate the ethical issues and devise strategies for addressing them" (Creswell & Creswell, 2023, p. 93). Therefore, to examine potential ethical issues faced in mixed-method research, I will use Creswell and Creswell's list of "ethical issues in Qualitative, Quantitative, and Mixed Methods Research" as a background (2023, pp. 93-101). There are several ethical issues to consider prior to the study, beginning the study, collecting data, analyzing data, and reporting, sharing, and storing data (Creswell & Creswell, 2023, p. 93-95), and I will examine some relevant ethical issues for this particular research.

Before conducting the study, two ethical issues were addressed, the first being "gain local permission from site and participants" (Creswell & Creswell, 2023, p. 93). Before creating the online questionnaire and interview guide, I contacted *Sikt* by mail and telephone to establish whether I would be handling personal data or not and, therefore, if I would need approval. Since the online questionnaire would be completely anonymous, they told me I would not need official approval to conduct it. Although the research is limited and quite small-scale, I considered whether the combination of variables (gender, education program, language) would uncover specific participants of the study. Therefore, I take extra care to keep this data anonymous. For the qualitative data, I applied for approval from Sikt to use audio recording in the two group interviews. This was automatically approved because it contained no particular personal data.

The other ethical issue considered was "plan to keep the burden of research for participants to a minimum" (Creswell & Creswell, 2023, p. 93). This was met by trying to collect both quantitative and qualitative data in a convenient way for the participants. That included not spamming participants with information, conducting the interviews when participants had time, and providing snacks and beverages for participants in the interviews. Unfortunately, respondents in the online questionnaire did not receive any compensation for their

participation. In addition, both interviews lasted about 1.5 hours, which can be a long time to participate in an interview.

At the beginning of the study, the ethical issue of "[disclosing] the purpose of the study" was met by informing participants about the study and its purpose (Creswell & Creswell, 2023, p. 94). Another issue was to "not pressure participants into signing consent forms" (Creswell & Creswell, 2023, p. 94). The consent forms were presented and signed at the beginning of the group interviews, with the clarity of participants being able to withdraw from the study at any given time. Nevertheless, participants could have been feeling pressured into signing the consent form, although not wanting to, considering them already having shown up for the interview and the stigma of leaving. In addition, the social setting of a group makes it more difficult to make individual choices in that given situation, not wanting to stand out. Unfortunately, this was not further addressed.

While collecting data, the ethical issue regarding the recruitment of participants was run into. Ideally, participants for the group interview would have been sampled through the request in the e-mail (e-mail regarding participation in the online questionnaire and group interview), but since I had difficulties recruiting, I ended up personally messaging or meeting relevant participants. This problematizes my relationship with the participants since I do not keep a professional distance as a researcher should. In addition, there is a mixture of private life and work life, especially regarding the usage of Facebook Messenger for contact with the participants. I tried to keep the contact on Facebook Messenger to a minimum by forming clear messages that would find a suitable time slot for the participants. Nevertheless, this remains in the grey area of ethical issues, and it is advised against recruiting participants this way.

As for the analysis of data, the two ethical issues, "avoid siding with participants" and "respect the privacy and anonymity of participants," were addressed. In the process of analyzing data, it was important to be aware of the researcher's biases. In this case, the bias is especially based on having experience from the teacher training education and being a peer of the participants. This issue was addressed by remaining objective and "[reporting] multiple perspectives" (Creswell & Creswell, 2023, p. 94). To "respect the privacy and anonymity of participants", both the qualitative and quantitative research has been anonymized (Creswell & Creswell, 2023, p. 94). To ensure the security of participants' identity, all participants in the

qualitative data have been given fictitious names, and no personal data about the participants is taken into the analysis or report of data.

The last part where an ethical issue can occur is when "reporting, sharing, and storing data" (Creswell & Creswell, 2023, p. 95). One ethical issue here is "avoid falsifying authorship, evidence, data, findings, and conclusions," which simply is addressed by "[reporting] honestly," which is done (Creswell & Creswell, 2023, p. 95). The final ethical issue that is addressed is the storage of data. All data regarding the project is stored in password-protected documents. In addition, the data sampled in Nettskjema can only be retrieved by myself since it is connected to my university account and has a two-step factorization. The data will only be stored until May, when the research is published.

4 Findings

This chapter will present the findings of the mixed-method research. The first section of the chapter will present the results of the quantitative data gathered through the online questionnaire. This data will be presented in the form of statistics calculated using Microsoft Excel. Furthermore, the second section of the chapter will present the qualitative data, in this context, the group interviews. The qualitative data will be presented through a categorical representation of important themes that occurred during the thematic analysis. All participants will be anonymized.

Both data were processed and analyzed with the intention of discussing the research objective and research questions 1 & 2 later in the discussion chapter:

RQ 1: What factors influence pre-service teachers' preparedness for teaching in multilingual EFL classrooms?

RQ 2: Are there any differences between the two groups [Teacher Education level 5-10 and Teacher Education level 8-13] of pre-service teachers regarding their preparedness for teaching in a multilingual EFL classroom?

Since this is exploratory comparative mixed-methods research, there was no intention of forming a hypothesis related to the research questions.

4.1 Online questionnaire

There were 27 respondents for the online questionnaire: 14 male students and 13 female students. Of the 27 respondents, 17 were enrolled in TTE levels 8-13, and 10 were enrolled in TTE levels 5-10. On the question regarding 'main language(s) used at home,' 16 respondents used Norwegian as the main language, 10 used Norwegian and another language(s), and 1 used "other". On the question regarding 'how many languages do you comprehend?', 10 participants answered two, 9 participants answered three, 4 participants answered four, 3 participants answered five, and 1 participant answered *more*. The detailed rapport is downloaded from Nettskjema and can be found attached as Appendix 7.

As stated in the methodology chapter, the first set of questions in the online questionnaire was made to map out important characteristics of the participants, i.e., 'gender identity,' 'educational program,' 'main languages used at home,' and 'number of languages

comprehended.' Eight variables were created based on these four characteristics, the variables being: 'Lector 5-10', 'Lector 8-13', 'Male,' 'Female,' 'Norwegian,' 'Other languages,' '3 or fewer languages,' and 'More than 3 languages'. When calculating the mean (=AVERAGE), the single-item scores were connected accordingly to the variables. The four participant characteristics with eight connected variables and calculated means are presented in Table 4 below. In addition, important findings are presented below the table.

	Online questionnaire		Ed. Program		nder	Lang. used at home		Lang. comprehended	
		Lector 5-10	Lector 8-13	Male	Female	Norwegian	Other lang.	3 or fewer lang.	More than 3 lang.
1	I understand what multilingual competence is	7,5	8,1	7,4	8,4	7,6	8,3	7,8	8,1
2	Multilingual competence is mainly developed through the teacher education program	4,5	4,7	5,1	4,2	4,7	4,5	4,9	3,9
3	Multilingual competence is mainly developed through practical experience	6,8	6,8	6,6	7,0	6,8	6,9	6,7	7,0
4	I consider developing multilingual competence a valuable part of the teacher education program	7,8	8,7	7,1	9,7	7,7	9,5	8,2	8,8
5	I consider developing multilingual competence a valuable part of the EFL (English foreign language) classroom	7,8	8,9	7,8	9,3	8,1	9,2	8,4	8,8
6	There should be more focus on multilingual competence in the teacher education program	6,1	7,8	6,5	7,8	6,5	8,2	6,8	8,0
7	Through the course of my teacher education, I have gained knowledge of what multilingual competence is	7,6	7,6	7,1	8,2	7,2	8,3	7,6	7,8
8	Through the course of my teacher education, I have gained knowledge of what multilingualism is	8,6	8,8	8,7	8,8	8,6	8,9	8,8	8,5
9	Throughout the course of my teacher education, I have been given specific multilingual methods and tools that I can use in the multilingual classroom	6,4	5,8	5,6	6,5	5,4	7,1	6,2	5,5
10	During my practicums, I have had the opportunity to use my multilingual competence	6,0	6,5	6,3	6,4	6,1	6,7	6,0	7,1
11	I have used multilingual exercises, methods, or strategies during my practicum	5,4	5,1	4,9	5,6	5,1	5,5	4,8	6,1
12	It is easier to use multilingual strategies when you are multilingual	7,2	7,6	7,4	7,6	7,4	7,6	7,2	8,1
13	I feel prepared to teach in a multilingual EFL (English foreign language) classroom	6,9	6,9	7,0	6,8	7,0	6,8	6,8	7,3

Table 4 – calculated mean of each question connected to the eight variables.

On question 1, presented in table 4, we can see how the variables 'Lector 8-13', 'Female', 'Other lang.', and 'More than 3 lang.' scores a bit higher than the rest of the variables, indicating that they have a higher understanding of what multilingual competence is. Further, if we compare question 2 to question 3, we can see that the overall score is lower on question 2 than on question 3, indicating that most participants think multilingual competence, to a greater extent, is developed through practical experience rather than through the teacher education program.

On question 4, female respondents scored 9.7, and respondents using 'Other language than Norwegian at home' scored 9.5. This indicates that they value multilingual competence as part of the teacher education program more than the rest of the respondents. Question 5 also shows this trend, with a score of 9.3 from female respondents and 9.2 from respondents using another language than Norwegian at home.

Question 6 shows that respondents who use another language than Norwegian at home and respondents who comprehend more than three languages score higher than the rest, with a mean of 8.2 and 8.0, indicating that they believe there should be more focus on multilingual competence in the teacher education program. On question 7, the variables 'Female' and 'Other lang.' scored highest with a mean of 8.2 and 8.3, indicating that these respondents have gained more knowledge of what multilingual competence is throughout the teacher education program. Question 8 shows nonsignificant differences between the variables, indicating most respondents have gained knowledge of what multilingualism is throughout the teacher education program.

Participants using languages other than Norwegian at home scored highest, with a mean of 7.1 on question 9. On the remaining questions, 10, 11, 12, and 13, respondents categorized under the variable 'more than 3 languages comprehended' scored higher than the rest of the participants with a mean of 7.1 (Q10), 6.1 (Q11), 8.1 (Q12), and 7.3 (Q13). This indicates that multilinguals have, to a greater extent, used their multilingual competence and multilingual strategies, methods, and exercises during the practicums (Q10 & Q11). In addition, results indicate that multilinguals consider it easier to use multilingual strategies when one is multilingual (Q12). And lastly, multilinguals feel more prepared to teach in a multilingual EFL classroom (Q13).

Figure 1 underneath shows a diagram that presents the mean of each question connected to the four variables 'Lector 5-10' (in blue), 'Lector 8-13' (in orange), 'Male' (in grey), and 'Female' (in yellow).



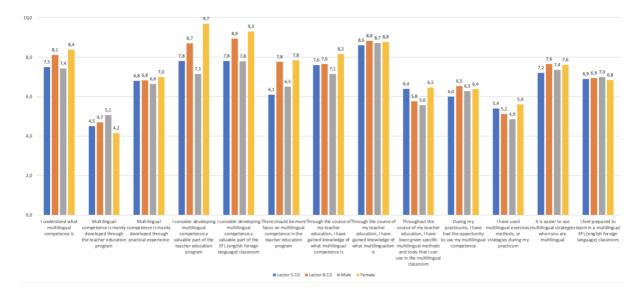


Figure 3 – Diagram displaying the calculated mean of each response of variables 'Lector 5-10', 'Lector 8-13', 'Male,' and 'Female.'

