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Research paper

# "Multilingualism is a resource, not a difficulty": Exploring Norwegian teachers' beliefs and reported practices in multilingual settings



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#### ABSTRACT

This study explored Norwegian teachers' (N=181) (a) beliefs about multilingualism and the multilingual teaching practices (MTPs) they reported, (b) the extent to which their beliefs and practices were interrelated, and (c) their justifications of certain beliefs and practices. The data were analyzed using descriptive statistics, Spearman's bivariate correlation, and content analysis. The findings revealed mixed views about multilingualism and three tendencies relative to MTPs. A significant positive correlation between beliefs and reported practices was found. Although many of the participants endorsed multilingualism in education, the dominant role of Norwegian and biased monolingual teacher ideology were the main factors hindering MTPs.

## 1. Introduction

Similar to other western nations, Norway has been experiencing an unprecedented increase in linguistic and cultural diversity caused by international migration. Although the rate of migration dropped significantly in 2019–2020, the numbers are rising again (Statistics Norway, 2019–2021). Currently, out of Norway's population of about 5, 5 million, 1,4 million are considered to have an immigrant background. Most immigrant children and Norwegian-born to immigrant parents are multilingual: they often speak a language (or languages) other than Norwegian at home, and in addition learn Norwegian and English starting in Grade 1. It has been argued that ethnic Norwegian students can also be considered multilingual as they are able to use and/or understand different dialects of Norwegian and other Scandinavian languages and are exposed to English through a variety of channels from an early age (Haukås & Speitz, 2018).

The new national Norwegian curriculum, LK20 (Norwegian Directorate of Education and Training, 2020) recognizes multilingualism as an asset and paves the way for an implementation of multilingual teaching practices (MTPs). For example, the curriculum for the subject of English stipulates that learners should be able to identify "connections between English and other languages," including home languages (HLs) (Norwegian Directorate of Education and Training, 2020, p. 3).

However, Haukås (2022) argued that there exist hierarchies in language subject curricula in Norway as multilingualism is not treated equally in mother tongue<sup>1</sup> education for language minorities and in other language subjects (i.e., Norwegian, English, and a second foreign language, e.g., Spanish or German). These language subject tend to support elitist multilingualism so that learners develop competence in languages that are considered valuable and prestigious. Sickinge (2016) found that languages-as-problem orientation (Ruíz, 1984) is identified in migrant education field in Norway while languages-as-rights or languages-as-resource discourses are explicit in official documents regarding national minority languages (e.g., Sami, Keven) and other languages (e.g., Norwegian, English, and second foreign languages). Moreover, findings from other studies in Norway suggest that although teachers generally hold positive views of multilingualism (Calafato, 2020; Haukås, 2016), many do not feel sufficiently prepared to work with multilingual learners (e.g., Dahl & Krulatz, 2016; Tishakov & Tsagari, 2022; Šurkalović, 2014) and rarely implement MTPs (Iversen, 2017). Employing a mixed-methods design, the present study aimed to examine the general trends in Norwegian teachers' beliefs about MTPs and the relationship between teacher beliefs and the reported implementation of MTPs through a quantitative approach. Moreover, a qualitative angle was adopted to attain a more in-depth understanding of the issues by examining teacher justifications of their beliefs and reported practices.

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<sup>&</sup>lt;sup>1</sup> In this paper, we use the term home language (HL) to refer to a language or languages that learners speak at home. We acknowledge that there is no agreement on the most appropriate term, and other terms such as mother tongue or first Language (L1) are also commonly used. Therefore, in cases where we refer to original sources in which other terminology is employed, we retain the original term.

#### 2. Literature review

## 2.1. Teacher beliefs and practices

The notion teacher beliefs is largely acknowledged as an aspect of teacher cognition defined as "the unobservable cognitive dimension of teaching - what teachers know, believe, and think" (Borg, 2003, p. 81). Teacher beliefs are impacted and shaped by various factors, for instance teachers' own learning experiences (Lortie, 1975), teacher education and professional development (Borg, 2006; Phipps & Borg, 2009), and educational policy (Paulinx et al., 2017). Since the term belief is generally understood as a complex and multidimensional concept, it has been defined from a range of different perspectives (e.g., Borg, 2017; Murphy & Mason, 2006; Pajares, 1992). Following Skott's (2014) analysis of various trends in defining beliefs, Borg (2017) summarized four core characteristics of teacher beliefs: (a) they refer to ideas that individual teachers consider to be true; (b) they consist of the cognitive and affective dimension; (c) they are stable and shaped by substantial social experiences; and (d) they inform practices, of which the fourth point is of particular interest for the current study. Furthermore, Borg (2017) contended that because teacher beliefs are not directly visible, it is vital to specify the observable manifestations of beliefs in the research into teacher beliefs and practices. He further distinguished two types of beliefs and highlighted the importance of explicating which one is being studied: professed/stated beliefs referring to what teachers say they believe, or the enacted beliefs inferred from what teachers do. The present study examines the professed/stated teacher beliefs that are reported by teachers themselves.

Teaching practice, which refers to what teachers do, is an influential factor in teacher cognition (Borg, 2003). Numerous studies (e.g., Borg, 2003, 2009, 2017; Phipps & Borg, 2009) revealed four combinations of the beliefs-practices relationship: (a) beliefs are precursors to practices, (b) practices influence beliefs, (c) beliefs and practices are disconnected, and (d) beliefs and practices are reciprocally informing. While most of the studies on the beliefs-practices relationship have examined teachers' stated beliefs as compared to the observed practices (Borg, 2017), in this study, it is the teachers' self-reported MTPs that are being investigated.

## 2.2. Teacher beliefs about multilingualism

In addition to research on teachers' beliefs about specific aspects of language, such as grammar or vocabulary (e.g., Borg, 2003, 2009), numerous studies in different educational contexts have investigated teachers' beliefs about multilingualism. De Angelis (2011) examined secondary teachers' beliefs about the role of prior language knowledge in language learning and how the beliefs inform teaching practices. While teachers in the three countries under investigation (i.e., Austria, Great Britain, and Italy) generally believed in cognitive benefits of multilingualism, they did not associate such benefits with language interactions that was pinpointed by scholars (e.g., Cook, 1992, 1995; Jessner, 2008) as crucial in the language learning process. A large number of the teachers perceived students' HLs as a hindrance to the learning of the school language and claimed that HLs are a source of confusions in the students' minds. Griva and Chostelidou's (2012) investigation found that Greek in-service teachers seemed to be aware of the merits of multilingualism, and thus they generally held positive attitudes towards issues of multilingual policies and agreed on the need for encouraging multilingual education at all educational levels. However, the teachers also raised some questions and concerns about multilingualism. For example, they were worried about the availability of teaching resources and support in teacher training. Erling et al. (2022) examined teacher beliefs about linguistic resources of non-elite, immigrant-background multilingual learners and identified both deficit perspectives as well as what they referred to as pockets of possibility, that is, experiences that enable teachers to start envisioning and implementing a change in their beliefs and teaching practices towards embracing MTPs. García (2016) pinpointed the importance of developing teachers' critical multilingual awareness so that teachers not only become more aware of the merits of multilingualism and appreciative of linguistic diversity, but also develop "a critical understanding of how language use in society has been naturalized" (p. 268). Portolés and Martí (2020) concluded that multilingualism-focused teacher education can play a role in shaping teachers' positive beliefs about multilingual education. However, the persistence of widespread monolingual views on language learning and misconceptions of multilingualism were also identified. (2020)revealed Gorter and Arocena's study multilingualism-focused teacher training can provide Spanish in-service teachers with new insights into multilingualism and potentially change their beliefs. Similar findings relative to the impact of teacher training on teachers' beliefs and ability to implement MTPs were obtained by Liu et al. (2022) in an ethnically diverse province in China and Smeins et al. (2022) in three multilingual areas in Europe.

