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Abstrakt:

Diese Masterarbeit untersucht die Linguistic Landscape eines österreichischen Bildungscampus, bestehend aus Volks- und Mittelschule. Auf Basis eines Mixed-Methods-Ansatzes integriert die Studie eine qualitative Erhebung der Linguistic Landscape, demografische Daten von Schüler:innen und Lehrkräften sowie einen qualitativen Lehrer:innenfragebogen, um Muster der Sprachsichtbarkeit und Inklusion von Mehrsprachigkeit zu analysieren. Die Ergebnisse zeigen eine dominante Präsenz des Deutschen in funktionaler Beschilderung, insbesondere in Klassenräumen, bei zugleich begrenzter Sichtbarkeit von Minderheitensprachen oder Schüler:innenstimmen in gemeinsam genutzten Bereichen. Obwohl einzelne Cluster inklusivere Praktiken aufweisen, bleibt mehrsprachige Beschilderung weitgehend unkoordiniert und von der Initiative einzelner Lehrpersonen abhängig. Lehrkräfte äußerten zwar Vertrauen im Umgang mit sprachlicher Vielfalt, doch fehlten häufig formale Fortbildung und Kenntnis einschlägiger Richtlinien. Die Organisation der Linguistic Landscape spiegelt somit eine Schulkultur wider, in der Deutsch konsequent als dominante und Standard-Sprache bestätigt wird, während Mehrsprachigkeit nur sporadisch anerkannt und in der öffentlichen wie institutionellen Schulpraxis weitgehend abwesend bleibt.

Abstract:

This thesis investigates the linguistic landscape of an Austrian *Bildungscampus*, a combined primary and middle school. Based on a mixed-method approach, the study integrates qualitative linguistic landscape mapping, demographic data of students and teachers, and a qualitative teacher questionnaire to analyze patterns of language visibility and inclusion. The findings reveal a dominant presence of German in functional signage, particularly in classrooms, with only limited visibility of minority languages or student voices in shared spaces. Although some clusters exhibit more inclusive practices, multilingual signage is largely uncoordinated and dependent on individual teacher initiative. Teachers expressed confidence in dealing with linguistic diversity, yet formal training and policy awareness were often lacking. The organization of the linguistic landscape thus reflects a school culture in which German is consistently reaffirmed as the dominant and default language, while multilingualism is only sporadically acknowledged and remains largely absent from the school's public and institutional discourse.

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List of Abbreviations

BCS.....	Bosnian, Croatian, Serbian
DaF/DaZ.....	<i>Deutsch als Fremdsprache/Deutsch als Zweitsprache</i> (German as a foreign language/ German as second language)
ES.....	Elementary School
EFL.....	English as a foreign language
L1.....	First Language
LL.....	Linguistic Landscape
Lol.....	Language of Instruction
MS.....	Middle School
STEM.....	Science, Technology, Engineering, and Mathematics
SuS.....	<i>Schülerinnen und Schüler</i> (Students)

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1. Introduction

Linguistic and cultural diversity is increasing in European schools, especially in urban areas like Vienna. Teaching at an Austrian school where many students speak different first languages, I witness the multilingual nature of the classroom every day. Yet, these linguistic assets are rarely acknowledged in the school's broader environment. This thesis was prompted by that observation and by a commitment to more explicit support of multilingual students in equitable and meaningful terms. The aim of this thesis is to use quantitative and qualitative observations as foundations for recommendations to increase the inclusion of multilingualism in routine school environments

While multilingualism is increasingly tolerated in policy declarations and public discussions, schools continue to be organized on the basis of monolingual assumptions. The conflict between these two tendencies raises significant questions about how schools symbolically and practically align with students' language repertoires, and to what extent they are supported, overlooked, or controlled by visual and pedagogical practices.