Tracing the results presented in Table 4 back to research question 2 regarding differences in preparedness between the two teacher education programs, we can see that both TTEs score equally on question 13 (feel prepared to teach in a multilingual EFL classroom), indicating an equal level of preparedness between the educational programs. Moreover, both respondent groups scored equally on questions 7 (through the course of my teacher education, I have gained knowledge of what multilingual competence is) and 3 (multilingual competence is mainly developed through practical experience). This indicates that both groups have gained knowledge of what multilingual competence is and believe that multilingual competence is mainly developed through practical experience.

On questions 9 (throughout the course of my teacher education, I have been given specific multilingual methods and tools that I can use in the multilingual classroom) and 11 (I have used multilingual exercises, methods, or strategies during my practicum), respondents enrolled in TTE levels 5-10 scored higher than respondents enrolled in TTE levels 8-13. This indicates that participants enrolled in TTE levels 5-10 have been given more specific multilingual methods and tools and applied them more frequently than participants enrolled in TTE levels 8-13.

Another important thing to note is the significant difference between the scores of TTE levels 5-10 and TTE levels 8-13 on question 6 (there should be more focus on multilingual competence in the teacher education program), whereas TTE levels 5-10 score 6.1 and TTE

levels 8-13 score 7.8. This indicated that participants enrolled in TTE levels 8-13 wish for more focus on multilingual competence. On the remaining questions not mentioned, TTE levels 8-13 score higher than TTE levels 5-10.

Below is a diagram presenting the calculated mean connected to the variables 'Norwegian,' (light blue), 'Other language(s)' (green), '3 or less languages' (dark blue), and 'More than 3 languages' (brown).

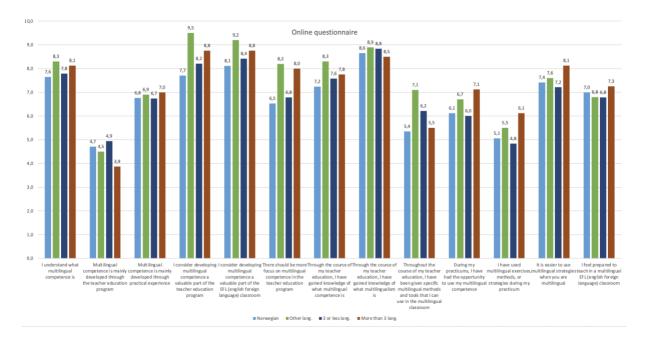


Figure 4 – Diagram displaying the calculated mean of variables 'Norwegian', 'Other language(s)', '3 or less languages', and 'More than 3 languages'.

4.2 Group interview

The qualitative research (group interviews) investigated pre-service teachers' preparedness for teaching in multilingual EFL classrooms, pre-service teachers' attitudes regarding multilingualism, and pre-service teachers' competence in multilingual pedagogies and teaching. During the analysis of the interviews, three overarching themes surfaced:

- Pre-service teachers' development of competence in multilingual pedagogies and teaching
- 2. Internal and external factors influencing pre-service teacher preparedness
- 3. Pre-service teacher's perceptions of multilingual EFL classrooms

These themes are further explored and elaborated in this subchapter, whereas the paragraphs are structured with an introduction of the theme, presentation of evidence from participants enrolled in TTE levels 5-10 and then TTE levels 8-13, commentary on the data, and a transition to the next theme. A total of 6 participants, 4 males (Noah, Liam, William, Daniel) and 2 females (Sarah, Signe), partook in the group interview for TTE levels 5-10. 5 participants, 2 males (Håkon, Lucas) and 3 females (Kornelia, Sofie, Emma) partook in the group interview for TTE levels 8-13. All participants' names are replaced with fictional names to ensure anonymity. The pronouns he/she will be used according to the given name.

4.2.1 Pre-service teachers' development of competence in multilingual pedagogies and teaching

4.2.1.1 An interaction between theory and practice

Participants from TTE levels 5-10 commented that competence in multilingual pedagogies and teaching is developed through an interaction between theory and practice. Noah from TTE levels 5-10 commented:

Noah: "I think that people gain more knowledge of it [multilingual pedagogies and teaching] via the course of study, but I think you get more, that is, you experience it more in practice. (...) in practice, you use the competence actively to develop it".

Liam added to this:

Liam: "Yes, I think that even though it [multilingual pedagogies and teaching] might be talked about during the TTE, it was very much up to oneself to use it in practice, perhaps make yourself more familiar with developing the competence on your own."

Additional remarks from participant Sarah substantiated these statements, in comments such as "I think there is an interaction between the two [theory and practice]". The data suggest that pre-service teachers enrolled in TTE levels 5-10 see the development of competence in multilingual pedagogies and teaching as an interaction between theory and individual practice. On the other hand, participants also expressed that they lacked the necessary knowledge to use this competence properly in the physical classroom. Signe commented, "We have been taught how to use that competence in a classroom, but it is difficult to do it because, well, we just try, and it's like...". Signe ends her comment there, and the data indicates that she is a bit upset about not knowing how to specifically implement multilingual

pedagogies and teaching in the classroom, therefore having to try without guaranteeing success. Noah further stated:

"It's very wholesome how lecturers say, 'It is great if you have multilingual students in your classroom. Use it, that tool', but it's like nothing more. What does it mean to 'use it', and how? Should I just start asking someone to talk in another language, or?"

Noah's ironic tone suggests that he is not pleased with the dissonance between the positive attitude of lecturers regarding multilingualism, and lecturers not providing specific examples of how to use multilingualism as a resource. Contrasting this, when asking the participants to provide specific examples of how they have gained competence in multilingual pedagogies throughout the teacher training education or provide specific examples of exercises connected to multilingualism, they could provide a few.

4.2.1.2 Competence from instruction in multilingual approaches and grammar

Sarah commented that they had used *ConBaT*+, an "approach that combines content-based teaching and plurilingual pedagogy" (Son, 2024), although she stated that "I don't remember that much about it, really." Noah, Signe, and William gave an example of a task where students were to create language portraits, meaning "they visually represented the languages in their lives," using different colors to fill in a human body silhouette (Brevik et al., 2020, pp. 106-07). Sarah also gave examples of how grammar teaching informed them of different sentence structures connected to different languages. When participants were asked whether they had used any of these methods in the practice, Noah commented: "Yes, before a practicum, it was in the 3rd year, we had to create a plan that was either based on ConBaT+ or something else". The participants further discussed the specific examples:

Noah: "You had to choose between ConBaT+ and some task-based activity, which I think many chose. My interpretation of that event was that many people were tired of ConBaT+ since we had had so much about it, so they chose the other".

William: "Yes, I think it was also that it was to be used in a 2-week practice period where there already were other things you were supposed to do".

Noah: "But I think that using ConBaT+ with a focus on multilingualism, and then using it in a Norwegian classroom where you didn't have any other ethnicities, it was

like, how much impact will it make? I don't think it was that interesting to most pupils".

Sarah: "We used the silhouette in practice, in 8th grade".

Liam: "It was part of instruction on intercultural competence, perhaps aiming to focus more on language as part of the pupils' culture. (...) But I don't feel that we dived any further into multilingual pedagogy using the task".

Sarah: "No".

Sarah further commented that the use of the silhouette was highly successful and that the task increased the relationship with the pupils, "you get to know the students better and what sort of background they have". Nevertheless, the data suggest that the combination of the variables listed below resulted in not providing participants with an ideal learning situation where they could properly develop their competence in multilingual pedagogies and teaching:

- The combination of participants not having sufficient competence in multilingual pedagogy and teaching (not knowing how to further connect the silhouette to multilingual pedagogy)
- 2. The short timeframe of the practice
- 3. The classroom setting (mostly ethnic Norwegian pupils)

4.2.1.3 Competence in multilingual approaches is an important part of the TTE

When participants were asked whether they view developing competence in multilingual pedagogies and teaching as an important part of the TTE program, Liam commented, "Yes, to the extent that you can say it is part of the education program." William added, "Yes, as in it's an advantage to be aware of it, but it's like, how much have we developed during this time, I think it's minimal".

The overall data looking into the theme of pre-service teachers' development of competence in multilingual pedagogy and teaching suggest that participants enrolled in TTE levels 5-10 think of competence in multilingual pedagogy and teaching as important and developed through both theory and practice. On the other hand, evidence also suggests that the instruction of multilingual pedagogy throughout the TTE program does not provide sufficient examples of how to employ the theoretical idea of multilingual pedagogies in the physical

classroom. In the end, participants question to what extent competence in multilingual pedagogy and teaching is part of the education program.

4.2.1.4 Interaction between theory and practice, to some degree

As for the reflections of participants enrolled in TTE levels 8-13, participants also commented on the interaction between theory and practice when developing competence in multilingual pedagogy and teaching. Participants in TTE levels 8-13 states:

Kornelia: "It depends on how you define competence. If it is knowledge about language, i.e. the metalinguistic knowledge we have about language, then it has been acquired throughout the education program, but general competence in several languages is to a greater extent acquired during practice".

Sofie: "I think one has gained a lot of competence in the didactical subjects, how one can use multilingualism in the classroom, but you don't get to try it out or gain perspectives on what it really is until you are in practice".

Kornelia: "You get the official instruction, but you don't get any ideas about how it should be implemented".

Sofie: "Yes, you have to try it out yourself".

Håkon: "Yes, it is very difficult to acquire competence in something so practical in a theoretical way, which makes it very difficult to do through the education program. One can ask whether it is the education program's fault that we do not get more competence in multilingual pedagogy, but there is also the fact that, with such a theoretical approach as you have in the EFL classroom, it is difficult to, it is often practical experiences that provide competence in multilingual pedagogy. At least that's the experience in my case".

The data indicates that participants receive theoretical instruction regarding multilingual pedagogy through the education program, although they do not receive specific examples of how to employ it in the EFL classroom. Participants point to practical experience as an important part of gaining further competence.

4.2.1.5 Little competence from theoretical instruction on multilingualism, more from individual experience and Foreign Language Didactics

When participants were asked in what ways they have developed competence in multilingual pedagogy and teaching throughout the teacher training education, the responses were few:

Håkon: "The only thing I can think of is two lessons in English-didactics where we talked about multilingualism and multicultural expressions, and about language and things like that. How language is more than just morphology, there is a lot of semantics in it in a way".

Kornelia: "Everything else seems very vague, like 'yes, there are multilingual pupils in school, you will face that', and then that's it, nothing else".

Lucas: "Without saying anything bad about our lecturer in didactics, his experience is from a Norwegian classroom (...) and all the examples he brings up are about how the Norwegian language influenced how the pupils learned English. So, we never got examples of anything else. It's a bit like that. I think it really depends on who your lecturer is."

Participants' responses further revealed how theoretical instruction has been the main source of instruction on competence in multilingual pedagogy. Kornelia commented, "It's like I've mentioned, everything is very theoretical." Lucas also commented, "Yeah, when having practicum in the introductory class, I notice how I have no foundation whatsoever." Kornelia further commented how, "it's like we've mentioned, I feel like we have general competence, but we lack the tools for implementing it in the classroom".

Sofie on the other hand, emphasized the individual development of competence in multilingual pedagogy:

Participant 2: "I don't know if it is too specific, but in the English-didactics, I wrote a thesis about using multilingualism as a resource in the classroom, and I did that based on the practicum I had in a minority language classroom first long-term practice. But we hadn't really had anything about that in the English didactics, so it was a task I wanted to write based on the practice".