In the Nordic context, Alisaari et al. (2019) examined Finnish teachers' beliefs about multilingualism and working with multilingual learners. They found that Finnish teachers mainly held positive beliefs about multilingualism although many teachers displayed monolingual ideologies. In particular, the authors identified three teacher ideologies related to classroom multilingualism, namely, advocacy, allowance, and denial. Regarding the factors that shaped teacher ideologies, the study revealed that the subject(s) taught and the amount of experience in working with migrant students, rather than total years of teaching experience, were the most influential factors. Finally, the study concluded that teacher education could have a positive effect on teachers' beliefs about multilingualism, their language awareness, and the ability to implement MTPs.

In Sweden, Lundberg (2019) investigated in-service primary teachers' beliefs about multilingualism and multilingual pedagogies. Overall, the teachers showed a rather positive attitude towards multilingualism with a wide acceptance of MTPs such as translanguaging. However, skeptical views derived from monolingual norms were also present. More specifically, three sets of beliefs were revealed to delineate the teachers' complex views of multilingualism: (a) multilingualism is an essential right at school and students' HLs development is crucial for students' educational success, (b) multilingualism should not be an important topic at school and students' HLs should not be permitted in classrooms, and (c) multilingualism can be beneficial but there is no need to change teaching practices to accommodate the students' diverse linguistic backgrounds.

In Norway, Haukås (2016) examined the views of Norwegian teachers who taught French, German, or Spanish as a third language (L3) and concluded that although the teachers viewed multilingualism as a potential asset and had benefited from learning multiple languages themselves, they did not agree that multilingualism was by default beneficial to students. Thus, the participants rarely drew on their multilingual learners' previous linguistic knowledge to facilitate the students' L3 learning. Recognizing that the study merely focused on L3 teachers, Haukås (2016) pointed out the importance of examining the beliefs of teachers who teach Norwegian as the first language (L1 teachers) and those who teach English as the second language (L2 teachers).

Following this research direction, Vikøy and Haukås (2021) investigated Norwegian L1 teachers' beliefs about multilingualism and found that the teachers viewed the students' linguistic diversity as a challenge and thus held a language-as-problem orientation towards multilingualism. Lorenz et al. (2021) and Sevinç et al. (2022) focused on Norwegian L2 English subject teachers and their studies concluded that the teachers demonstrated generally positive beliefs about multilingualism, yet they tended to display monolingual mindsets and persisted in monolingual teaching practices. Arguing that previous studies in Norway merely followed a qualitative approach with a small sample size, Calafato (2020) examined Norwegian language teachers' beliefs about multilingualism through an online survey. Overall, his findings

supported the conclusions drawn from the abovementioned smaller-scale qualitative studies, namely that Norwegian teachers evinced positive beliefs about multilingualism as a resource.

In sum, the literature reviewed above consistently stressed that teachers generally hold positive beliefs about multilingualism but continue to exhibit concerns and reservations. In fact, many teachers do not foster multilingualism by making use of the learners' full linguistic repertoires in their classroom practices. However, the majority of previous studies have so far been dominated by a qualitative design and were small-scale. Therefore, more quantitative studies are needed to provide policymakers, educational institutions, and researchers with broader insights regarding teacher beliefs about multilingualism and the relationship between beliefs and practices. Moreover, most of the studies to date have investigated beliefs held by language teachers, whereas research on teachers of other subjects is scarce. The current study aims to address these gaps.

## 2.3. Pedagogical approaches to multilingualism

A multilingual pedagogy is referred to as a learner-centered approach that aims to develop students' linguistic awareness and language learning strategies by recognizing the interconnectedness among the different languages that students know and by utilizing students' previous language knowledge (Haukås, 2016; Neuner, 2004). Although how multilingual pedagogy is enacted can vary as a result of different language policies, teaching contexts, and learners, the main principles that underpin all the approaches include the following (Lorenz et al., 2021; Vikøy & Haukås, 2021): (a) valuing all learners' full linguistic repertoires, (b) stimulating positive attitudes towards linguistic and cultural diversity in and outside the classroom, (c) developing students' metalinguistic awareness to establish the connections among the languages they know, (d) utilizing, to varying degrees, all the existing languages in the classroom as a pedagogical resource, and (e) transforming views of language(s) and language instruction from monolingual stereotypes to a more multilingual orientation. Examples of multilingual approaches are linguistically responsive teaching (Ladson-Billings, 1995; Lucas et al., 2014; Lucas & Villegas, 2013), awakening to languages (Candelier, 2017), identity texts (Cummins, 2006; Early & Cummins, 2011), and pedagogical translanguaging (Cenoz & Gorter, 2020a, 2020b). Consequently, scholars have documented a range of specific MTPs that can enable teachers to develop the students' awareness and appreciation of their linguistic diversity and facilitate students' additional language(s) learning by drawing on their previous language knowledge (Calafato, 2021a; García & Sylvan, 2011; Van Viegen & Zappa-Hollman, 2020). Such MTPs include crosslinguistic comparison, translation, multilingual storytelling, and language explorers (Calafato, 2019; Higgins & Ponte, 2017; La Morgia, 2018; Schwartz & Asli, 2014).

Despite the existing wealth of multilingual approaches that can enable teachers to foster multilingualism, a range of studies have concluded that teachers tend to be reluctant to employ MTPs and their practices usually display a monolingual orientation (e.g., Alisaari et al., 2019; Lorenz et al., 2021; Sevinç et al., 2022). In the cases where teachers have engaged with languages other than majority languages, it is often done in an ad-hoc manner (Burner & Carlsen, 2022) and limited to pointing out the similarities and differences between the languages that the teachers themselves know or that the majority of the students know, with little or no focus on minority students' HLs (Haukås, 2016). Factors affecting the implementation of MTPs include: teachers' beliefs about multilingualism (Zheng, 2017); teachers' critical multilingual awareness (García, 2016); teachers' language knowledge and level of metalinguistic awareness (Calafato, 2021b; Haukås, 2016); teaching confidence and competence in implementing MTPs (Aslan, 2015); availability of teaching materials and the level of received support (Calafato, 2021b; Vikøy & Haukås, 2021); the degree to which teachers identify themselves as multilinguals (Calafato, 2020; 2021b); teaching experiences with multilingual leaners (Alisaari et al., 2019); and multilingualism-focused teacher education (Otwinowska, 2017; Portolés & Martí, 2020) and TPD (Gorter & Arocena, 2020; Liu et al., 2022; Lorenz et al., 2021). Taking these factors into consideration, the current study also aspired to examine the teachers' justification of their own pedagogical choices in multilingual classrooms. This was aligned with the study's aim to gain an overview of MTPs existing in the Norwegian classrooms from as many teacher participants as possible in a quantitative way, rather than to explore and specify a certain relationship between professed/stated beliefs and actual classroom practices from a smaller sample size.