Linguistic landscape (LL) research offers a strong foundation for debating these dynamics. In school environments, LL research not only documents what is on display with regard to languages, but also identifies what is left out or on the margins, typically in ways that mirror broader ideological positions on language, identity, and belonging. While there is ever more international literature on schoolsapes, there is little research on Austrian schools, particularly concerning the intersection of visual, demographic, and pedagogical factors.

In this thesis, the linguistic landscape of an Austrian “*Bildungscampus*” is examined. A “*Bildungscampus*” is a school complex that includes several levels of education, typically kindergarten, elementary school, and middle school. As a result of high migration over the last decades, these schools increasingly bring together children from diverse linguistic backgrounds, making them key sites of multilingual encounter. While there are national projects promoting multilingualism, a wide gap between educational discourse and regular school life can be found. The linguistic landscape of a

“Bildungscampus” offers a concrete way to investigate how this multilingualism is acknowledged, represented, or neglected within the institutional environment.

Based on critical linguistic landscape studies (e.g., Gorter & Cenoz, 2024; Shohamy & Gorter, 2008), this thesis takes an empirical approach to investigating how language is made visible, regulated, and experienced in school settings. It investigates whether the language context of students and teachers within the school aligns with their language biographies, and what teachers' perceptions and responses are to such diversity. By combining visual records with teacher perception and demographic data, the research attempts to make visible the ideological dimensions embedded in these schoolsapes and assess the extent to which schools reinforce or resist prevailing monolingual norms.

A mixed-methods approach was employed to record a wide array of dimensions of this phenomenon. The first component assessed students' and teachers' language profiles, via internal school records and teachers' self-reporting, to evaluate the degree to which the visual milieu is representative of actual language repertoire in the school community. The second part was a systematic documentation of the use of written language in selected clusters of both school levels, with emphasis on visibility, spatial distribution, and communicative function of signage. In the third step, a semi-structured questionnaire for teachers was conducted that investigated teachers' beliefs, practices, and perceptions regarding multilingualism and institutional support. Triangulation of the sources allows for multi-layered analysis of the way in which diversity of languages is represented and negotiated within the school context.

Together, these methods address the following research questions:

1. Which languages are represented in the school's linguistic landscape, and where are they located?
2. To what extent does the linguistic landscape coincide with the linguistic background of the students and teachers?
3. In what manner do teachers perceive and respond to linguistic diversity in their school context?

This study contributes to educational linguistics, critical language policy, and linguistic landscape studies by offering an empirical study of schoolsapes in Austria. Its three-

part approach brings together spatial, demographic, and pedagogical perspectives and highlights not only what is literally written on the walls of schools but also the connection to institutional discourse and practice.

This thesis is structured as followed: Chapter 2 provides a literature review of multilingualism in education, linguistic landscapes, and translanguaging. Afterwards, chapter 3 explains the research design and methodology. Chapter 4 outlines the empirical findings from demographic data, linguistic landscape analysis, and teacher questionnaire. Then, chapter 5 discusses these findings considering existing literature and school-level practices. Finally, chapter 6 ends with an overall summary of the findings, an overview of the study limitations, and recommendations for future research and teaching practice.

2. Literature Review

This chapter provides a critical overview of the available research on multilingualism in the education section, with emphasis on linguistic landscape (LL) research, language policy, and educational pedagogies for linguistic diversity. Through both early and more recent scholarship, the review provides context for the present research within broader theoretical and empirical debates about the ways schools deal with a high degree of multilingualism. Ideas such as raciolinguistic ideologies, language hierarchies, translanguaging, and assimilationist schooling norms are explored in an effort to understand the pragmatic and symbolic dimensions of language in institutional spaces. In a combination of these approaches, the chapter offers a foundation for interrogating how multilingual realities are managed in the researched school setting and what this means in terms of inclusive education.