Further, she commented that "this semester, we also have a course called 'multilingualism'". In addition, Sofie explained that she has had a course called 'Foreign Language Didactics', where she was taught specific methods for foreign language learning. None of the other participants have had this subject, and Lucas responded to this by asking:

Lucas: "Do you feel you have gained more multilingual methods from the Foreign Language Didactics?".

Sofie: "Absolutely. I think there is a greater focus on multilingualism itself because it is assumed that the students who are going to start learning Spanish, German, and French, already know Norwegian and have also learned English in the Norwegian primary school. On top of that they have to start learning a third language, so I think that's it, there's a bit more focus on how the two, three, four, previous languages are going to mix in. Therefore, must you also have more specific tools on how to deal with this multilingualism".

The data clearly show that 4 of 5 participants either struggle to remember how they have developed competence in multilingual pedagogy and teaching throughout the teacher training education, or, they do not have any other relevant examples than theory. Sofie on the other hand, can provide several examples of how she has developed competence in multilingual pedagogy, among them, individual experiences and foreign language didactics.

4.2.1.6 Competence in multilingual approaches could become an important part of the TTE

When participants enrolled in TTE levels 8-13 were asked whether they viewed developing competence in multilingual pedagogy and teaching as an important part of the TTE program, most participants answered affirmingly:

Lucas: "We express that it's something we wish we received more instruction about, so for me, I think the answer is yes".

Kornelia: "We have heard x number of times during the education program that we'll encounter multilingual pupils and have x number of different languages within our classrooms. Therefore, having some knowledge about it, and having some tools that can make it easier for the multilingual pupils is really useful to have, something that is missed in the current education program".

Lucas: "I wouldn't say that it is a valuable part of the education program we have now, but that it could have been".

The data retrieved from participants enrolled in TTE levels 8-13, indicate that participants think of competence in multilingual pedagogy and teaching as important and developed through the interaction of theory and practice. Although, participants comment that it is often "up to oneself" to implement multilingual pedagogy in the classroom, and that multilingual pedagogy cannot fully be acquired through theoretical instruction. An important finding is how Sofie, based on her knowledge gained through Foreign Language Didactics, is able to provide specific examples of multilingual pedagogy, and seems to have a larger resource bank than the rest of the participants. Kornelia and Lucas also utter how multilingual pedagogy could become a larger part of the education program.

4.2.2 Internal and external factors influencing pre-service teacher preparedness

4.2.2.1 External factors contributing to preparedness among TTE levels 5-10

The second theme to occur during the analysis of the interviews was internal and external factors influencing pre-service teacher preparedness. Participants enrolled in TTE levels 5-10 were asked to share specific aspects of their training they believed contributed to their preparedness to address linguistic diversity in the classroom, which uncovered grammar instruction as an external factor:

Sarah: "I came to think of when we had a relatively short introduction to other languages and common linguistic transfer errors in languages with a lecturer".

Interviewer: "Did this contribute to how well-prepared you feel?"

Sarah: "Yes, I feel that in any case, it helped me realize that I have to acknowledge students with slightly different background knowledge, and that you have to take their language background into account in order to get good lessons in the English subject, or to guide them properly".

While Sarah commented that the grammar instruction positively influenced her level of preparedness, others in the group did not remember much about it because it was taught over Zoom during the pandemic. Signe commented, "it was hard to pay attention since it was digital".

4.2.2.2 External factors inhibiting preparedness among TTE levels 5-10

Furthermore, regarding external factors influencing the level of preparedness, participants uncovered three particular gaps in their teacher training that they believed had influenced their level of preparedness. The first one was lack of individual tasks:

Sarah: "I wished we would have planned and conducted lessons individually, tried different teaching plans about multilingual pedagogy in the classroom, and be responsible for it ourselves".

Liam: "I imagine, if we had worked specifically with multilingual classrooms, as you say, create a teaching plan where it [multilingual pedagogy] can be used, and then presented it to each other, then you suddenly have a resource bank of several teaching plans on how to use multilingual pedagogy. Reading up on it, and tested it out kind of".

The data indicates that the participants would have liked to have more individual work, aiming specifically to work with multilingual pedagogy. In addition, participants uncover a second gap they feel has influenced their preparedness, which is the gap between lecturers' approach to teaching, and the actual classroom situation. Liam utters how "it is a recurring challenge, that we have many lecturers who are not that practical when it comes to teaching about the profession". Signe continues:

Signe: "Yes, I think that if the lecturers had been more out in 'the field', we would have been given better examples of how to do it [maneuver the multilingual classroom]. We once experienced a big challenge while we were in practice, but the lecturer at the university didn't understand what we were talking about when we were talking about challenging pupils. (...) it was very challenging for us to get the lecturer to understand because he/she just couldn't".

Noah: "But I also think that the follow-up we've had during the practice, I mean, I think I have received follow-up from my lecturer once. It seems that it's just a part of the formalities they have to check off. Regarding the lecturers who come for visitation, I've had the impression that they do not have expertise in what we are practicing. As an example, it was not the lecturer who instructed us in ConBaT+ who came to the lesson we conducted based on ConBaT+, it was just one of our other lecturers. And

that feedback was not connected to the use of ConBaT+, it was more like 'you should stand here' and then they drew a map of the classroom and asked questions like 'why did you go there or there'. It's very micromanaging. Instead of giving professional feedback".

The data show that participants find their lecturers disconnected from the actual classroom and feel that lecturers lack knowledge of how the contemporary classroom looks. In addition, they commented on how the follow-up in practicum did not match the instruction they had received in their courses. The third gap participants uncovered was the general gap between theory and practice:

Noah: "There are many things you have to take in, but it seems as if it is very black and white for them [faculty lecturers]".

Liam: "Yes, it is like competence in multilingual approaches. (...) When are we going to learn about it? we should learn about it from a classroom perspective, what it looks like to use it in the classroom, and why it is important. Why is it something we should consider learning more about? (...) we get success stories about how the teacher has used multilingual approaches, etc. But, like, what did help, what worked, and what did the pupils feel and say? I feel like we have had little focus on that."

Sarah: "Yes, they should have shown more project-based research where we can see what happened through it, how they carried it out"

Sarah additionally commented how, "I think there is also a bit more theoretical knowledge about it, just like, why is this something we want to promote in education?"

In the data, participants question how theoretical knowledge about multilingual pedagogy seems to weigh heavier than classroom-based research. As one moves from theoretical knowledge to implementing it in a classroom, the focus on why it is important and why students should gain knowledge regarding multilingual pedagogy seems to be lost.

Further, when participants are asked in what ways they think the expectations and requirements for TTE levels 5-10 affect their preparedness to handle linguistically diverse classrooms, they aim to focus on what they see as unrelated expectations and requirements. William comments, "I feel that there are more unrelated requirements, unnecessary requirements. And there are a lot of them". Sarah added:

Sarah: "It's like, we use time to prepare for stuff we get graded on. Things that have consequences for us, and whether we can move forward in our studies or not. So, maybe those expectations, to a certain extent, can inhibit aspects of the English subject that we should focus more on".

In addition, Sarah commented that "there are such different expectations from the lecturers at the university and the practice teachers". The excerpts show how some participants view the expectations and requirements as unrelated and unnecessary, in addition to depriving resources that could be used to focus on other topics in the English subject.

4.2.2.3 Internal factors influencing preparedness among TTE levels 5-10

Regarding internal factors influencing participants' preparedness, the participants had different reflections on their own subjective preparedness:

Liam: "I feel well prepared, maybe not in terms of how to use multilingual pedagogy in the best possible way, but at least I have an idea about it, and have intentions to learn more about it, and I mean, can't expect much more".

Noah: "Considering that I speak three languages, I feel that I am well-prepared. I am multilingual myself, I speak German, so in that sense I imagine that I can use German to talk to students who have a German language background, (...) but I feel that the competence in multilingual pedagogy, knowing what I can do, how I can use it in a classroom, that's more difficult. The positive side of it is being able to create a relationship with each student. But I don't know how to teach with multilingualism in focus".

William: "I think that when it comes to my knowledge about multilingualism, it's pretty minimal. As long as you are open and willing, being aware that multilingualism can cause problems, or be a resource, then there are opportunities to gradually gain more knowledge. How well I rank when I enter the profession, I think I rank quite low. But, over time it gets better".

Sarah: "I quite agree with that, but for me, I am quite interested in languages, so if I have students who speak other languages, I would like to learn a bit of their language, simple phrases, etc. So, I really feel that, yes, as long as you are open-minded and try to keep up-to-date in the field, you should eventually be fine".

Signe: "Yes, I agree, you go out there a bit uncertain and with a lack of knowledge, but I believe that you learn a lot when you just try. Like, see what works, and that you just have to be open to learning from other students and teachers".

Daniel: "Yes, you cannot be fully prepared for the teaching profession. It is an experience-based profession, so when you work with several languages you learn from your experiences".

Overall, most participants are positive to the idea of working in a multilingual classroom, although the competence in multilingual pedagogy and teaching varies. Noah state that he feels prepared due to being multilingual. Nevertheless, he lacks the proper knowledge about multilingual pedagogy, similar to Liam, William and Signe. Sarah emphasizes that being open-minded, updated and interested will help prepare you once you are in the profession. Lastly, Daniel focuses more on how teaching is an experienced-based profession, therefore, you cannot be fully prepared.

4.2.2.4 External factors contributing to preparedness among TTE levels 8-13

Participants enrolled in TTE levels 8-13 were also asked to share specific aspects of their training they believed contributed to their preparedness to teach in linguistically diverse classrooms. The participants revealed two external factors without further commenting: "discussion with other students" and "practice".

4.2.2.5 External factors inhibiting preparedness among TTE levels 8-13

On the other hand, participants emphasized that the lack of focus on modern-day multilingual classrooms appeared to be a gap in their teacher training. The participants commented:

Kornelia: "More focus should be aimed towards how multicultural and multilingual the Norwegian school has become. A lot of the focus, especially in our training, is aimed toward a Norwegian classroom with Norwegian students who learn English. Like, lecturers mention, 'you will encounter pupils who speak other languages,' but they don't elaborate on how we can help them. That's how it's always been".

Håkon: "I agree. Most people who study TTE levels 8-13 are also Norwegian or have Norwegian as their mother tongue. (...) In other words, there should be more balance".

Lucas: "I feel like the whole point of the school is to include and integrate those who aren't, but if we don't have tools for how to do that, then we fall a little short".

Håkon: "Introductory class for minority language pupils should perhaps be a separate module within pedagogy or didactics, regardless of what you are majoring in. I think everyone would benefit from it".

In addition, Sofie commented on the lack of balance between theory and didactics within the courses in the education program:

Sofie: "We have courses with exchange students who are not necessarily becoming teachers, who are studying linguistics, etc. so I understand that you can't just have didactics, English multilingual didactics, English such and such didactics. I understand that there must be more theory, but I think It should have been a bit more didactics/pedagogy".

The data show that participants critique the lack of focus on the growth of multilingual classrooms. In addition, they question the current instruction, which emphasizes teaching English as a second language to ethnic Norwegian pupils. Further, the data suggest that the courses provided in the education program are predominantly theoretical and, therefore, not as relevant for the teaching profession.

When participants are asked in what ways they think the expectations and requirements for TTE levels 8-13 affect their preparedness to handle linguistically diverse classrooms, they emphasize the topic of differentiated instruction:

Participant 3: "I would say that the expectations and requirements from the faculty's side focus very much on differentiated instruction, which does not necessarily apply to language competence, etc.".