## 3. Research questions

The current study addressed the following three research questions (ROs):

- (1) What are Norwegian teachers' beliefs about multilingualism and their reported MTPs?
- (2) To what extent are the teachers' beliefs and practices interrelated?
- (3) How do the teachers justify their beliefs and reported practices?

## 4. Methodology

## 4.1. Participants

A total of 181 teachers with the mean age of 39.8 participated in this study. Table 1 below presents the participants' background information including gender, educational backgrounds, language profiles, subjects taught, teaching experiences, school types, and grade levels.

#### 4.2. Data collection procedures and instruments

Data were collected through an online survey based on previous studies that explored teachers' beliefs in multilingual contexts (Alisaari

**Table 1**Background information of the participants.

| Category                     | Sub-category                                 | Percentage (N = 181) |  |  |
|------------------------------|--|----------------------|--|--|
| School subjects              | English subject teachers (ET)                | 51% (n = 92)         |  |  |
| ·                            | Language teachers other than<br>English (LT) | 30% (n = 55)         |  |  |
|                              | Subject teachers other than language (ST)    | 13% (n = 23)         |  |  |
|                              | Not identifiable                             | 6% (n = 11)          |  |  |
| Years of teaching experience | Less than 1 year                             | 14% (n = 25)         |  |  |
|                              | 1–5 years                                    | 24% (n = 42)         |  |  |
|                              | 6-10 years                                   | 16% (n = 29)         |  |  |
|                              | More than 10 years                           | 46% (n = 82)         |  |  |
| Grade levels                 | Primary school                               | 41% (n = 75)         |  |  |
|                              | Secondary school                             | 45% (n = 81)         |  |  |
|                              | Other  | 14% (n = 25)         |  |  |
| School types                 | Public school                                | 97% (n = 175)        |  |  |
|                              | Private school                               | 3% (n = 6)           |  |  |
| Educational backgrounds      | Pre-service teachers                         | 18% (n = 32)         |  |  |
|                              | BA degree in education                       | 25% (n = 44)         |  |  |
|                              | MA degree in education                       | 29% (n = 51)         |  |  |
|                              | Other  | 29% (n = 51)         |  |  |
| Gender                       | Female                                       | 84% (n = 152)        |  |  |
|                              | Male   | 16% (n = 29)         |  |  |
| Number of languages spoken   | 1 language                                   | 3% (n = 5)           |  |  |
| by the teacher               | 2-3 languages                                | 54% (n = 98)         |  |  |
|                              | 4-5 languages                                | 36% (n = 65)         |  |  |
|                              | More than 5 languages                        | 7% (n = 13)          |  |  |
| Teachers' home language(s)   | Norwegian                                    | 78% (n = 141)        |  |  |
|                              | Norwegian and other language(s)              | 5% (n = 10)          |  |  |
|                              | Other languages(s)                           | 17% (n = 30)         |  |  |

et al., 2019; Griva & Chostelidou, 2012; Portolés & Martí, 2020). To explore the participants' beliefs about and their experiences with multilingualism, the survey contained 50 Likert-items adapted from Griva and Choestelidou's (2012) semi-structured interviews and Alisaari et al.'s (2019) digital questionnaire. The first page of the survey included information about the aim of the study and the protection of data collected. It also contained explanations of the two terms used frequently in the survey: the term *multilingual* to denote any person who speaks more than one language and the term *home language(s)* to refer to any language(s) students use with their families at home. No information about students' HLs was elicited as teachers in Norway often teach more than one group of students in a given semester and because previous research suggests that teachers are not always able to adequately report on their students' HLs (Lorenz et al., 2021).

This article reports on an analysis of three sections of the survey that examined the teachers' beliefs about multilingualism (sections 2.4 and 2.5) and their reported pedagogical practices (section 3.5). In addition, one open-ended question, "Should teachers only rely on the majority language (e.g., Norwegian) while working with multilingual learners? Why or why not?" was included in the analysis to shed light on the teachers' justifications on their beliefs and reported MTPs. It was mandatory for participants to finish all the questions in order to submit the survey. After generating a list of 912 primary schools in Norway's 11 counties based on the information available in the official county portals, random sampling was used to select 50 schools using Research Randomizer (Urbaniak & Plous, 2013). Teachers' email addresses were obtained via the schools' websites and bilingual invitation emails were sent to teachers with a link to the online survey available in both Norwegian and English. Convenience sampling was also adopted to recruit more participants through advertising the survey on social media groups of teachers across different disciplines in Norway. In addition, emails were sent to teacher educators asking for their help to forward the survey to their teacher-students in various Norwegian universities. It was not possible to determine how many participants were recruited via each venue as we did not include a question about it in the survey. As it was impossible to keep track of how many of the invited teachers actually participated, the response rate is also not reported.

The study followed the ethics guidelines of the Norwegian Center for Research Data. All participants were informed that participation in the study was voluntary and anonymous and that they gave their consent by filling out the survey. The participants were also informed that their responses would be anonymized for any publication or dissemination purposes.

## 4.3. Data analysis

Two-step quantitative analysis was conducted using SPSS 27. First, descriptive analysis was applied to identify frequencies of the teachers' beliefs and their reported MTPs (RQ1). Next, Spearman's bivariate correlation was conducted to investigate the relationship between teachers' beliefs and reported practices (RQ2). An alpha level not greater than 0.05 was used as the benchmark of significance and the effect size (r) was reported alongside Cohen's (1992) criteria with r values of 0.1 indicating a small effect, 0.3 signifying a middle effect, and 0.5 implying a large effect.

Upon completion of the quantitative analysis, teachers' justifications of their beliefs and practices (RQ3) were examined through a qualitative analysis. Teachers' written responses to the open-ended question (Should teachers only rely on the majority language (e.g., Norwegian) while working with multilingual learners? Why or why not?) were analyzed in a four-stage process. First, the researchers read through the 181 responses together and sorted them into four themes: (a) No (i.e., teachers' endorsement of multilingualism and leveraging MTPs), (b) Both No and Yes, (i.e., teachers' concerns about multilingualism and limiting MTPs), (c) Yes (i.e., teachers' resistance to multilingualism and MTPs), and (d) Don't Know (excluded for this study as it did not provide

relevant information to answer the research questions). Further, we independently re-read the responses under the themes (a)–(c) and developed a list of possible codes for each theme. We then compared our code lists and found the inter-coder reliability to be over 90%. Finally, we collaboratively grouped the codes into categories under each theme and quantified the references in each category to identify the dominant factors that had shaped teachers' beliefs and reported practices.

## 5. Findings

This section reports the findings corresponding to the three RQs, namely: (a) teachers' beliefs about multilingualism and their reported MTPs, (b) the relationship between teachers' beliefs and reported practices, and (c) teachers' justification of their beliefs and reported practices. Statistical results obtained through the quantitative analysis are presented first, followed by findings from the qualitative content analysis to shed additional light on the quantitative findings.