2.1. Multilingualism in educational settings

Due to high levels of immigration, language backgrounds of students all over the world are becoming more diverse. Therefore, many students are taught in a different language of instruction in formal education than their first language. Austria is no exception to this global trend influenced by urbanization and migration patterns. More than 40% of students across the world, as quoted by UNESCO (2024), are not learning in their native language. In Austria, cultural diversity has increased in the past decades due to immigration from countries such as Turkey, ex-Yugoslavia, Syria, and Afghanistan. According to Statistics Austria (2024), approximately 27% of pupils have a first language other than German, with strong variations between urban and rural areas. Especially in cities such as Vienna, schools are becoming increasingly multilingual.

Recent studies on multilingualism challenge the traditional views of languages as autonomous, independent systems. Translanguaging describes how multilingual speakers use their languages flexibly and fluidly. Instead of alternating between distinct, named languages, they draw on their entire linguistic repertoire at once. For example, they combine words, phrases, or grammatical patterns from different languages within the same interaction to make meaning most effectively (Otheguy et al., 2015). Li Wei

(2018) extends this concept further by proposing the idea of "translanguaging space," a constantly shifting communicative space where people transgress socially constructed linguistic boundaries to create meaning. Additionally, Flores and Rosa (2015) introduce the raciolinguistic ideology framework that focuses on how school systems are prone to assess multilingual students' language use against racially constructed, deficit-based norms. Generally, they advocate for learning spaces that validate and capitalize on all of students' full language repertoires in a constructive manner, therefore supporting inclusion, identity formation, and disrupting monolingual ideologies that are deeply rooted in traditional schooling.

This shift is both an opportunity and a challenge. Teachers are now asked to teach students with diverse linguistic backgrounds, which requires stepping away from traditional monolingual mindsets. In return, educational research has embraced the "multilingual turn," which needs the acceptance of the students' home languages as rich resources (Piller, 2016b, p. 123). Optimizing multilingual classrooms, however, requires dedication not just from the teachers but also from all levels of the education system to ensure inclusive pedagogical responses.

2.1.1.Challenges

While multilingual education has notable advantages, there are still challenges. Research suggests that students with poor language proficiency in the language of instruction (LoI) are more likely to perform poorly in formal learning (Cummins, 2010; García et al., 2017). Additionally, the dominance of the Language of Instruction can lead to a loss of the students' mother tongue skills (Benson & Kosonen, 2013). Linguistic marginalization can further have a detrimental influence on the socio-emotional lives of students by lowering their self-esteem and motivation (Hornberger & Link, 2012).

One of the issues regarding implementing more multilingual teaching practices is insufficient teacher training and resources. The majority of teachers, particularly in traditionally monolingual schools, are not trained to handle linguistic and cultural diversity. In Austria, with a high numbers of migrant students, this is still the case. Studies show that even though most teachers accept the idea of multilingual education, they are

not necessarily equipped to implement it in their lessons (Dallinger, 2023; Schwarzl et al., 2019).

This gap has occasionally led to "willful blindness" (Cummins, 2014) where teachers avoid addressing multilingual realities by continuing monolingual classroom practices. Austrian and German studies point out that while many teachers state support of multilingualism, multilingual classrooms are still maintained as monolingual spaces by the majority of teachers (Bredthauer & Engfer, 2016). A few initiatives exist that acknowledge the diverse linguistic backgrounds students such as "*Deutsch als Zweitsprache*", but support remains lacking. Here, the German language classes are divided so that learners with lower language levels are taught separately. In addition, methods such as segregating students into German language support classes (*Deutschförderklassen*), where students with lower language skills are grouped together and spend most of their time at school separate from the regular classrooms, can alienate learners instead of placing them meaningfully within the school community (Angelis, 2011). Overall, support for teaching initiatives incorporating multilingualism is still low.

A second pressing concern is cognitive barriers to students. Low L2 proficiency typically goes hand in hand with lower test scores, higher dropout rates, and curtailed educational opportunities (OECD, 2023; Soland, 2019). In Austria, the decision between different schooling systems takes place early on in life, thus exacerbating these inequalities because learners with weaker German skills are disproportionately directed into lower-level academic channels (Erlings et al., 2023).