Participant 4: "It is perhaps what way you look at it, differentiated instruction also has aspects that are not exclusively negative. Perhaps we only associate adapted education with something negative, or perhaps that the faculty does. I do not know. Since we don't view multilingualism as a problem, maybe that's why it's not considered a differentiated instruction topic".

The data show that participants view the expectations and requirements of differentiated instruction as unrelated to language diversity and, therefore, it does not positively affect their preparedness for teaching in linguistically diverse classrooms.

4.2.2.6 Internal factors influencing preparedness among TTE levels 8-13

When looking into internal factors influencing participants' preparedness, data suggests that language background and exposure to multilingual instruction influence the level of preparedness. Håkon commented on how his language background influenced his level of preparedness:

Håkon: "I probably feel better prepared than people with a monolinguistic background. I am exposed to several languages continually since I have an international roommate and quite an international group of friends. So, in that sense, you become quite aware of multilingualism. (...) You become aware that there are different grammatical errors in different languages. (...) However, it's my individual experiences that have done it (increased multilingual awareness and language competence), and not something I have acquired through instruction, i.e. instruction at the university".

In addition, Sofie comments on her exposure to multilingual courses:

Sofie: "I feel above average prepared, but that is perhaps due to foreign language didactics, and the topics I had there. So maybe the English courses should learn a bit from foreign language didactics. The English classroom becomes a foreign language classroom when you bring in something other than students who only know Norwegian from the start. Once you have several languages in circulation, you have to have a multilingual perspective on it".

As for Lucas and Emma, they feel less prepared, even though Emma has a multilingual language background:

Emma: "I do not feel very prepared. I feel like the classrooms I've taught in have mostly consisted of English and Norwegian students, so yeah, I don't feel that prepared. (...) I hope that I'm better prepared just based on knowing more languages, but I don't know if it helps that much".

Lucas: "I feel quite poorly prepared".

The data shows that Håkon and Sofie feel adequately prepared due to multilingual language instruction and personal multilingual exposure. Emma and Lucas, on the other hand, did not feel well prepared, disregarding Emma's multilingual language background.

4.2.3 Pre-service teacher's perceptions of multilingual EFL classrooms

4.2.3.1 Perception of pre-service teachers enrolled in TTE levels 5-10

When participants enrolled in TTE levels 5-10 were asked how they feel about teaching in a multilingual EFL classroom, the responses were overall positive:

Daniel: "Cool. It seems fun to have several languages and cultures to maneuver. It can clash with how your teaching approach, but that's not what I think of first and foremost when I think of multilingual classrooms. I just think 'cool, then I get to know about other cultures and languages, and learn something new', so yeah".

Signe: "Yes, it's exciting because you don't quite know what you're going to end up with, I mean, you can learn a lot. It's about how open you are to learning from the students".

Sarah: "I'm also looking forward to it. I think it also seems very exciting if you get a multicultural class".

William: "I also have a positive attitude regarding multilingual classrooms"

Noah: "It will be fun, but it can also be a bit scary. Feel like I'm lacking a bit of expertise, perhaps, so I'm a bit unsure about that".

Liam: "I'm looking forward to it, I view it as an opportunity".

The data indicate that most of the participant viewed multilingual EFL classrooms as an exciting opportunity. In addition, they were positive to teaching in a multilingual and multicultural classroom.

Further, participants emphasize that going on an exchange had positively influenced their feelings about multilingualism. Sarah commented on how she went on an exchange to South Africa and that she, during that time, experienced the resource of being able to use several

languages. In addition, Liam went to New Zealand, where he experienced indigenous languages and the openness about language people had.

In contrast to the positive responses about multilingual EFL classrooms, participants also mentioned some challenges they imagine could appear in a multilingual classroom. Liam commented that he is not that concerned about the teacher's role but rather worried about other students' attitudes toward multilingualism. He mentions an experience from an earlier practicum:

Liam: "I have experienced that negative connotations can quickly be associated with languages other than Norwegian. Pupils may learn swear words in languages spoken by other students and then use them for bullying. Once, some pupils started shouting 'Allahu Akbar' in the ball pit to some minority language pupils. How do you address this in the classroom, and change the attitudes of pupils so that minority language pupils can use their language and perhaps positively talk about their language?"

Sarah responded by commenting that she thinks it will require a lot of work and time to create a classroom where pupils are used to a multilingual concept. She further stated that she does not think something like that would have happened if pupils were used to a multilingual pedagogy approach in the classroom. Moreover, Signe comments that she thinks it will be challenging to pay attention and include different cultures:

Signe: "I am from a small place where there have been none but Norwegian pupils in the classroom, so I think it will be a challenge when I get out to work, knowing how to pay attention and how to include and respect different cultures. It's something you have to work on, and as Liam and Sarah said, I think you have to create a culture in the classroom where you don't use it in a negative sense, their language. But I think it's quite a lot of work, and that it's something you have to start with quite early when you start working".

The data show that participants enrolled in TTE levels 5-10 are overall positive about teaching in a multilingual and multicultural classroom and view it as an opportunity. In addition, some participants gained positive experiences from the exchange. Earlier practicums have also given participants insight into potential challenges that can occur in a multilingual classroom and the complexity of multilingualism. Regarding challenges in multilingual

classrooms, data also reveals how individual factors, such as exposure to language and culture, influence the way one approaches language and culture diversity.

4.2.3.2 Perception of pre-service teachers enrolled in TTE levels 8-13

When participants enrolled in TTE levels 8-13 were asked how they felt about teaching in a multilingual EFL classroom, the responses were more varied. Kornelia answered that she did not feel prepared enough, while Sofie felt excitement. Emma, Håkon, and Lucas responded:

Emma: "I think that it will be challenging, but at the same time exciting".

Håkon: "Challenging is a good word for it. When you've just graduated I think you're generally nervous about teaching, and with each layer you add to that there is even more to be aware of. (...) challenging does not necessarily have to have negative connotations".

Lucas: "Uncertain perhaps, in addition to challenging".

The data show how the participants' feelings about teaching in a multilingual EFL classroom are varied. Håkon made an interesting remark when he emphasized that the term *challenging* did not have to be a negative word, when used to describe his feelings. In addition, he reflects on how challenges and nervousness do not necessarily have to be directly connected to multilingualism, but factors connected to the setting of being a newly educated teacher. The participants also commented that conducting practicums often had positively affected their emotions regarding multilingual EFL classrooms. Kornelia commented, "to actually be in classrooms where there are several different languages, different cultures, it takes away some of the fear you have". Sofie, on the other hand, has different experiences from practice, both positive and negative. The positive experience involved gaining access to multilingual teaching resources and practices supporting multilingualism during a practicum in an introductory class:

Sofie: "We (...) had access to a few more resources. We would teach them about body parts, and then they could fill in what that body part was called in their language. (...) another example is where (...) a "weak" and a "strong" pupil [who] had the same mother tongue [were] put together so that they could work on translating for each other".

In another practicum, the short amount of time combined with a mainstream Norwegian EFL classroom where some pupils spoke very little Norwegian and English made it difficult to create a relationship with the foreign language pupils. Therefore, English language instruction became challenging, negatively affecting Sofie's experience.

Similar to the participants enrolled in TTE levels 5-10, participants enrolled in TTE levels 8-13 also mentioned some challenges they imagined could appear in a multilingual classroom. Kornelia commented that she viewed multilingualism as a resource, although it also "feels very overwhelming". Additionally, Sofie commented that she thinks it will be hard to manage different languages at the same time and wonders how she will be able to differentiate the instruction. Håkon and Lucas both comment on relational challenges as a possible part of the multilingual EFL classroom.

5 Discussion

This chapter aims to discuss research questions 1 and 2 in light of the mixed-method research findings and the theoretical framework. The overall goal of the research was to investigate and compare pre-service teachers' preparedness regarding teaching in multilingual EFL classrooms, and the research questions were as stated:

RQ 1: What factors influence pre-service teachers' preparedness for teaching in multilingual EFL classrooms?

RQ 2: are there any differences between the two groups [Teacher Education levels 5-10 and Teacher Education levels 8-13] of pre-service teachers regarding their preparedness for teaching in a multilingual EFL classroom?

To see if there are any differences in the level of preparedness between pre-service teachers enrolled in TTE levels 5-10 and 8-13, we must first discuss research question 1. After discussing factors influencing pre-service teachers' preparedness, research question 2 will discuss whether there are any differences in the level of preparedness between the two groups.

5.1 Factors influencing preparedness

The findings in the previous chapter suggest that external and internal factors influence preservice teachers' preparedness to teach in a multilingual EFL classroom. We will examine these specific factors, first focusing on the external factors and, thereafter, the internal ones.

5.1.1 External factors promoting preparedness

The data analysis revealed several external factors influencing the preparedness of pre-service teachers. Participants enrolled in TTE levels 5-10 described how practical experiences during their education program had positively influenced their view on multilingualism. Liam and Sarah commented on how going on exchange abroad had given them a different view of multilingualism as a resource in addition to seeing other cultures' openness towards language. In connection with this, Steele and Leming (2022) state:

Research shows that student teachers who have partaken in school practice in different cultural settings than their own, have better opportunities to gain a broader

understanding of their future learners, who include migrants and refugees from all over the world. They might develop intercultural competency (p. 48).

Even though Liam and Sarah first and foremost view their experience of exchange as a positive influence on their emotions regarding multilingualism, Steele and Leming (2022) highlight how exposure to different cultural settings can give pre-service teachers an advantage of cultural understanding. It is, therefore, natural to think that this advantage would also affect the pre-service teachers' level of preparedness when encountering a multilingual EFL classroom.

In addition to exchange being a positive influence on preparedness, field experience, in this case, practicums in schools, is considered highly effective on pre-service teacher preparedness. Kornelia, enrolled in TTE levels 8-13, commented that having practicums in culturally and linguistically diverse classrooms "takes away some of the fear you have." Sofie also mentioned how her practicum in an introductory class gave her experience with multilingual pupils, access to multilingual teaching resources, and ideas for teaching English in a multilingual classroom. When investigating pre-service teachers' perceptions of plurilingual pedagogies, Dražnik (2022) uncovers how:

Pre-service teachers emphasize the importance of practice, enumerating sets of skills decisive for the implementation of plurilingual pedagogies, such as the skill of planning plurilingual lessons, designing and using plurilingual learning tools and materials, collaborating with teachers of other subjects, teachers from abroad, and the wider school community, and teaching migrant students (p. 86).

Kornelia and Sofie's statements correlate with findings in Dražnik's study, which underlines how practical experience in different linguistically diverse classrooms, but also in general, is an important part of the process of preparing to work as a teacher in the EFL classroom. In his implications, Polat (2010) also emphasizes how "teacher education programs need to incorporate into their curricula not only knowledge, skills and dispositions concerning supporting ELLs, but also *adequate amounts of field experience* in mainstream classes with ELLs" (pp. 238-239, my emphasis). Even though this is an implication concerning mainstream English language learners, his study underlines the need for and importance of practical experience.