## 5.1. Teacher beliefs about multilingualism and reported practices

#### 5.1.1. Beliefs about the role of students' HLs and MTPs

Descriptive statistical analysis revealed three orientations regarding teachers' beliefs about the role of students' HLs: (a) endorsement of students' HLs as an asset, (b) concern about students' use of HLs, and (c) resistance to students' use of HLs. As shown in Fig. 1, over 90% of the participants believed that students' HLs were an asset (item 14). This positive attitude towards students' HLs was further confirmed by a disagreement of more than two thirds (74%) of the teachers that multilingual students' HL development would hinder their learning of other languages (items 12 and 13). In addition, most teachers (82%) believed it was important to show interest in students' HLs (item 16). However, when it came to creating space for multilingual students to teach their peers words or phrases in their HLs (item 17), teachers' positive attitude dropped to 58%, and it further declined to less than a half (47%) regarding students' right and freedom to use HLs in the classroom (item 15). Moreover, 22% of the teachers stated that they did not allow multilingual learners to speak or write in their HLs, even for the purpose of enhancing their subject-knowledge learning (item 18).

Furthermore, as Fig. 2 shows, teachers' beliefs about MTPs in multilingual contexts converged among all the three pedagogical statements (items 19–21). That is, more than two thirds of the teachers consistently agreed that while working in a linguistically and culturally diverse setting, it was important for teachers to implement MTPs, such as using culturally and linguistically responsive materials (item 19), utilizing students' linguistic repertoire (item 20), and translating key concepts to students' HLs (item 21). Such beliefs resonated with the first orientation, endorsement of students' HLs as an asset as illustrated in Fig. 1. Nevertheless, around 15% of the teachers displayed a neutral attitude towards MTPs in the classroom (Fig. 2), which reflected the second orientation, namely, teachers' concern about students' use of HLs. In addition, a disagreement or strong disagreement that teachers should implement MTPs supported the third orientation: teachers' resistance to students' use of HLs.

## 5.1.2. Teachers' reported MTPs

The MTPs reported by the teachers were examined through eight five Likert-scale items (see Fig. 3). Descriptive frequency analysis revealed three tendencies: (a) leveraging MTPs, (b) limiting MTPs, and (c) resisting MTPs. As presented in Fig. 3, around 50% of the teachers reported that their practices had been dominated by an Always and Often responses regarding the following MTPs: supporting students' metacognitive development (item 48), valuing all languages equally in the classroom (item 47), reflecting the cultural and linguistic diversity of students (item 49), and providing opportunities for students to clarify key concepts in students' HLs (item 46). These responses indicated that the teachers strived to leverage MTPs in the classroom setting.

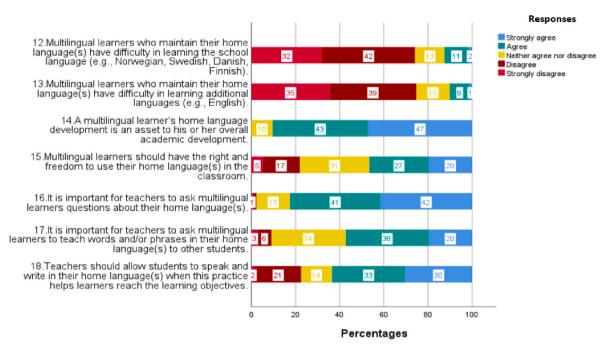


Fig. 1. Percentage distribution of answers to the survey Section 2.4: The use of home Language(s) for learning.

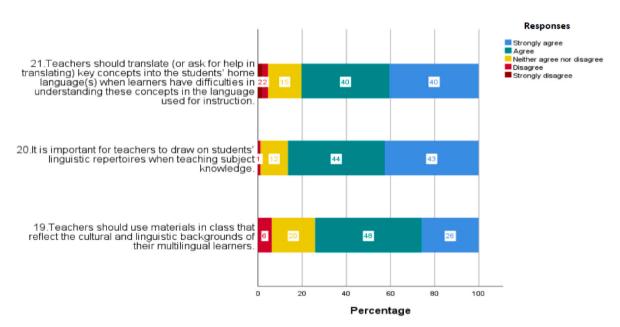


Fig. 2. Percentage distribution of answers to the survey Section 2.5: Beliefs about MTPs in the classroom.

Nevertheless, as the Sometimes and Rarely responses dominated the remaining four items, it can be concluded that teachers limited their use of the following MTPs: facilitating the availability of multilingual literacies (item 50), building an inclusive learning space (item 43), optimizing multilingual students' linguistic repertoire (item 45), and considering students' linguistic backgrounds when grouping (item 44). In addition, as the response Never was found among all the eight statements of multilingual pedagogies (Fig. 3), some resistance to employing MTPs was identified.

## 5.2. Relationship between teachers' beliefs and reported MTPs

The results from the Spearman bivariate correlation tests revealed significant positive correlations between the teachers' beliefs and their

reported MTPs (Table 2). That is, the more positive beliefs teachers held about certain MTPs (items 19–21), the more frequently they reported to employ these MTPs (items 43–50). The teachers' beliefs about using culturally and linguistically responsive materials (item 19) had a significant positive correlation among all the pedagogical items (p < 0.05) and exerted a middle to large impact (0.3 < r < 0.5) on the following MTPs: building an inclusive learning space (item 43), considering students' linguistic backgrounds when grouping (item 44), and providing opportunities for students to clarify key concepts in their HLs (item 46).

In addition, the teachers' beliefs about the importance of utilizing students' linguistic repertoires (item 20) showed a significant positive correlation (p < 0.05) among all the pedagogical items except facilitating multilingual literacy (item 50). Particularly, this belief appeared to influence the teachers' practices at a middle to large effect (0.3 < r <

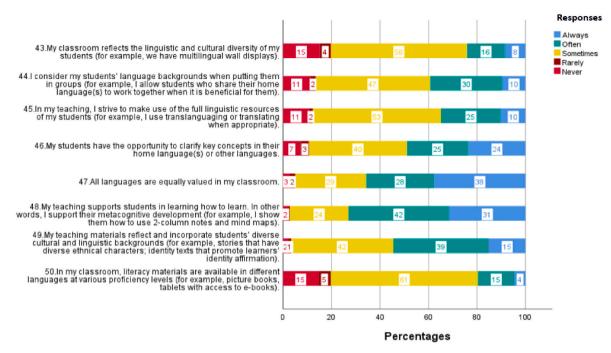


Fig. 3. Percentage distribution of answers to the survey Section 3.5: Pedagogical practices.