Moreover, social attitudes towards certain languages create hierarchical borders. While Western European languages such as English or French tend to be highly valued in educational and social contexts, migrant languages like Turkish or Bosnian-Croatian-Serbian (BCS) are often comparatively marginalized, by being excluded from formal curricula, absent in school signage, or associated with lower social status (May, 2023). This hierarchy of language can discourage students from maintaining their heritage languages and can foster excluding settings where the use of such languages is regarded negatively. A striking example is the political decision in Lower Austria to introduce a German-only rule during school recess, officially framed as a means of fostering German

fluency but widely criticized as discriminatory and exclusionary (Weichhart, 2023). This illustrates how assimilationist tendencies can become codified in educational settings. Moreover, such policy interventions align with broader national strategies that prioritize rapid German acquisition—often through segregated language support—thus reinforcing existing linguistic hierarchies (Schwab et al., 2024).

The school language environment is one of the critical components in the socio-emotional growth of multilingual students. Ortega (2013, pp. 230–232) draws attention to the importance of validating students' full linguistic repertoires to enhance positive identity formation and academic resilience against a world increasingly defined by multilingual realities. Conversely, Dovchin (2020) outlines how multilingual repertoires are decreased because of experiences of linguistic racism and the stigmatization of minority languages. In the Austrian context, linguistic racism can be understood as the systematic devaluation and marginalization of certain languages and their speakers. Language operates as a proxy for racialized and cultural differences and occurs when minority or migrant languages are seen as inferior, deficient, or threatening (May, 2023, pp. 652-654; Flores & Rosa, 2015, pp. 150-152; Piller, 2016a, pp.12-15).

Such experiences, consequently inflict psychological harm in the form of exclusion, shame, and decreased participation at school. Additionally, the dominance of the LoI and exclusion of other first languages can serve to erode students' mother tongues if not maintained in school contexts (Benson & Kosonen, 2013). These findings demonstrate that increasing the visibility and validation of multilingual repertoires in schooling settings is not simply an aesthetic choice, but a necessary action for ensuring students' emotional security, social belonging, and academic success.

2.1.2. Possible Opportunities

Considering these challenges, multilingualism nevertheless holds great potential to benefit pupils that should not be ignored in school discourse. Empirical research shows that multilingual kids have been found to demonstrate greater problem-solving ability, cognitive flexibility, and creativity (Bialystok et al., 2012 , pp. 241–243; Cummins, 2010, pp. 200–201). Another research confirms that bilingual education increases convergent and divergent thinking ability through cognitive inhibition and flexibility (Xia et al., 2022).

Moreover, long-term bilingualism has been associated with the postponement of dementia symptom development, with cognitive advantages far outweighing just the educational context (Bialystok et al., 2012, pp. 243–244).

In schools, multilingualism promotes metalinguistic consciousness, which is the ability to reflect on the structure of language, which later supports language acquisition and maximizes critical thinking potential (Cummins, 2010, pp. 200–201; Woll, 2017, pp. 236–238). Learning in several different languages enables students to grasp complex ideas better and apply learning strategies across subjects. Socially and culturally, multilingual education fosters intercultural consciousness and understanding. In appreciating the value of languages, schools can contribute to more balanced and respectful societies (García & Lin, 2017, pp. 127–128). Support for the students' development and use of their home languages also serves to maintain minority languages and heritages, a process that is vital to continue linguistic diversity and to embrace the benefits of a diverse society (Benson & Kosonen, 2013, pp. 8-9).

Economically, multilingualism assures greater career opportunities in the current globalized job market. The OECD (Marconi et al., 2023) emphasizes that multilingual people might have better job opportunities and salaries, since employers in all sectors, particularly foreign trade and services, place high importance on language skills. The advantages are not merely limited to easy communication; the language skills provide access to broader markets and professional mobility. Gorter and Cenoz (2024) further state that multilingualism is no longer just a cognitive or cultural asset but is currently a necessity in the multilingual societies and economies. Thus, the ability to speak two or more languages simply contributes to the human capital of individuals.