Another finding regarding external factors influencing preparedness was how courses, including instruction on multilingual pedagogy and didactics, greatly impacted preparedness levels. During the interview, Sofie from TTE levels 8-13 explained how she felt "above average prepared" for teaching in multilingual EFL classrooms, among other things, due to her exposure to the Foreign Language Didactics course. This correlates with studies such as Deng et al. (2021) and Hansen-Thomas (2016), who underline the correlation between courses and preparedness:

For teacher education experiences, only one out of the six variables significantly affected teacher-perceived preparedness to work with multilingual students, that is, whether they had taken a course(s) on teaching multilingual students. Specifically, teachers who had taken any such graduate or undergraduate courses (...) reported being significantly more prepared to work with multilingual learners than those who did not take any (Deng, et al., 2021, p. 495)

Further, Hansen-Thomas et al.'s findings "seem to indicate that having two or more college courses [in ESL] can play an important role in the preparedness of rural teachers in their work with ELLs" (2016, p. 319). Sofie explains how the course has "a greater focus on multilingualism" and has provided specific tools for "how to deal with this multilingualism". In addition, other participants in the group interview made notice of Sofie's preparedness regarding multilingual EFL classrooms, which is shown through Lucas asking her if she feels as if she has gained more multilingual methods through the Foreign Language Didactics, to which she answers, "absolutely." Even though the course is not connected to the English field of study but rather to foreign language teaching in Spanish, the course has given Sofie knowledge that she finds easily transferable to the EFL classroom. This knowledge, or lack of this knowledge, including specific examples and tools regarding multilingual exercises, is also a factor that influences pre-service teacher preparedness.

Research indicates that teachers need more knowledge, training, and specific examples of how to employ multilingualism in the classroom (Tiurikova & Haukås, 2022; Hansen-Thomas et al., 2016; Polat, 2010; Hegna & Speitz, 2020). Therefore, instruction in ConBaT+ among pre-service teachers enrolled in TTE levels 5-10 would seem to be a good response to this deficiency. During the interview, participants enrolled in TTE levels 5-10 uttered a wish for more specific examples and exercises connected to multilingual pedagogy and didactics. However, they also gave examples of explicit instruction on ConBaT+, which evolves around

multilingual pedagogy. Even though one might think that this instruction would positively influence pre-service teachers' preparedness, participants' comments on ConBaT+ were mostly negatively charged.

Among participants enrolled in TTE levels 5-10, Sarah first commented that she did not remember much about the ConBaT+ instruction. When students were to choose between using ConBaT+ and a task-based activity in a 2-week practicum, Noah had the impression that "many people were tired of ConBaT+" and, therefore, they chose not to use it. In addition, William made a point about how it was difficult to adapt it into a 2-week practice "where there already were other things you were supposed to do". Moreover, Noah explained how he did not think using ConBaT+ would be interesting to ethnic Norwegian pupils since no languages other than Norwegian were in use. Even though we do not have data confirming whether the instruction on ConBaT+ was successful or not regarding preservice teacher preparedness in teaching in multilingual EFL classrooms, participants' statements suggest that it was less successful. On the other hand, participants who decided to use the language portrait in practice viewed it as successful. Participants explained that when using it, pupils were engaged, and it helped improve the relationship with the pupils, getting to know what language they knew, used, or had a relation to. Nevertheless, participants did not dive "any further into multilingual pedagogy using the task" (Liam). It is difficult to say to what extent the use of ConBaT+ and the language portrait have affected pre-service teacher preparedness, but data reveals how participants do not have the necessary knowledge and competence to properly connect these tools and methods into multilingual pedagogy to integrate it as a part of the English instruction naturally. Based on the correlation between data and former research, some factors, such as exchange, practice, and courses, clearly increase the level of preparedness regarding teaching in multilingual EFL classrooms. In the next section, we will look at some factors which inhibit the development of preparedness.

5.1.2 External factors inhibiting preparedness

5.1.2.1 The gap between theory and practice

Throughout the analysis of data, the gap between theory and practice within the educational programs unfolds as a factor inhibiting preparedness. We have seen that participants enrolled in TTE levels 5-10 were given some instruction and exercises regarding multilingual pedagogies. Nevertheless, they still expressed that they did not know how to utilize multilingualism in the classroom. As for participants enrolled in TTE levels 8-13, Sofie was

the only one who seemed to have some specific competence regarding foreign language didactics and the utilization of multilingualism. When working with the language portrait, Noah and Liam, enrolled in TTE levels 5-10, explained how they did not connect the task further to multilingualism and multilingual pedagogy. The reason for this could be found in Noah's comment that they did not receive any further instruction on integrating the task into an English lesson, "there was nothing like 'what to do with it afterward'". Sarah (TTE levels 5-10) also commented on theoretical knowledge being the main emphasis in the education program, leaving her questioning, "why is this [multilingual pedagogies] something we want to promote in education?". She further stated that there should be more focus on project-based research, which, in some ways, would address this gap between theory regarding competence in multilingual pedagogy and implementation of multilingual pedagogy. The instruction provided by TTE levels 5-10 seems to fail to properly balance theory and practice, leaving pre-service teachers lacking the necessary knowledge to impart theoretical competence in multilingual pedagogies to practical competence utilized in the classroom.

As for TTE levels 8-13 participants, the gap between theory and practice is especially large due to a lack of instruction containing practical examples and tools for implementing a multilingual approach in the classroom. When participants were asked in what ways they had gained knowledge of what competence in multilingual pedagogies and teaching is, Kornelia, in TTE levels 8-13, stated how "everything is very theoretical", lacking tools for knowing how to implement multilingual approaches in the classroom. Lucas also commented that he "has no foundation whatsoever". One would imagine that participants gained such competence through the didactical courses provided in the TTE, but they uttered the contrary. This could be explained through Lucas' statement regarding how the English didactics lecturer's experiences and examples are based on the Norwegian classroom, the examples mostly covering how the Norwegian language influences English language learning. Therefore, participants do not get sufficient teaching and various examples from different cultural and language-diverse classrooms.

Even though data points to didactic subjects not sufficiently promoting multilingual approaches, participants explain how the gap between theory and practice is a recurring factor throughout the education program. Sofie addresses this gap by highlighting how English language and literature courses are taken together with students who are not becoming teachers but rather majoring in literature or linguistics. Therefore, the courses are mostly theoretical, providing little to no didactical elements. As a result, participants experience a

gap between their theoretical competence and the pedagogical/didactical competence needed in the school. Kornelia comments how "the courses we are taking now, they are such an incredibly high level and to relate it down to the school level and to what we [teachers] actually do... it's very hard", to which Sofie responds, "it leaves one feeling that it goes a bit over your head."

Similar to participants enrolled in TTE levels 8-13, participants enrolled in TTE levels 5-10 also suggest that the lack of practical examples connected to multilingualism could be connected to lecturers' lack of classroom-based experience. Liam commented that a recurring challenge is how lecturers seem to not be 'up to date' with the actual classroom and profession. At one point, Signe asked the other participants whether some of the lecturers had a teacher training educational background and if they had any prior experience in the classroom. To underline her point, she provided an example of the one time they encountered a challenge in the classroom during the practicum to which the lecturer could not relate due to a lack of understanding of the given situation. Whether or not the lecturers have classroom-based experience from primary, secondary, or upper secondary school is hard to say.

Nevertheless, participants enrolled in TTE levels 5-10 questioned some lecturers' pedagogical background and experience in the classroom, implying a far too big gap between lecturers' representation of the classroom and the actual classroom.

When discussing the gap between theory and practice as an external factor inhibiting preparedness, it is important to note that several factors contribute to this gap. Among them, we have seen how participants enrolled in TTE levels 5-10 and 8-13 lack the necessary knowledge to impart theoretical competence in multilingual pedagogy to practical competence utilized in the classroom. Further, TTE levels 8-13 participants lack instruction containing varied practical examples and tools for implementing a multilingual approach in the classroom. This could be a result of how lecturers in English didactics base their instruction on examples retrieved from classrooms containing mostly Norwegian pupils. On the other hand, participants enrolled in TTE levels 5-10 critically question whether their lecturers have classroom-based experience at all. Lastly, the gap between theory and practice seems to be a recurring factor throughout the courses in Teacher Training Education levels 8-13. Since the English literature and language courses emphasize theoretical instruction on an advanced level, participants struggle to employ it in a pedagogical situation at a lower subject level.

5.1.3 Internal factors promoting and inhibiting preparedness

During the group interviews, some participants expressed how they thought their language background gave them an advantage in multilingual EFL classrooms. When asking participants in both groups whether they felt prepared to teach in a multilingual EFL classroom, Noah, enrolled in TTE levels 5-10, answered: "Considering that I speak three languages, I feel that I am well-prepared." Håkon (TTE levels 8-13) similarly commented how he "probably feels better prepared than people with a monolinguistic background" due to his international friend group and input of several languages. In Otwinowska's study regarding language awareness and monolingual bias (2017), she suggests that language awareness increases in correlation to how many languages you learn. She states: "If multilingual/plurilingual pedagogy is to succeed, language teachers should experience learning L2 and L3-Ln languages" (Otwinowska, 2017, p. 320). Based on Otwinowska's findings, Noah and Håkon have a better foundation for succeeding in using multilingual pedagogies, something they seem to recognize. Otwinowska's research shows "that English language teachers should ideally become advanced in at least two languages apart from the native one if they are to create suitable tasks and materials for cross-linguistic comparisons" (2017, p. 320). Therefore, Noah and Liam should also have less difficulty implying a multilingual pedagogical approach in the classroom.

An interesting contrast to Noah and Liam's statements, which we have seen, is supported by Otwinowska's study, Emma (TTE levels 8-13) does not feel prepared, even though she is multilingual. Emma stated, "I hope that I'm better prepared just based on knowing more languages, but I don't know if it helps that much." It is not easy to say why Emma is uncertain whether her competence in several languages increases her level of preparedness. It could simply be that she does not have specific knowledge regarding the connection between multilingualism and language instruction. On the other hand, she could also have contrasting experiences regarding her own multilingualism that are not conveyed in the interview.

Signe, enrolled in TTE levels 5-10, expressed how her background inhibits preparedness. In the interview, Signe stated that she was from a small place "where there have been none but Norwegian pupils in the classroom". Therefore, she thought it would be a challenge "knowing how to pay attention and how to include and respect different cultures", while positively utilizing different languages. It is interesting to see how she imagines that her lack of familiarity and experience with multicultural and multilingual classrooms will affect her

preparedness. However, her statements reveal that she understands the complexity of how experience with other languages and cultures contributes to increased cultural competency (Steele & Leming, 2022) and language awareness (Otwinowska, 2017), resulting in increased preparedness. Therefore, on a positive note, Signe has a better foundation for acquiring sufficient competence in multilingual approaches than those who have not reflected upon their own competence and language background.

5.2 Differences in level of preparedness

In both the interview and online questionnaire, data suggested that participants enrolled in TTE levels 5-10 had been given more specific instruction and examples regarding multilingual pedagogy and teaching. The online questionnaire revealed that participants enrolled in TTE 5-10 scored a bit higher on questions concerning having received multilingual tools and methods throughout the course of TTE and having used those methods and tools in practicum. Correlating to these findings, the interview data revealed how participants enrolled in TTE levels 5-10 had gotten specific instruction connected to multilingualism and the utilization of multilingualism in a school setting. This instruction was provided through English courses, and the instruction included work with ConBaT+ and specific exercises such as the language portrait. In addition, pre-service teachers enrolled in TTE levels 5-10 were required to make a teaching plan based on what they had been instructed in and execute it during a practicum in the classroom. As I have highlighted, whether or not it was successful is debatable. Nevertheless, the pre-service teachers were instructed in multilingual methods and practiced implementing them in a classroom setting.