**Table 2**Correlation test between teachers' beliefs about MTPs (item 19–21) and reported MTPs (item 43–50).

|                |         |                             | Item 43 | Item 44 | Item 45 | Item 46 | Item 47 | Item 48 | Item 49 | Item 50 |
|----------------|---------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Spearman's rho | Item 19 | Correlation Coefficient (r) | .327**  | .439**  | .286**  | .365**  | .239**  | .156*   | .284**  | .242**  |
|                |         | Sig. (2-tailed)             | .000    | .000    | .000    | .000    | .001    | .038    | .000    | .001    |
|                | Item 20 | Correlation Coefficient(r)  | .200**  | .381**  | .407**  | .435**  | .271**  | .209**  | .276**  | .068    |
|                |         | Sig. (2-tailed)             | .008    | .000    | .000    | .000    | .000    | .005    | .000    | .369    |
|                | Item 21 | Correlation Coefficient(r)  | .403**  | .378**  | .340**  | .313**  | .198**  | 012     | .195**  | .146    |
|                |         | Sig. (2-tailed)             | .000    | .000    | .000    | .000    | .008    | .877    | .009    | .052    |
|                |         | N                           | 181     | 181     | 181     | 181     | 181     | 181     | 181     | 181     |

#### Items:

- 19. Teachers should use materials in class that reflect the cultural and linguistic backgrounds of their multilingual learners.
- 20.It is important for teachers to draw on students' linguistic repertoires when teaching subject knowledge.
- 21.Teachers should translate (or ask for help in translating) key concepts into the students' home language(s) when learners have difficulties in understanding these concepts in the language used for instruction.
- 43.My classroom reflects the linguistic and cultural diversity of my students (for example, we have multilingual wall displays).
- 44.I consider my students' language backgrounds when putting them in groups (for example, I allow students who share their home language(s) to work together when it is beneficial for them).
- 45.In my teaching, I strive to make use of the full linguistic resources of my students (for example, I use translanguaging or translating when appropriate).
- 46My students have the opportunity to clarify key concepts in their home language(s) or other languages.
- 47All languages are equally valued in my classroom.
- 48.My teaching supports students in learning how to learn. In other words, I support their metacognitive development (for example, I show them how to use 2-column notes and mind maps).
- 49.My teaching materials reflect and incorporate students' diverse cultural and linguistic backgrounds (for example, stories that have diverse ethnical characters; identity texts that promote learners' identity affirmation).
- 50.In my classroom, literacy materials are available in different languages at various proficiency levels (for example, picture books, tablets with access to e-books). \*p < 0.05. \*p < 0.01

0.5) regarding the following MTPs: considering students' linguistic backgrounds when grouping (item 44), optimizing multilingual students' linguistic repertoires (item 45), and providing opportunities for students to clarify key concepts in their HLs (item 46).

Furthermore, although the teachers' beliefs about the practice of translating to students' HLs (item 21) had no significant correlation (p > 0.05) with classroom practices that support students' metacognitive development (item 48) or facilitate multilingual literacy (item 50), this belief revealed significant positive correlations with all the otheritems. It had a middle to large effect (0.3 < r < 0.5) on the following multilingual pedagogies: building an inclusive learning space (item 43), considering students' linguistic backgrounds when grouping (item 44),

optimizing multilingual students' linguistic repertoires (item 45), and providing opportunities for students to clarify key concepts in their HLs (item 46).

## 5.3. Justification of teacher beliefs and reported practices

The qualitative findings about teachers' beliefs about multilingualism and their reported MTPs were confirmed by the results from the qualitative data. Among the 181 responses, three themes were identified: (a) endorsement of classroom multilingualism and leveraging MTPs (Theme 1), (b) concerns about students' HLs and limiting MTPs (Theme 2), and (c) resistance to using students' HLs and MTPs (Theme 3), which

corresponded to the three orientations of teacher beliefs about multilingualism and the three tendencies of the teachers' reported MTPs described above. There were in total 67 references that justified teachers' endorsement of multilingualism and MTPs, which fell into two interrelated categories: educational support and democratic values. The former encompassed different perspectives of multilingualism, including the pedagogical, the cognitive, the linguistic, and the intercultural angles. The latter denoted specific values such as inclusion, equality, and human rights. Table 3 presents the two categories, codes in each, the number of references (No. of Ref.), and examples from the data.

Table 4 presents teachers' concerns about using students' HLs and thus limiting MTPs. There were four categories with 50 references: (a) the dominant role of Norwegian in education and society, (b) biased monolingual teacher ideology, (c) contexts of teaching, and (d) enacting students' hybrid identities. The dominant role of Norwegian in the educational and societal domain was salient, as it was illustrated by the teachers' statements regarding the importance of integration into the society and adaption to the mainstream education. Nine of the 20

**Table 3**Teachers' justification of Theme 1: Endorsement of classroom multilingualism and leveraging MTPs.

| Category               | Code                                     | No.<br>of | Examples  |
|------------------------|--|-----------|---|
|                        |  | Ref.      |   |
| Educational<br>support | Pedagogical<br>resources for<br>teachers | 22        | No, more languages, more resources are positive; the learning point is to understand and make oneself understood - in all different pedagogical ways, more languages and multilingualism must not be seen as a problem, but a resource. |
|                        | Cognitive benefits to students           | 12        | No, teachers should take<br>advantage of students' repertoire<br>of languages so that students can<br>make the best use of their<br>cognitive skills.   |
|                        | Identity<br>affirmation for<br>students  | 7         | No, they should not. [I]t does<br>nothing for students' self-value or<br>identity if their home language is<br>something outside of [the]<br>languages you present.   |
|                        | Linguistic<br>interaction                | 7         | No languages are not disconnected entities in the language learner's mind. A multilingual approach is more appropriate as languages can interact, benefit and influence each other.   |
|                        | Intercultural<br>understanding           | 6         | Multilingualism can be a resource in the classroom and a unique opportunity for the whole class to gain insight into different cultural and linguistic perspectives.  |
| Total                  |  | 54        |   |
| Democratic<br>values   | Inclusion                                | 5         | No, because it's about inclusion in<br>the classroom. I know this is<br>something we should get better<br>at!   |
|                        | Equality                                 | 4         | No, all languages are equally important.  |
|                        | Diversity                                | 2         | Recognizing diversity and giving voice to the minority group in the classroom has a positive impact on students' performances.  |
|                        | Students' rights                         | 2         | No, multilingual pupils should have the right to receive adapted education by getting help to understand key concepts and understand what the teacher says.   |
| Total                  |  | 13        |   |

**Table 4**Teachers' justification of Theme 2: Concerns about students' HLs and limiting MTPs.

| MTPs.  |  |                   |   |
|--|--|-------------------|---|
| Category   | Code   | No.<br>of<br>Ref. | Example   |
| Dominant role of<br>Norwegian in<br>education and<br>society | Norwegian as the<br>ultimate goal VS Other<br>languages as auxiliary                                     | 9                 | They should be able to use other languages as support in education, but it is important that students also have a requirement to master Norwegian, as they need this in future education and work.  |
|  | Common language<br>practices as the starting<br>point VS Individual<br>students' needs as<br>necessary   | 7                 | Teaching takes place in a common language, but all the other languages should be raised and included.   |
|  | Integration to the host<br>society VS Preserving the<br>cultural value of the HLs                        | 4                 | Basis must be the majority language. The school's main task is to provide education in public language, but at the same time, children must be able to preserve their identity and cultural values.   |
| Total<br>Biased<br>monolingual<br>teacher<br>ideology        | Deactivation of teacher identity   | 20 9              | If I would consider the possibility of using a minority language, it would be difficult. And as a teacher, I would need resources (e.g., teachers who teach a minority language such as Somali, Arabic). Many public schools do not offer these resources or have the budget for it. So, I would say that teachers should first and foremost use a majority language (e.g., Norwegian) to help teach a second language such as English to the pupils. |
|  | Deficit view of students'<br>multilingualism and HLs   | 5                 | This is not the same as saying that I disagree that more languages should be given a higher status. The challenge is that students who do not speak Norwegian at home are in fact also poorly developed in their own mother tongue.   |
|  | Deficient critical<br>multilingual awareness   | 4                 | The expectation for a teacher to operate in multiple languages is unrealistic in terms of workload but employing dedicated classroom helpers with specific language knowledge may work.   |
| Total<br>Contexts of<br>teaching                             | Teaching context<br>including classroom size,<br>number of multilingual<br>students, and grade<br>levels | 18<br>4           | The size of the class and<br>the number of<br>multilinguals have a lot<br>to say for how well a<br>teacher can facilitate for<br>each individual student.   |
|  | Subject matters  | 4                 | I think it is crucial which<br>field or topic you work<br>(continued on next page)  |