While multilingualism can offer clear cognitive, cultural, and economic advantages, educational practices do not always reflect these benefits. In fact, the ways schools deal with linguistic diversity can at times undermine the potential of multilingualism. Particularly in Austria, language-related policies often remain guided by assimilationist traditions, where multilingualism is not recognized as a resource but treated as a challenge to be managed.

2.1.3. Assimilationist schooling norms and their limitations

Within a multilingual school context, different concepts have been used to overcome the challenges that can accompany a diverse group. Studies have found that integration policies in Austria are often shaped by assimilationist ideas, promoting the image of a culturally uniform Austrian society. Within this framework, integration is framed as a form of discipline, where individuals are expected to integrate by demonstrating specific performances or achievements such as language acquisition and participation in cultural customs (Rosenberger & Gruber, 2020; Wolter & Sauer, 2024).

Assimilationist education requirements define education policies and practices that favor the dominant language and cultural expectations of a country, sometimes at the students' loss of their original language and identity. Such systems typically view linguistic and cultural diversity as a problem to be fixed rather than an asset to be valued (García & Lin, 2017). Such standards usually mandate one-language-fits-all, in school curriculum and institutional culture. As a result, multilingual students tend to be linguistically and culturally expected to accommodate to the dominant societal norms, without being able to implement their first languages in schooling, testing, and public school signage (Piller, 2016a).

One of the most prominent features of assimilationist models is their reliance on monolingual ideologies that frame language diversity in terms of deficiency. These ideologies are usually accompanied by policies against home language use in school, restricting their display on the linguistic landscape, and prioritizing standardized language use (García & Menken, 2010, pp. 7-9; Dovchin, 2020, pp. 805-807). Although these studies stem from Anglo contexts, García and Menken from the U.S. and Dovchin from Australia, they remain relevant for Austria. In the U.S. and Australia, integration policies are often couched in a multicultural rhetoric that values diversity, yet in practice they continue to enforce English monolingual norms. By contrast, Austria's approach is more explicitly assimilationist: integration is openly framed as conditional upon acquiring German proficiency and adopting national cultural norms. Despite these differences in framing, the outcome is similar across contexts: students' home languages are marginalized, and their long-term social and psychological well-being is overlooked (Josipovic & Reeger, 2021).

Research in different educational settings has shown that assimilationist approaches may lower students' self-esteem, inhibit their engagement with studies, and impose current social injustices (Flores & Rosa, 2015, pp. 150-152). If students' language and cultural identity are rendered invisible or erased, then this may lead to a diminished sense of belonging and motivation (Dovchin, 2020, pp. 806-808). Furthermore, the validation of identity can be a prerequisite to academic achievement, especially for students from minority or immigrant backgrounds. If schools suppress or deny such identities in favor of a monolithic model of culture, it may lead to the exclusion of the students rather than an improvement for them.

Similarly, Lehner's (2022) work underscores that schools must move away from deficiency models that envision multilingualism as an obstacle to learning. Rather, centers of learning and schools should recognize and celebrate the varying linguistic and cultural capital the learners bring into the space of learning. When teachers interact meaningfully with such resources in the linguistic ecology, they can not only support linguistic inclusion but also amplify learners' agency, self-worth, and academic motivation. Lehner (2022) thus argues for a pedagogic shift toward the construction of multilingual learning environments in which all languages are valued as resources. This is highly consonant with broader tendencies within critical applied linguistics and sociolinguistic scholarship towards more socially just and equitable pedagogic practices in more diversifying societies.

However, while assimilationist schooling conventions have been criticized, one must also be aware of the supporting arguments. Supporters maintain that the aspect of assimilation concentrating on one single shared language as a language of communication can promote social cohesion, facilitate interactions, and support equal access to educational material (Extra & Gorter, 2008). A single shared language of instruction in linguistically heterogeneous classrooms can decrease miscommunication, foster a shared classroom culture, and provide access to the same curriculum content for all students. Also, educators and educational systems rarely, if ever, possess the training, time, or resources required to effectively implement multilingual teaching practices. As a consequence, a dominant language policy might

seem like the easiest way to achieve academic expectations and maintain classroom order.