In contrast, participants enrolled in TTE levels 8-13 did not report on any specific multilingual pedagogical approaches received throughout the English courses. Neither had exercises been tested in practicum. Of all the participants, Sofie was the only one who had received specific instruction concerning foreign language learning. This instruction was received through the course 'Foreign Language Didactics', a course connected to the subject of Spanish, not English. What participants enrolled in TTE 8-13 did report was having practicums in introductory classes for minority language pupils, and based on Steele and Leming (2022), this should work as a factor contributing to the development of intercultural competency, which could increase preparedness. Nevertheless, when participants were to answer how they perceived their preparedness for teaching English in a multilingual EFL

classroom, responses were quite varied, whereas two participants did not feel prepared, with one participant commenting, "I feel quite poorly prepared" (Lucas).

Further, TTE levels 8-13 participants wished for more focus on the language-diverse classroom, multilingual pedagogies and didactics, specific exercises, and examples of how to utilize multilingualism. This correlated with data retrieved from the online questionnaire showing a significantly higher score on question 6 (there should be more focus on multilingual competence⁹ in the teacher education program). Even though participants enrolled in TTE levels 5-10 also requested more practical examples and instruction in multilingual approaches, they appeared overall more positive teaching in multilingual EFL classrooms. During the interview, TTE levels 5-10 participants uttered a higher level of readiness regarding the multilingual EFL classroom through comments such as "you cannot fully be prepared (...) you learn from your experiences" (Daniel), "I believe you learn a lot when you just try" (Signe), "as long as you are open-minded and try to keep up-to-date in the field, you should eventually be fine" (Sarah), and "as long as you are open and willing, being aware that multilingualism can cause problems, or be a resource, then there are opportunities to gradually gain more knowledge" (William). This large variance in readiness and preparedness between TTE levels 5-10 and 8-13 could indicate that there is reason to believe that the instruction participants enrolled in TTE levels 5-10 have received has influenced their level of preparedness, even though participants requested more instruction.

Contrasting this difference in responses during the interviews, both Teacher Training Educations scored equally on the level of preparedness in the online questionnaire. There could be several factors as to why the scores of the online questionnaire do not correlate to participants' responses in the interview, but without going further into this, the interviews catch the complexity of participants' perceptions of multilingualism and multilingual EFL classrooms. In addition, responses in the interviews uncover how English courses in TTE levels 8-13 have given little to no instruction on multilingual pedagogical/didactical exercises, while English courses in TTE levels 5-10 have provided some instruction.

The overall structure of the teacher education program could explain the large internal variation in responses between participants enrolled in TTE levels 8-13. During the interview,

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⁹ In this setting multilingual competence is defined as 'competence in multilingual pedagogies and teaching'.

Sofie explained how their courses are shared with students studying English literature or linguistics, and therefore, the courses are not adapted to pre-service teachers' needs, including little to no didactical elements. In contrast to TTE levels 5-10, which have all their instruction in one faculty, TTE levels 8-13 are divided between two faculties. TTE levels 8-13 receive instruction in subject courses (i.e., English literature or English linguistics) at one faculty, while instruction in pedagogical and didactical courses is received in a pedagogical faculty. Since TTE levels 5-10 receive all their instruction from one faculty, it could be possible that TTE levels 5-10 provide a greater connection between discipline subjects and pedagogical/didactical subjects. In correlation, statistics from NOKUT (National Agency for Quality Assurance in Education) reveal how primary and secondary teacher education (levels 1-10), on average, spend more time on learning activities organized by the institution than teachers training educations, vocational teacher education, and others (NOKUT, 2023). Further, statistics also show that TTE levels 8-13 spend more time on independent studies, while primary and secondary teacher education spend less time (NOKUT, 2023). This could indicate that more obligatory courses are embedded in TTE levels 5-10, in addition to more practical related instruction, than in TTE levels 8-13. Students enrolled in primary and secondary teacher education also reveal a higher level of connection between the education program and the profession (NOKUT, 2023), which correlates to participants enrolled in TTE levels 5-10 being more open and positive towards the teacher role in a multilingual EFL classroom. This could indicate that more instruction and connection between subjects provided by the faculties could increase overall preparedness regarding the profession.

Regarding gender, the study conducted by Deng et al. revealed a higher level of preparedness among female teachers than male teachers (2021, p. 495). The quantitative questionnaire showed some significant differences between genders, although not in terms of preparedness. In addition, the qualitative interviews did not show significant differences in the level of preparedness between genders. Therefore, this issue will not be further addressed.

An interesting finding worth highlighting is how Sofie (enrolled in TTE levels 8-13) reveals an overall higher level of preparedness and competence regarding multilingual pedagogies and teaching. The group interview revealed how Sofie's instruction in Foreign Language Didactics and practice in introductory classes for minority language pupils had given her a higher level of both theoretical and practical competence in multilingual approaches. During the interview, other participants also made notice of her knowledge of practical exercises and the language theory she had gained through the subject. She offered an important distinction

between the instruction in English courses and the foreign language didactics course, which was how language learning is viewed between the courses. In contrast to English language courses, she explained how foreign language courses had a greater emphasis on third language acquisition. Therefore, practical examples and exercises were based on how L1 and L2 influence L3 language learning. In connection to this, we have seen how pre-service teachers in TTE levels 8-13 critically question the kind of classroom experience lecturers in English didactics have. As Lucas stated, "without saying anything bad about our lecturer in didactics, his experience is from a Norwegian classroom (...), and all the examples he brings up are about how the Norwegian language influenced how the pupils learned English". The extract shows how there is a need for instruction on how former languages, in addition to Norwegian, influence English language learning. In order to increase the level of preparedness regarding teaching in multilingual EFL classrooms, it could be fruitful to adapt elements from foreign language didactics into English didactics courses. This way, preservice teachers would gain a greater understanding of how multilingual pupils acquire language and how to utilize multilingualism when learning a third language.

5.3 Generalization

Due to the limited scope of this study, the findings cannot be generalized to apply to all preservice teachers enrolled in Teacher Training Education levels 5-10 and 8-13 on a national level. To increase generalizability, a similar study must be conducted on a larger scale, including a larger number of participants and educational institutions.

5.4 Methodological limitations and weaknesses

Even though precautions were taken to reduce limitations, it is important to acknowledge that some limitations and weaknesses occur. The first limitations I would like to address are the time frame and number of respondents who partook in the mixed-method research. As stated in Chapter 3 (methodology), decisions regarding the choice of method were made based on the time frame of the thesis. As a result, the mixed-method data was collected from a small group of participants to efficiently sample data. Ideally, a larger number of participants would have been recruited in order to generalize findings. In addition, only two group interviews were conducted, including only a small number of representatives from each Teacher Training Education. Even though it would not have been sufficient to generalize findings, all

students enrolled in their fifth year of TTE levels 5-10 and 8-13 majoring in English should preferably have been interviewed in order to achieve a higher level of reliability.

The second limitation is the researcher's role in this study. As mentioned in Chapter 3, some participants were recruited through an internal network and some through direct contact. In addition, Facebook Messenger was used to recruit participants for the interview. This mix of personal and professional contact and the usage of personal platforms affects the researcher's role as an objective part of the study. It is not advised, and for future research, it should be avoided to recruit participants by mixing professional and personal channels for communication.

The third limitation is the lack of relevant theoretical knowledge before designing and conducting mixed-method research. In Chapter 3, I mention how careful formulation of objectives should have been completed before designing the online questionnaire. In addition, in the mixed-methods research, the term 'multilingual competence' was used as a synonym for teachers' competence in multilingual pedagogies and teaching, which have been addressed throughout the thesis. It is not easy to say whether this affected the results of the online questionnaire and group interviews since participants seemed to understand the term as connected to competence in multilingual pedagogies and teaching. Nevertheless, this mix-up should not have happened and is, as stated, a regrettable error that weakens and limits the research.

The fourth limitation is that the online questionnaire showed an equal level of preparedness between the two education programs, while the group interview did not. On one hand, this could be an interesting finding and prove the importance of conducting a group interview to gain further insight into responses. On the other hand, it would be beneficial to further investigate whether the qualitative or quantitative results are more accurate. To do this, a larger group of pre-service teachers must be recruited.

6 Conclusion

This thesis aimed to investigate and compare pre-service teachers' preparedness regarding teaching in multilingual EFL classrooms. Through mixed-method research, with an emphasis on qualitative methods, the following research questions have been examined:

RQ 1: What factors influence pre-service teachers' preparedness for teaching in multilingual EFL classrooms?

RQ 2: Are there any differences between the two groups [Teacher Training Education levels 5-10 and Teacher Training Education levels 8-13] of pre-service teachers regarding their preparedness for teaching in a multilingual EFL classroom?

An in-depth analysis of data was conducted using the theoretical framework, thematic analysis, and Microsoft Excel.

Regarding RQ1, results revealed that external factors such as exposure to language diversity, instruction in multilingual pedagogies, exchange, and field experience promote pre-service teachers' level of preparedness. On the other hand, the gap between theory and practice inhibits preparedness.

Data suggests that this gap is found in pre-service teachers' competence in transferring theoretical knowledge to practical exercises in the classroom. Moreover, participants enrolled in TTE levels 8-13 commented on the significant imbalance between theoretical instruction in teacher education and the pedagogical/didactical need at a classroom level. Further, both participant groups commented on the gap between the type of instruction the lecturers in English didactics offer and what the modern classroom needs and looks like.

Results also revealed how internal factors such as language background can promote or inhibit preparedness. Data shows how multilingual pre-service teachers feel more prepared to teach in a multilingual EFL classroom, except for Emma, who did not. On the other hand, data also reveals how a lack of exposure to language-diverse classrooms can inhibit preparedness.

Regarding RQ2, pre-service teachers enrolled in TTE levels 5-10 were overall more positive about multilingual EFL classrooms and expressed a higher level of preparedness and openness to working with multilingual pupils than participants enrolled in TTE levels 8-13.

As seen in the quantitative and qualitative data, this could be a result of the higher amount of instruction received in multilingual approaches and the use of those approaches in practicums. It could also be connected to the overall structure of the education program. But more research on this is necessary.

An interesting finding is the difference in Sofie's level of preparedness and competence in multilingual approaches compared to the other participants. Through the course 'Foreign Language Didactics' and practicum in introductory classes, she gained vital examples and instruction on implementing, using, and facilitating multilingualism and multilingual approaches.

Both groups of pre-service teachers value competence in multilingual approaches as an important part of teacher training education. Nevertheless, this thesis lays grounds for implying that more instruction on multilingualism and multilingual approaches is needed in teacher training education, as both groups wish for more preparedness and a higher level of competence in multilingual approaches. As stated in Chapter 1, teachers are mandated to facilitate language diversity in the classroom. Through language facilitation, pupils might feel an increased sense of ownership of the school and society, as "language gives us a sense of belonging" (Ministry of Education and Research, 2017). In this globalized society, it is therefore vital that teacher training education offers sufficient instruction in multilingual pedagogies, didactics, and teaching, as well as arenas for practically employing it, increasing pre-service teachers' level of preparedness to face linguistic diversity and teach in multilingual EFL classrooms.

6.1 Didactical implications

Although the results of this study are not generalizable and include various limitations and weaknesses, some interesting discoveries have been made that are relevant to Teacher Training Education. Regarding preparedness, there is a difference in responses between TTE levels 5-10 and 8-13 in the interviews. Pre-service teachers in TTE levels 5-10 express a greater positive view of multilingual EFL classrooms. Although they do not perceive their level of competence in multilingual pedagogy and teaching as exceptionally high, they display a greater optimism when reflecting on their preparedness.