Table 4 (continued)

| Category   | Code   | No.<br>of<br>Ref. | Example   |
|--|--|-------------------|---|
|  |  |                   | with. If, for example, one is engaged in social studies where the learning of concepts is important, I am not sure that it is sufficient to translate concepts In history, for example, I think there may be a greater opening for using multilingualism actively in class. |
| Total<br>Enactment of<br>students'<br>hybrid<br>identities | New identity related to<br>learning Norwegian VS<br>Original identity<br>embodied in the HLs | 8 4               | Language is identity, therefore the student must become good at Norwegian, and the teacher should also encourage the student to appreciate their own mother tongue.   |

comments in this category related to learning Norwegian as the goal while other languages, including students' HLs, were considered auxiliary resources. Biased monolingual teacher ideology was the next dominant factor that had limited MTPs. In this category, nine teachers failed to actively reflect on their teacher role and identity when they blamed their limited use of MTPs on the lack of resources or systematic support. Five more teachers had a deficit view of students' HLs and multilingualism, while four other teachers seemed to lack critical multilingual awareness as they claimed workload as the barrier to engage in MTPs, which appeared to be a strategy they employed to avoid accountability for not creating an inclusive learning space. Furthermore, contexts of teaching including classroom size, the number of multilingual students, grade levels, and the subject taught were mentioned as the next factor. In addition, four references were made relative to the interrelationship between language and identity, which denoted the importance of enacting multilingual students' hybrid identities, both the original identity embodied in their HLs and the new identity being formed as a result of learning Norwegian.

As shown in Table 5, there were in total 48 comments that indicated teachers' resistance to MTPs. Among the different factors shaping the teachers' beliefs and practices, the predominance of Norwegian as the language of the society and schooling ranked as first, followed by biased monolingual teacher ideology with the teachers asserting that a common language was needed in order to ensure the equality of learning opportunities and that mixing languages was disruptive for learning. The deactivation of teacher identity was also identified as the teachers stated that implementing MTPs was demanding and challenging because they lacked adequate teaching competence and systematic support. The intersection of language and identity was also mentioned, but the attention was merely paid to the new identity as a Norwegian regardless of students' linguistically and culturally diverse backgrounds. Concerning the significance of context, one teacher commented on a range of factors influencing the choice of language and indicated that it was all the uncertainties in the teaching context that together lead teachers to merely rely on the majority language, as illustrated by the example under the code "Uncertainty of various factors in teaching".

## 6. Discussion

This study explored Norwegian teachers' beliefs about multilingualism and their reported MTPs, examined the extent to which their beliefs and practices were related, and investigated the teachers'

**Table 5**Teachers' justification of Theme 3: Resistance to students' HLs and MTPs.

| Category  Codes  No. Examples  of Ref.  Predominance of Norwegian in education and society  Language of the society  Language of instruction  Language of instruction  Language of instruction  Language of instruction  Examples  grow up in Norway, it is important to know the language. This applies be academically and sociall large enough language competence in Norwegia (as a language of instruction in Norwegiar schools) so that they can follow teaching. | oth<br>y. |
|---|-----------|
| Predominance of Language of the Norwegian in society grow up in Norway, it is education and society language. This applies be academically and sociall Language of instruction large enough language competence in Norwegia (as a language of instruction in Norwegiar schools) so that they can  | oth<br>y. |
| Norwegian in society grow up in Norway, it is education and society language. This applies be academically and sociall  Language of 8 Students should have a instruction large enough language competence in Norwegia (as a language of instruction in Norwegiar schools) so that they can  | oth<br>y. |
| schools) so that they can   | 1         |
|   |           |
| Total 19  |           |
| Biased monolingual Common language teacher ideology creates equal learning majority language to allo all students to have the same opportunities to learn.  | ne        |
| Mixing languages 2 If you mix too much makes learning language, then learning disruptive goals are misunderstood and chaos.   |           |
| Total 16  |           |
| Deactivation of Lacking sufficient 6 We generally feel that w teacher identity teaching lack good enough competence competence when it com to multilingual students.  |           |
| Lacking systematic 2 It is difficult to expect support multicultural multilingualism in teach when education does no  |           |
| Too demanding for 1 I think it will be too must teachers to demand this from the teacher; one must have more time to plan and collaborate with teacher who know these language.   | s         |
| Total 9   |           |
| Need to invest in Intersection of 2 We have to have a good Norwegian language and Norwegian common identity language in Norway.  Common identity is very important.   |           |
| Total 2   |           |
| Significance of Uncertainty of 1 What is the purpose of the context various factors in teaching prerequisites do the multilingual students hat to read their own home language? What opportunities does the teacher have to use different languages? How will students learn the majority language most effectively? These questions force YES on the questions.  | ve<br>v   |
| Few multilingual 1 Yes, because I work at a students school with few multilingual students.   |           |
| Total 2   |           |

justifications of their beliefs and practices. The findings revealed three orientations relative to the teachers' beliefs about multilingualism: (a) endorsement of students' HLs as an asset, (b) concern about students' use of HLs, and (c) resistance to students' use of HLs. The study also revealed three tendencies in the MTPs that the teachers reported: (a) leveraging MTPs, (b) limiting MTPs, and (c) resisting MTPs. A generally

significant positive correlation between beliefs and practices was revealed although tensions among the two existed. The teachers' justifications of their beliefs and practices provided further insights into the factors that had shaped them. In the following section, we review the RQs and address each in turn.

RQ1 asked about Norwegian teachers' beliefs about multilingualism and their reported MTPs. The findings revealed that the participating teachers generally believed in the benefits of multilingualism as supported by most teachers' endorsement of students' HLs as an asset and their agreement that MTPs were the most appropriate approaches in linguistically diverse classrooms. This finding corresponds with previous studies conducted in Norway (e.g., Haukås, 2016; Lorenz et al., 2021) and other multilingual contexts (e.g., De Angelis, 2011; Griva & Chostelidou, 2012; Portolés & Martí, 2020). Nevertheless, many of the Norwegian teachers displayed a monolingual ideology exemplified by their concern about or even resistance to students' use of HLs. Recent studies in Norway reported on Norwegian teachers perpetuating a monolingual orientation, for instance by insisting on strict language separation and advocating maximum target language exposure (Lorenz et al., 2021; Neokleous et al., 2022; Sevinc et al., 2022). Vikøy and Haukås (2021) also pointed out that most of the Norwegian L1 teachers perceived their students' diverse languages as a problem and thus did not encourage students' use of HLs. Given that such a mixed view of multilingualism has also been reported in other Nordic countries (e.g., Alisaari et al., 2019; Lundberg, 2019), it seems that teachers in the Nordic contexts have a rather complex perception of multilingualism. One explanation may be that the term multilingual is interpreted by Nordic teachers in a way that varies from teachers' understandings in other European countries. As noted by Calafato (2021a) and Lundberg (2019), the term multilingual in Norway and Sweden is usually associated with immigrant students who use languages other than Norwegian or Swedish at home and need extra language support at school, and the term thus tends to embody a strong negative connotation. In this study, although the term multilingual was clarified on the first page of the survey, it is likely that some of the participants defaulted to this widespread definition.