It is important to acknowledge that even within multilingual approaches, one or several dominant languages may be implicitly privileged (Fuster, 2024, pp. 3-4). However, the crucial difference lies in the underlying orientation. While assimilationist approaches identify the dominant language as the sole legitimate medium of education and social integration, multilingual approaches aim to recognize, validate, and incorporate the full linguistic repertoire of the students alongside the dominant language (Cenoz & Gorter, 2021, pp. 2-3).

Beyond the linguistic dimension, proponents further argue that assimilationist schooling may provide greater group stability. Schools are seen as institutions where national identities and civic values are transmitted. By emphasizing shared civic values, cultural reference points, and reinforcing national identities, such approaches are believed to strengthen the symbolic cohesion of society (Brubaker, 2001, p. 534).

Thus, although this only covers a few aspects of the issue, the thoughts about and preferences for assimilationist approaches may be based on considerations of education equity, efficiency, or students' long-term accomplishments. Nevertheless, such approaches risk reinforcing linguistic hierarchies and marginalizing students who do not speak the dominant language, thereby undermining both the inclusive goals of education and the linguistic rights of multilingual learners.

These findings suggest that prevailing assimilationist norms still guide school cultures in ways that can erase or marginalize students' language realities. Such norms are seen in institutional language practices, teachers' training, and classroom routines that reinforce monolingualism over linguistic diversity. Multilingualism is mostly acknowledged at the demographic level of students but underrepresented in pedagogical and spatial practices of this system. As long as there are assimilationist assumptions in place, structural arrangements for linguistically inclusive education are limited.

2.2. Historical Background Linguistic Landscape

The field of linguistic landscaping is a relatively new field of study. Emerging in the late 1990s, it initially focused on the use of language within public spaces. Early studies

concentrate on documenting how specific language use reflects and reinforces social hierarchies and linguistic ideologies (Landry & Bourhis, 1997). This can also be found in the definition proposed by Landry and Bourhis (1997, p. 25), which refers to the linguistic landscape as “the visibility and salience of languages on public and commercial signs in a given territory or region”. They also provide a more nuanced definition specifying which items need to be analyzed: “The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings” (Landry & Bourhis, 1997, p. 25). However, these six categories are insufficient when considering recent technical developments and changes in communication to capture all modes of language use in public spaces. Nevertheless, as explained by Gorter and Cenoz (2024, p. 10), these early studies “provide a crucial snapshot of the multilingual tapestry of urban environments, setting the stage for later, more theoretical nuanced inquiries”.

For example, early research into linguistic landscapes primarily focused on describing and documenting language visibility in public spaces, thereby highlighting the interplay between official language policy, market forces, and community practices. As shown in a study by Landry and Bourhis (1997, p. 27), public signage functions as “an index of power relations and cultural capital”, which reflects how mundane texts can display public attitudes and serve as tools for cultural affirmation.

More recent developments in linguistic landscape research have worked toward moving the field from a descriptive emphasis into a critical study of language, identity, and power. One such extension is the field of geosemiotics, which extends the focus of LL research to the connection of language, space, and meaning-construction in material landscapes (Scollon & Scollon, 2003, p. 2). Geosemiotic analysis means that scholars understand the construction of social hierarchies through the spatial arrangement of signs, their superposition, and the power in positioning them. Extending on this view, Shohamy and Gorter (2008, p. 3) state, LLs are generated at sites where ideologies clash and are thus reproduced; they do not just reflect the existing social conditions of linguistic diversity. This view criticizes the mere counting of signs while analyzing the sociopolitical functions of language in public visibility. In a school setting, as described by Shohamy (2006, p. 110-111), linguistic landscapes uncover hidden agendas about language status and

belonging. Identifying the LL as an ideological and semiotic process is useful as groundwork for critically examining school spaces since signs can support or resist prevailing language norms.