Nevertheless, they believe that positivity and openness toward language diversity, as well as further experiences in the school, will help them gain competence. This could be connected to

instruction on multilingualism and having tested multilingual approaches in the classroom. Moreover, it could also be connected to how the educational program is structured. When planning the subject plan for English courses in TTE levels 8-13, looking to English courses provided in TTE levels 5-10 could be fruitful in meeting the need for a higher level of preparedness and inclusion of didactical elements. However, more light must be shed on the differences in study plans between the two teacher training educations.

Another implication is the frequently mentioned gap between theory and practice in teacher education programs. Pre-service teachers enrolled in TTE levels 8-13 report a large gap between the advanced theoretic level of instruction in English courses in the education program and the school level. This gap is often experienced once students are in practicums, and they question how they should adjust their advanced theoretical knowledge to appropriate classroom teaching for pupils in grades 8-13. Different measures should be taken to minimize this gap. Among them, it could be beneficial to investigate further:

- a) Lecturers' pedagogical background and their experience with language-diverse classrooms
- b) The connection between English literature and language courses and the didactical courses provided in TTE levels 8-13
- c) The overall emphasis on multilingual approaches in the English didactical courses

Considering Sofie's high level of preparedness, it would be interesting to see if elements from the Foreign Language Didactics course could be implemented into English didactics courses and curriculum. This way, more focus would be on English language learners acquiring English as an L3. As a result, it could help improve the preparedness level among pre-service teachers facing the multilingual EFL classroom. In addition, having practicums in introductory classes for minority language pupils would help pre-service teachers gain essential experience with language diversity. Therefore, practicums in introductory classes should be considered an obligatory part of the instruction.

Further, even though levels of preparedness vary, pre-service teachers feel they need more preparation to face the multilingual EFL classroom. Therefore, more focus should be on knowledge, training, and examples of how to employ multilingualism in the school.

Finally, an interesting discovery made through the group interviews is pre-service teachers' dissatisfaction with the teacher education program. In addition, the participants frequently critique the education program. This criticism concerns several factors, among others:

- a) Follow-up during practice
- b) Little to no instruction on multilingual approaches
- c) The gap between faculties
- d) The gap between theory and practice
- e) Lecturers' classroom-based experience
- f) Requirements that are unrelated to the practical classroom situation

Although these criticisms do not necessarily significantly impact pre-service teacher preparedness, it can be fruitful to consider them when evaluating teacher education programs and designing the curriculum.

6.2 Suggestions for future research

A natural suggestion for future research would be to recruit a larger number of participants on a national level to generalize findings. In addition, the research objectives should be clear and well-rooted in relevant literature and former research. Before conducting the mixed-method research, it would also be ideal to provide pre-service teachers with a general definition of 'multilingual EFL classrooms' and 'competence in multilingual approaches, pedagogies, and didactics.'

Further, a longitudinal study with a control and experimental group would be interesting to test whether practice in introductory minority language classes and English courses providing instruction in multilingual approaches could help increase preparedness. A detailed analysis of the curriculum and study plan for the two teacher education programs would also help uncover potential factors for differences in preparedness levels.

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Appendix

Appendix 1 – Online Questionnaire



Multilingual competence

Gender identity

- o Male
- o Female
- o Other

What education program are you enrolled in?

- o Lector 8-13
- o Lector 5-10

What is the main language(s) you use at home?

Check more boxes if necessary

- o Norwegian
- o Sami
- Kven
- o English
- o Spanish
- o German
- o Arabic
- o Tamil
- o Swedish
- o Finnish
- o Other

How many languages do you comprehend?

o 2
o 3
o 4
o 5
o More
I understand what multilingual competence is
(0 = strongly disagree 10 = strongly agree)
Multilingual competence is mainly developed through the teacher education program
Keep in mind the program you are enrolled in. (0 = strongly disagree 10 = strongly agree)
Multilingual competence is mainly developed through practical experience
(0 = strongly disagree 10 = strongly agree)
I consider developing multilingual competence a valuable part of the teacher
education program
(0 = strongly disagree 10 = strongly agree)
I consider developing multilingual competence a valuable part of the EFL
(english foreign language) classroom
(0 = strongly disagree 10 = strongly agree)
There should be more focus on multilingual competence in the teacher
education program
Keep in mind the program you are enrolled in. $(0 = \text{strongly disagree } 10 = \text{strongly agree})$
Through the course of my teacher education, I have gained knowledge of what
multilingual competence is
(0=strongly disagree, 10= strongly agree)

How many languages are you able to either understand, speak, read, or write?

0 1

Through the course of my teacher education, I have gained knowledge of what multilingualism is

(0=strongly disagree, 10= strongly agree)

Throughout the course of my teacher education, I have been given specific multilingual methods and tools that I can use in the multilingual classroom (0=strongly disagree, 10= strongly agree)

During my practicums, I have had the opportunity to use my multilingual competence

(0=strongly disagree, 10= strongly agree)

I have used multilingual exercises, methods, or strategies during my practicum

(0 = not at all, 10 = very much so)

It is easier to use multilingual strategies when you are multilingual

(0=strongly disagree, 10= strongly agree)

I feel prepared to teach in a multilingual EFL (english foreign language) classroom

(0=strongly disagree, 10= strongly agree)

Appendix 2 – E-mail regarding participation in the online questionnaire and group interview

Hei!

Du er blitt bedt om å svare på denne undersøkelsen fordi du er påmeldt lærerutdanning og har engelsk som hovedfag.

Skann QR-koden eller trykk på link https://nettskjema.no/a/376032 for å komme til skjemaet. Undersøkelsen er anonym og tar ca. 5 minutter. Det er viktig at samtlige svarer på undersøkelsen da det vil styrke funnene i oppgaven – I'm counting on you!

Det er satt av tid til gjennomføring av gruppeintervju uke 48 og 49, og intervjuene tar ca. 45-90 minutter. Om du har mulighet til å stille på intervju, enten uke 48 eller 49, gi beskjed så snart som mulig ved å respondere på mail til kme044@uit.no. Når det kommer til tidspunkt og sted er jeg fleksibel, hovedfokus er å få gjennomført intervju.

Takk for at du tar deg tid til å svare på undersøkelsen! 😂



Vennlig hilsen,

Kristiane Marie S. Melkersen

Appendix 3 – Additional e-mail reminding students to participate in the study

Hei!

Sendte ut et nettskjema sist uke, og mangler fortsatt en del svar fra lærerstudentene på GLU 5-10 - gjerne ta dere 5 minutter på å svare på

undersøkelsen https://nettskjema.no/a/376032 eller skann QR-koden for å komme til skjemaet.

Gi også tilbakemelding til kme044@uit.no om du kan stille til intervju uke 48 eller 49.

Takk for at du tar deg tid til å svare på undersøkelsen! 😂



Vennlig hilsen,

Kristiane Marie S. Melkersen

Appendix 4 – Facebook Messenger chat to ask primary school teacher students when they are available for participation in the group interview

Hei!

Har allerede hørt med noen av dere om å stille til gruppeintervju tirsdag uke 48 eller mandonsd uke 49. Trenger minst 6 stk (veldig gjerne flere), så vi laget like så greit en gruppe for å høre hvem som fortsatt er i byen og som har tid/når dere har tid.

Hva kunne fungert best av:

- uke 49 mand, tirsd, onsd
Ellers så er en eventuell nødløsning fredag uke 47.
Appendix 5 – Interview Guide
Før oppstart ha forskningens formål i bakhodet:
Investigating pre-service teachers' preparedness for and feelings (thoughts, mindsets)
regarding multilingual EFL classrooms.
☐ Presentere meg selv og prosjektet + sekretær
☐ Gå gjennom informasjonsskriv og innhente skriftlig samtykke til
o Deltakelse
 Lydopptak
☐ Notere kjønn og morsmål
Page 88 of 104

uke 48 tirsdag

Intro
Generelt
☐ Hva forstår informantene med begrepet flerspråklig kompetanse? Hva legger dere i
begrepet?
- [Avklare hva man mener med flerspråklig kompetanse, danne tanker rundt begrepet]
Hoveddel
Kompetanse
☐ Noen mener flerspråklig kompetanse hovedsakelig utvikles gjennom
lærerutdanningen, andre mener det hovedsakelig utvikles gjennom praksis
o Hva mener dere om dette?
O Hvor mener dere flerspråklig kompetanse utvikles?
☐ Gjennom lærerutdanningen deres, på hvilke måter har dere fått kunnskap om hva
flerspråklig kompetanse er?
o Gi gjerne eksempler
☐ I nettskjemaet svarte de fleste at det bør være litt mer fokus på flerspråklig
kompetanse, hvorfor tenker dere det?
☐ Hvilke spesifikke verktøy, metoder, øvelser, osv. Når det gjelder flerspråklighet har
dere fått gjennom utdanningen?
 Har dere brukt noen av metodene i praksis?
o Gi eksempler
☐ Er det å utvikle flerspråklig kompetanse en verdifull del av lærerutdanningen
 Er det verdifullt for engelsk klasserommet?
Preparedness / beredskap / forberedthet
Scenario:

Page **89** of **104**

 $\hfill \square$ Du er nyutdannet lærer og går ut i det flerspråklige klasserommet som ${\it engelsklærer}$

	hvordan planlegger de å møte disse utfordringene?
	Hvordan oppfatter du din beredskap/kompetanse/ferdigheter/forberedthet for undervisning i flerspråklige engelske fremmedspråklige klasserom?
	Kan du dele spesifikke aspekter ved opplæringen din som du mener bidrar til din forberedthet for å kunne adressere språklig mangfold i klasserommet?
	Er det noen utfordringer eller hull i opplæringen din som du føler kan påvirke hvor godt forberedt du er til å undervise i flerspråklige klasserom?
	På hvilke måter tror du forventningene og kravene til lektor 5-10 påvirker deres forberedthet til å håndtere språklig mangfold i klasserommet? • Blir det stilt nok forventninger og krav? For mye, for lite?
Minds	ets / feelings / emotions / følelser
	Hva føler dere om det å skulle undervise i flerspråklige engelskspråklige klasserom?
	Hvilke følelser eller bekymringer oppstår når man tenker på at det potensielt kan være et språklig mangfold til stede i dine fremtidige klasserom?
	Har det vært noen erfaringer eller sider ved utdanningen din som har påvirket følelsene dine rundt undervisning i flerspråklige klasserom, positivt eller negativt? O Gi eksempel
Samm	enligning av GLU og Lektor 8-13
	På hvilke måter tenker dere at kravene/forventningene for hvor godt forberedt man skal være for å møte det flerspråklige engelske klasserommet er forskjellig mellom glu 5-10 og lektor 8-13?

Oppfatter dere noen merkbare forskjeller i vektleggingen av kulturell kompetanse
mellom de to utdanningsnivåene?
o hvordan kan dette påvirke undervisningstilnærmingen din?
Med tanke på den spesifikke læreplanen og opplæringen på ditt lektorutdanningsnivå,
hvordan tror dere det har forberedt dere på de ulike utfordringene et flerspråklig
engelsk klasserom kan ha?

Avslutning

- ☐ Er det noe annet du vil dele om dine erfaringer, tanker eller bekymringer angående din forberedthet og følelsene knyttet til undervisning i flerspråklige engelskspråklige klasserom innenfor ditt utdanningsnivå?
- Oppsummerende tanker, åpne opp for eventuelle kommentarer fra informantene
- Minne om rettigheter og samtykkeskjema
- Runde av på en positiv måte og takke for bidraget.