Moreover, the results of the present study revealed that while the teachers endorsed multilingualism as a way to recognize the value of and show an interest in their students' HLs, they resisted the option to allow learners to use their HLs in the classroom. This is in line with Haukås's (2016) findings that although teachers view multilingualism as a potential asset, they do not agree that students would automatically benefit from MTPs. De Angelis (2011) pointed out that teachers tend to have a great openness towards the students' HLs when offering advice to parents; nevertheless, they rarely integrate HLs in classroom practices. This reluctance can be caused by the Atlas complex, a classroom dynamic in which teachers are the central figures who dominate and control the learning processes while students are simply passive recipients of knowledge (Hayashi & Morioka, 2007; Lee & VanPatten, 1995). MTPs place students at the center by utilizing their full linguistic repertoires and activating all their linguistic knowledge (Neuner, 2004), thus shifting the power in the classroom from the teacher to the students. It is likely that teachers may fear losing power or control if MTPs were employed, and thus might be hesitant about or even resistant to MTPs. This idea is confirmed by studies that reported that teachers feel unconfident when students employ languages in which teachers do not have a certain degree of competence (e.g., De Angelis, 2011; Haukås, 2016; Sevinc et al., 2022).

Regarding the implementation of MTPs, the participants reported that they had practiced the eight MTPs listed in the survey at a medium to high frequency (Fig. 3), which indicates that Norwegian teachers have a good level of language awareness and cultural sensitivity. This contradicts the findings from Sevinç et al. (2022) that the Norwegian English subject teachers lack interest in students' HLs and ignored their students' cultural and linguistic diversity in classroom practices. Lorenz et al. (2021) observed some MTPs in Norwegian English subject

classrooms and concluded that Norwegian teachers were open to ideas of integrating students' HLs in teaching and willing to learn how to implement MTPs in their linguistically diverse classrooms. However, Lorenz et al. (2021) also noted that Norwegian teachers lack the ability and confidence to systematically employ MTPs as the observed MTPs in their study exclusively occurred in the oral domain and the integration of students' HLs in literacy tasks was very scarce. This is confirmed by our findings that only a small portion of teachers reported integrating multilingual literacies (item 50) or utilizing students' linguistic repertoires to facilitate teaching and learning (items 43, 44, 45). As reported by other studies in Norway, language education in some Norwegian schools often relies on trial-and-error procedures (Sevinç et al., 2022) and where MTPs exist, they are implemented sporadically rather than systematically (Haukås, 2016; Lorenz et al., 2021; Vikøy & Haukås, 2021).

RQ2 examined the extent to which the teachers' beliefs and practices were interrelated. The three orientations of the teachers' beliefs about multilingualism (Fig. 1) corresponded with the three tendencies of their reported practices (Fig. 3). Given that teacher beliefs can exert profound influence on pedagogical practices (Borg, 2017; Phipps & Borg, 2009), it is possible that the teachers who endorsed students' HLs as an asset also tended to leverage MTPs. Likewise, those who were concerned about students' HLs use possibly set more limits to MTPs, while those who resisted students' HLs avoided any attempt to implement MTPs. This finding was further confirmed by the Spearman correlation tests, which revealed a generally significant positive correlation between the teachers' beliefs about MTPs and their self-reported MTPs (Table 2). Nevertheless, while more than two thirds of the participating teachers believed it was important to implement MTPs in multilingual settings (Fig. 2), this belief did not always converge with the reported frequency of MTP implementation (Fig. 3). Thus, it can be concluded that teacher beliefs do not always coincide with their practices and that there may exist tensions between teachers' beliefs and practices (Phipps & Borg, 2009). Borg (2017) argued the relationship between teacher beliefs and practices tended to be complicated and any study focusing on the relationship between the two needs to pay particular attention to the purpose of the study and the methodology it employs. It is worth restating that including the quantitative perspective in this study did not aim to specify a uniform relationship between Norwegian teachers' beliefs about multilingualism and their self-reported MTPs. Rather, the goal was to provide insights into understanding Norwegian teachers' beliefs and practices when confronting the multilingual reality in their classrooms. Our findings gained from the qualitative data shed additional light on this issue.

RQ3 examined the Norwegian teachers' justification of their stated beliefs and reported MTPs. The findings revealed three themes: (a) endorsement of multilingualism and leveraging MTPs (Theme 1), (b) concerns about students' HLs and limiting MTPs (Theme 2), and (c) resistance to students' HLs and MTPs (Theme 3). Theme 1 suggests that many of the participants had a high awareness of the benefits of multilingualism including the pedagogical, the cognitive, and the sociocultural ones (Table 3). In their responses, these teachers advocated for utilizing multilingualism as a resource in learning and teaching, which aligns with the languages-as-resource orientation (Ruíz, 1984, 2010) and resonates with Lorenz et al.'s (2021) results which suggested that Norwegian teachers support the idea of employing MTPs. However, in contrast to Sevinc et al.'s (2022) study, which revealed teachers' lack of awareness and sensitivity to the linguistic and cultural diversity in Norwegian classrooms, Theme 1 in this study suggests that Norwegian teachers may have progressed on the path to embracing multilingualism and implementing MTPs (Haukås, 2016). Particularly, in Sevinc et al.'s (2022) study, the authors doubted whether the principle of equality was ensured in the Norwegian multilingual classrooms as the teachers seemed to have biases based on where the multilingual students come from; however, in the present study, equality, diversity, and inclusion were cited by the participating teachers as factors contributing to their

endorsement of multilingualism and adoption of MTPs. As Sevinç et al.'s (2022) study was small scale and qualitative, it could be that the particular group of teachers at the location where the study was carried out might have divergent views from that of other teachers in Norway.