Over time, other scholars have offered slightly different definitions of linguistic landscapes. For example, Lou (2016, p. 2) describes LL as the collection of all “visual forms of language present in a public space of a pre-determined geographic area”. In order to use a concise definition, this paper will examine LL as defined by Cenoz and Gorter in 2006 which simply states linguistic landscapes as “the use of language in its written form in the public sphere” (2006, p. 67).

Based on these early descriptive models, researchers started to challenge the ideological backgrounds present in public signage. In *A Panorama of Linguistic Landscape Studies*, Gorter and Cenoz (2024, p. 15) point out that “linguistic landscapes are not merely passive backdrops but active arenas where issues of identity, power, and belonging are continually negotiated”. This critical focus was borrowed from broader traditions in sociolinguistic and critical discourse analysis. Scholars began to ask not only what languages are visible but also why these languages appear where they do and what they reveal about social order.

Moreover, current research has also extended the scope of LL studies. For instance, researchers no longer only ask questions about physical spaces but also virtual ones such as social media, online advertising, and virtual graffiti. With this new development, these studies indicate that virtual spaces are just as relevant to capturing multilingual realities as physical spaces (Gorter, 2018; pp-51-53). New technologies of digital mapping such as GIS software, which enables the analysis and visualization of spatial data, along with mobile ethnography and large data sets, allow researchers to record and examine the liquid and dynamic qualities of these linguistic landscapes in real time. This way, it is possible to link micro-level observations with macro-level sociopolitical processes (Laihonen & Szabo, 2018, p. 1).

Apart from new methodological advances, particular attention is paid to the socio-political dimension of public language. According to Cenoz and Gorter (2024), current research is interested in the manner in which linguistic landscapes reflect and address issues of identity, power, and social justice in the context of globalization and migration.

This critical tradition goes hand in hand with the use of linguistic landscape research to inform and improve language teacher education (Melo-Pfeifer, 2023).

The field has embraced the concept of translinguaging practices as more scholars are keen on exploring how users alternate codes among languages in an urban setting that resists the tight compartmentalization of languages. This development reflects a broader shift towards the recognition of language as a hybrid, fluid resource that does not follow rigid rules. This observation has significant implications for both sociolinguistic and pedagogical theory (Gorter & Cenoz, 2024, pp. 156-158). It highlights how individuals glide across named languages to constitute meaning, negotiate identity, and navigate social environments (García & Wei, 2014, pp. 22-23). These insights also inform linguistic landscapes analysis as it shapes the interpretation of data and reflects within the landscape translinguaging practices, ideological tensions, and struggles over whose voices and identities are legitimized in public and institutional spaces.

By conceptualizing language as inherently embedded and dynamic, ongoing research challenges traditional binary oppositions of "languages", meaning languages are no longer seen as discrete, countable entities (Gorter & Cenoz, 2024, p. 156). This work aligns theoretical approaches with a heightened sensitivity to the everyday linguistic practices of users, particularly in superdiverse urban contexts where conventional language categories are increasingly inadequate (Blommaert, 2010, pp. 1-5).

2.3. Linguistic Landscape in education

Drawing from these theoretical developments, research into the linguistic landscape has increasingly targeted educational contexts. Researchers recognize that schools are not just institutions for language instruction but are important linguistic landscapes where language ideology, identity, and power are reciprocally negotiated every day (Gorter & Cenoz, 2024). This "educational turn" in LL research constitutes heightened awareness for the way a school's linguistic landscape, in the form of signs, classroom materials, pupils' productions, and interactions in everyday life, both reflects and influences multilingual worlds (Melo-Pfeifer, 2023, p. 4).