Appendix 6 – Consent Form

Vil du delta i forskningsprosjektet Multilingual Competence in Teacher Education?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å se på lærerstudenters oppfatninger og kompetanse i forbindelse med flerspråklighet i skolen. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Prosjektet er en del av min didaktiske master i faget engelsk. Tema for oppgaven er flerspråklig kompetanse der datainnsamlingen utføres gjennom et mixed-method design, med hovedvekt på kvalitative metoder, men også innslag av kvantitative metoder. Oppgaven har en komparativ utforskende forskning design, og vil ha som formål å se på forskjeller i kompetanse og tankesett rundt flerspråklighet i klasserom med engelsk som fremmedspråk, mellom lærerstudenter på 5. året på GLU 5-10 og lektor 8-13, med hovedfag i engelsk. Jeg vil analysere forskningsspørsmålet:

Investigating pre-service teachers' preparedness for and feelings (thoughts, mindsets) regarding multilingual EFL classrooms.

Hvem er ansvarlig for forskningsprosjektet?

UiT – Norges Arktiske Universitet, fakultet for humaniora, samfunnsvitenskap og lærerutdanning er ansvarlig for prosjektet.

Hvorfor får du spørsmål om å delta?

Utvalget er trukket basert på hvilke studenter som går 5. året på lærerutdanning 5-10 eller 8-13 og som skriver master i engelsk 2023-2024. Du får spørsmål om å delta fordi du er innlemmet i en av disse utdanningsløpene, går 5. året, og fordi du har engelsk som hovedfag. Du er tilfeldig trukket ut fra en elev-liste gitt av studiekoordinator ved fakultetet ditt. Alle med engelsk som hovedfag, som går 5. året og som går en av to lærerutdanninger har fått forespørsel om å delta.

Hva innebærer det for deg å delta?

Hvis du velger å delta i prosjektet, innebærer det at du fyller ut samtykkeskjema, for så å være aktivt deltakende på gruppeintervju der det blir tatt lydopptak. Intervjuet varer ca. 45-90 minutter, og jeg skal ikke innhente noe annen personinformasjon enn lydopptak. Intervjuet er bestående av seks deler, med intro, hoveddel med spørsmål, og en avslutning. Lydopptakene vil bli transkribert, deretter slettet. Transkriberingen vil bli lagret i et passord beskyttet dokument.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

- Student, Kristiane Marie Sortland Melkersen og veileder Annelise Brox Larsen ved UiT
 vil ha tilgang til prosjektet
- Alle navn, kontaktopplysninger, og generelle opplysninger som gjør at man kan få
 kjennskap til hvem du er vil ikke bli tatt med i transkriberingen. Transkriberingen vil
 bli passord beskyttet i Word og lagret på en mobil enhet med passordbeskyttelse.
 Opptaket vil deretter bli slettet.

Deltakere av prosjektet vil ikke kunne gjenkjennes i publikasjon.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes?

Prosjektet vil etter planen avsluttes 15.05.23. Etter prosjektslutt vil datamaterialet med dine personopplysninger slettes.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra *UiT* har Sikt – Kunnskapssektorens tjenesteleverandør vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke opplysninger vi behandler om deg, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om deg som er feil eller misvisende
- å få slettet personopplysninger om deg
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:

- UiT, fakultet for humaniora, samfunnsvitenskap og lærerutdanning ved Annelise Brox Larsen e-post: <u>annelise.larsen@uit.no</u> tlf.: +47 77 64 44 43. Og student Kristiane
 Marie S. Melkersen e-post: <u>kme044@uit.no</u> tlf.: 95895542
- Vårt personvernombud: Annikken Steinbakk Epost: personvernombud@uit.no
 Telefon: 77 64 69 52

Hvis du har spørsmål knyttet til vurderingen som er gjort av personverntjenestene fra Sikt, kan du ta kontakt via:

• Epost: personverntjenester@sikt.no eller telefon: 73 98 40 40.

Med vennlig hilsen

Prosjektansvarlig Student

Annelise Brox Larsen Kristiane Marie S. Melkersen

Samtykkeerklæring

lem:lem:lem:lem:lem:lem:lem:lem:lem:lem:
Education, og har fått anledning til å stille spørsmål. Jeg samtykker til:
□ å delta i <i>gruppeintervju</i>
Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet
(Signert av prosjektdeltaker, dato)

Appendix 7 – Detailed rapport from online questionnaire



Multilingual competence

Oppdatert: 19. mars 2024, 10:46

Gender identity

Antall svar: 27

Svar	Antall	% av svar	
Male	14	51.9%	51.9%
Female	13	48.1%	48.1%
Other	0	0%	0%

What education program are you enrolled in?

Antall svar: 27

Svar	Antall	% av svar	
Lector 8-13	17	63%	63%
Lector 5-10	10	37%	37%

What is the main language(s) you use at home?

Antall svar: 27

Svar	Antall	% av svar	
Norwegian	26	96.3%	96.3%
Sami	0	0%	0%
Kven	0	0%	0%
English	8	29.6%	29.6%
Spanish	0	0%	0%
German	0	0%	0%
Arabic	0	0%	0%
Tamil	1	3.7%	3.7%
Swedish	0	0%	0%
Finnish	1	3.7%	3.7%
Other	2	7.4%	7.4%

How many languages do you comprehend?

Antall svar: 27

Svar	Antall	% av svar	
1	0	0%	0%
2	10	37%	37%
3	9	33.3%	33.3%
4	4	14.8%	14.8%
5	3	11.1%	11.1%
More	1	3.7%	3.7%

Antall svar: 27	Snitt: 7.89	Median: 8		
Svar		Antall	% av svar	
)		0	0%	0%
1		0	0%	0%
2		0	0%	0%
3		1	3.7%	3.7%
4		0	0%	0%
5		1	3.7%	3.7%
5		5	18.5%	18.5%
7		3	11.1%	11.1%
В		6	22.2%	22.2%
9		4	14.8%	14.8%
10		7	25.9%	25.9%

Antall svar: 27	Snitt: 4.63	Median: 5		
Svar		Antall	% av svar	
0		2	7.4%	7.4%
1		1	3.7%	3.7%
2		1	3.7%	3.7%
3		2	7.4%	7.4%
4		2	7.4%	7.4%
5		11	40.7%	40.7%
6		4	14.8%	14.8%
7		3	11.1%	11.1%
8		1	3.7%	3.7%
9		0	0%	0%
10		0	0%	0%

Antall svar: 27 Snit	t: 6.81	Median: 7		
Svar		Antall	% av svar	
)		0	0%	0%
		0	0%	0%
!		0	0%	0%
		0	0%	0%
		2	7.4%	7.4%
i		7	25.9%	25.9%
j		2	7.4%	7.4%
,		3	11.1%	11.1%
		10	37%	37%
		2	7.4%	7.4%
0		1	3.7%	3.7%

Antall svar: 27	Snitt: 8.37	Median: 9		
Svar		Antall	% av svar	
)		0	0%	0%
1		0	0%	0%
2		1	3.7%	3.7%
3		0	0%	0%
4		1	3.7%	3.7%
5		1	3.7%	3.7%
5		0	0%	0%
7		4	14.8%	14.8%
3		3	11.1%	11.1%
9		7	25.9%	25.9%
10		10	37%	37%

Antall svar: 27	Snitt: 8.52	Median: 9		
Svar		Antall	% av svar	
		0	0%	0%
		0	0%	0%
		0	0%	0%
		0	0%	0%
		1	3.7%	3.7%
		3	11.1%	11.1%
		1	3.7%	3.7%
		0	0%	0%
		5	18.5%	18.5%
)		5	18.5%	18.5%
0		12	44.4%	44.4%

Antall svar: 27	Snitt: 7.15	Median: 8		
Svar		Antall	% av svar	
0		0	0%	0%
1		1	3.7%	3.7%
2		1	3.7%	3.7%
3		0	0%	0%
4		1	3.7%	3.7%
5		2	7.4%	7.4%
6		0	0%	0%
7		7	25.9%	25.9%
8		11	40.7%	40.7%
9		1	3.7%	3.7%
10		3	11.1%	11.1%

Antall svar: 27	Snitt: 7.63	Median: 8		
Svar		Antall	% av svar	
0		0	0%	0%
1		0	0%	0%
2		0	0%	0%
3		1	3.7%	3.7%
4		1	3.7%	3.7%
5		1	3.7%	3.7%
6		6	22.2%	22.2%
7		4	14.8%	14.8%
8		4	14.8%	14.8%

7.4%

10

7.4%

29.6%

Antall svar: 27	Snitt: 8.74	Median: 10		
Svar		Antall	% av svar	
0		0	0%	0%
1		0	0%	0%
2		1	3.7%	3.7%
3		0	0%	0%
4		0	0%	0%
5		0	0%	0%
6		2	7.4%	7.4%
7		2	7.4%	7.4%
8		5	18.5%	18.5%
9		2	7.4%	7.4%
10		15	55.6%	55.6%

Throughout the course of my teacher education, I have been given specific multilingual methods and tools that I can use in the multilingual classroom

Antall svar: 27	Snitt: 6.00	Median: 6		
Svar		Antall	% av svar	
0		0	0%	0%
1		0	0%	0%
2		0	0%	0%
3		7	25.9%	25.9%
4		3	11.1%	11.1%
5		1	3.7%	3.7%
6		4	14.8%	14.8%
7		3	11.1%	11.1%
8		5	18.5%	18.5%
9		1	3.7%	3.7%
10		3	11.1%	11.1%

During my practicums, I have had the opportunity to use my multilingual competence

Antall svar: 27	Snitt: 6.33	Median: 6		
Svar		Antall	% av svar	
0		0	0%	0%
1		0	0%	0%
2		1	3.7%	3.7%
3		3	11.1%	11.1%
4		1	3.7%	3.7%
5		2	7.4%	7.4%
6		7	25.9%	25.9%
7		4	14.8%	14.8%
8		7	25.9%	25.9%
9		0	0%	0%
10		2	7.4%	7.4%

Antall svar: 27	Snitt: 5.22	Median: 6		
Svar		Antall	% av svar	
)		0	0%	0%
1		1	3.7%	3.7%
2		1	3.7%	3.7%
3		4	14.8%	14.8%
4		4	14.8%	14.8%
5		2	7.4%	7.4%
6		9	33.3%	33.3%
7		4	14.8%	14.8%
8		1	3.7%	3.7%
9		0	0%	0%
10		1	3.7%	3.7%

Antall svar: 27	Snitt: 7.48	Median: 8		
Svar		Antall	% av svar	
0		0	0%	0%
1		0	0%	0%
2		0	0%	0%
3		0	0%	0%
4		0	0%	0%
5		4	14.8%	14.8%
6		3	11.1%	11.1%
7		5	18.5%	18.5%
8		10	37%	37%
9		1	3.7%	3.7%
10		4	14.8%	14.8%

Antall svar: 27	Snitt: 6.93	Median: 7		
Svar		Antall	% av svar	
0		0	0%	0%
1		0	0%	0%
2		0	0%	0%
3		1	3.7%	3.7%
4		1	3.7%	3.7%
5		5	18.5%	18.5%
6		4	14.8%	14.8%
7		4	14.8%	14.8%
8		8	29.6%	29.6%
9		1	3.7%	3.7%
10		3	11.1%	11.1%