However, the Norwegian teachers' scepticism about or even resistance to multilingualism was also evident in our findings. In Theme 2 and Theme 3, the dominant role of Norwegian in the educational and societal context appeared to be the main factor that affected the teachers' beliefs and practices. These teachers agreed on the benefits of utilizing different languages as a resource but only as a means to facilitating learning of Norwegian. This parallels previous studies which revealed that some Norwegians teachers believed multilingualism could be beneficial only when the students have mastered Norwegian (Sevinc et al., 2022), which may reflect some Norwegian teachers' fractional understanding of multilingualism (Lorenz et al., 2021). Such an understanding is likely linked to the language hierarchies in the educational context as mentioned by Haukås (2022) and Sickinge (2016). Indeed, some teachers in the present study commented that it was important for immigrant students to learn Norwegian so that they could obtain a new, Norwegian identity and better integrate into the society. A study by Van Praag et al. (2016) in the Belgian context found that some teachers made attempts to help ethnic minority students' socio-cultural mobility by restricting or resisting their use of HLs in the classroom. These findings highlight the importance of developing teachers' critical multilingual awareness to improve teachers' critical understanding of how language uses in the society can be shaped by power structures (García, 2016) and how their own beliefs and practices are shaped by societal ideologies at large (Xu, 2023). In the present study, the participating teachers' biased monolingual ideology was one of the other main factors that appeared to prevent the teachers from implementing MTPs as they asserted that a common language was needed in order to ensure the equality of learning opportunities and were concerned that mixing languages was disruptive for learning. Such a view neglects the benefits of being proficient in HLs and can hamper linguistically diverse students' academic achievement and occupational success (Agirdag, 2010, 2014). Moreover, biased monolingual teacher ideology can lead to deactivated teacher identity, deficit view of students' multilingualism, and deficient cultural multilingual awareness as shown in the present study. Scholars pointed out that a monolingual ideology likely leads to monolingual teaching practices such as language separation (Creese & Blackledge, 2011) while a multilingual ideology can trigger MTPs such as pedagogical translanguaging (Cenoz & Gorter, 2020a). Therefore, teacher education and TPD should actively engage teachers in reflection to externalize their language ideologies so that they can improve their critical multilingual awareness and claim ownership of their teacher identity, and in turn create a more inclusive learning environment and employ more MTPs. In addition, as the lack of multilingual teaching materials and teaching support can indeed hamper the employment of MTPs, it is urgent to address the call that has been raised in recent publications (e.g., Haukås, 2016; Lorenz et al., 2021; Sevinç et al., 2022; Vikøy & Haukås, 2021) regarding developing practical multilingual teaching materials and providing systematic support for Norwegian teachers in order to facilitate their work in multilingual settings.

It is worth pointing out that various factors converged among the three themes identified in the qualitative data. For instance, the intersection between language and identity were reported across all the three themes; the predominance of Norwegian and biased monolingual teacher ideology were identified in both Themes 2 and 3. This indicates that teachers' distinctive beliefs about and practices in multilingual classrooms are like points in a spectrum rather than scattered discretely. The issue then becomes how to maintain those teachers' endorsement of multilingualism to promote MTPs, how to relieve teachers' Atlas complex so that they can embrace more MTPs, and how to transcend tendencies to resist MTPs so that teachers can gradually step out of the monolingual cage. It is unquestionable that teacher education and TPD can influence teachers' beliefs about multilingualism and enhance

teachers' multilingual teaching competence (Gorter & Arocena, 2020; Liu et al., 2022; Portolés & Martí, 2020). Recent research has concluded that knowledge-delivery models like lecture-led seminars or peer-discussion on certain topics can be insufficient (Lorenz et al., 2021). Alternatively, engaging teachers in reflective approaches can empower the teachers to be the knowledge-generator and thus lead to more effective results (Farrell, 2014, 2020; Yazan & Lindahl, 2020). Confronting the multilingual reality in classrooms and examining one's own multilingualism through activities such as language portraits (Soares et al., 2020) or dominant language constellation (DLC; Aronin, 2020; Aronin & Vetter, 2021) can engage teachers with their own multilingualism, help them recognize their own multilingual identity, and thus encourage them to try MTPs (Ibrahim, 2022; Xu & Krulatz, in press). Engaging teachers in writing critical autoethnographies that prompt them to reflect own life experiences with languages, articulate their language ideologies, and comment on their own reported practices can also empower teachers to embrace MTPs (Yazan, 2019; Yazan et al., 2020), and thus transform their teaching practices.

## 7. Conclusion

Employing a mixed-methods approach, this study explored Norwegian teachers' beliefs about multilingualism and their self-reported MTPs, examined the extent to which the teachers' beliefs and practices were interrelated, and investigated the teachers' justification of certain beliefs and practices. Key findings suggest that Norwegian teachers hold a complex view of multilingualism although many teachers evince their openness to linguistic and cultural diversity in classrooms. The study also confirmed the reciprocal relationship between teachers' beliefs and practices (Borg, 2017). Moreover, teachers' justifications of their beliefs and practices revealed that while many Norwegian teachers feel that multilingualism can be a resource in the classroom, the dominant role of Norwegian in the societal and educational context and biased monolingual teacher ideology have hampered their willingness and ability to choose and employ MTPs.

It is important to acknowledge the limitations of the study. First, this study is based on teachers' self-reports, which can admittedly be biased, as teachers tend to report their practices in a way that aligns more closely with their ideal teacher identity. This is one possible reason why our findings differed somewhat from those reported in Lorenz et al. (2021) and Sevinç et al. (2022), both of which employed classroom observations. Second, a limited number of items were examined when exploring the relationship between teachers' beliefs and reported practices. More in-depth investigations based on more items may help gain a fuller understanding of teachers' beliefs-practices relationship in multilingual contexts. Third, because we were unable to recruit a sufficient number of participants through random sampling, we also employed convenience sampling as a part of our recruitment strategy. As a result, the study sample might not be representative of the studied population. Fourth, as information about the specific HLs present in the participating teachers' classrooms was not elicited, we cannot tell whether the participating teachers had bias towards certain languages or not and thus, future research of this issue is needed.

Nevertheless, the study has significant methodological and empirical contributions. To date, studies of Norwegian teachers' beliefs and practices in multilingual settings have been dominated by qualitative methods and there is no research to date has employed a mixed-methods design. In the present study, quantitative and qualitative results were combined to advance multiple perspectives and validate one database with the other, and therefore provided a more holistic picture of the study phenomenon than employing a single approach alone would have offered. Moreover, while previous studies on teachers' beliefs in the field mainly focused on language teachers, this study included teachers of other subjects as well. Furthermore, while most of previous studies in Norway reported that Norwegian teachers generally had a positive attitude towards multilingualism and welcome MTPs, the present study

showed that some Norwegian teachers held a deficit view of students' HLs and multilingualism, and thus restricted or even resisted MTPs. These findings provide additional insights into Norwegian teachers' beliefs and MTPs in multilingual contexts.

The findings from this study have important implications for policy makers, school administrates, and teacher educators in Norway and in other similar multilingual contexts. First, given that the national curriculum plays an essential role in Norway (Speitz, 2018) and that there exists hierarchies in the language subject curricula (Haukås, 2022), it is necessary to examine the extent to which multilingualism is defined and treated in different subject curricula. Moreover, as teacher education and TPD can impact teacher beliefs and enhance multilingual teaching competence (Gorter & Arocena, 2020; Liu et al., 2022; Neokleous et al., 2022), authorities need to invest more resources in teacher education programs and TPD projects that focus on multilingualism and promote MTPs (e.g., Cenoz & Gorter, 2020a, 2020b; Christison et al., 2021). Second, schools need to provide teachers with systematic support including opportunities for TPD and access to authentic teaching materials such as multilingual textbooks (Lorenz et al., 2021; Sevinc et al., 2022; Vikøy & Haukås, 2021). Third, given that reflective approaches could lead to more effective results in teacher education and TPD, teacher educators need to include reflection in their instructional approaches to encourage teachers to examine their teacher identity so that they can transform their classroom practices and become the agents of change. In short, the findings from this study confirm that all-round efforts are needed to enable teachers to carry out the multilingual turn in education (Conteh & Meier, 2014; May, 2019).

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper

## Data availability

The data that has been used is confidential.

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