Building on this perspective, Krompák, Fernández-Mallat, and Meyer (2022, p. 1) introduce the term *educationscape* to conceptualize schools as evolving semiotic

environments where language hierarchies and social discourses become visible and open to critique. Within this framework Gorter and Cenoz (2022, pp.277-279) identify two core strands in this research, one focuses on examining the linguistic landscape of learning spaces so that it can explore how language ideologies are institutionalized and expressed. The other investigates using LL research as a potential educational tool to foster linguistic awareness and intercultural competence. LL research is increasingly being embedded in the classroom as a teaching tool to enable critical language awareness, promoting inclusive multilingual education, and developing global citizenship competence; however, its pedagogical value depend on its critical framework. Empirical studies illustrate both the potential and the limitations of such approaches: Dressler (2015, pp. 129-130) shows how bilingual school signage can promote awareness of linguistic diversity, while Malinowski (2015, pp. 99-101) highlights that LL projects can open spaces for student reflection but also risk reproducing institutional hierarchies if not critically framed. Nevertheless, the observation of the linguistic landscape within schools provides valuable insights of how language diversity is made visible, regulated, or excluded within institutional space , but it also raises questions about the extent to which classroom activities based on LL research can move beyond descriptive exercises toward genuinely transformative practices.

In Linguistic Landscape research, some of the important contributions to multilingual education and teacher training are by scholars such as Sílvia Melo-Pfeifer, Durk Gorter, Jasone Cenoz, and others. Particularly, Melo-Pfeifer's (2023) edited volume *Linguistic Landscapes in Language and Teacher Education: Multilingual Teaching and Learning Inside and Beyond the Classroom* summarizes eleven nations' empirical research on LL's integration in multilingual education and teacher education. This book underscores the merit of LL as a pedagogical tool, focusing on its contribution to language awareness, reflective teaching, and social justice pedagogy.

Melo-Pfeifer (2023, p.6) identifies three key educational applications of Linguistic Landscaping: multilingual focus, monolingual focus, and mixed focus. The multilingual approach aims to “raise learners’ awareness of the linguistic and cultural diversity” around them and of “issues such as equity, resilience and language maintenance or language struggle” (Melo-Pfeifer, 2023, p.6). Within the multilingual focus, the linguistic

landscape (LL) is used as a tool to help students become more aware of the linguistic and cultural variety present in their immediate surroundings, whether that be their local community, region, or nation, as well as to engage with broader issues like social equity, resilience, and the preservation of languages. The monolingual approach on the other hand focuses on the status of one specific language in a “particular socio-demographic and multilingual landscape” (Melo-Pfeifer, 2023, p.6). Hence, linguistic landscapes research can be used to examine the position, function, or condition of a specific language within a given multilingual and socio-demographic context. This includes identifying areas of economic life where the language is most visible or where it demonstrates the greatest vitality. Both perspectives of LL can be combined within the mixed focus, thereby aiming to enhance learners’ understanding of language dynamics in a social setting.

Furthermore, according to Cenoz and Gorter (2008, pp. 272-277), Linguistic landscaping, has the potential to contribute to the target language learning in several pedagogical domains. LLs can support even often unintentional language learning by reinforcing vocabulary and pragmatic knowledge. This pedagogical potential is reflected in approaches such as “spot German” (Marten & Saagpakk, 2017, pp. 4-6), an activity that encourages learners to identify and reflect on instances of German in their environment as a means of raising language awareness, or in teaching materials developed by Solmaz and Przymus (2021, pp. 26-28) for learners of English as an additional language. Linguistic landscaping can be used as a language teaching tool that can enable the acquisition of linguistic elements such as vocabulary, largely implicitly, as students are presented with a natural use of the language in public signs. Secondly, it enables hands-on competences by putting language in meaningful real-life communicative contexts. Third, it supports the development of multimodal literacy competence, in which students read and travel through an interplay of textual, visual, and in some cases spatial or auditory modes. Fourth, it enhances cross-linguistic consciousness (also known as multicompetence) since it renders the interplay of more than one language visible in a particular setting. Finally, Cenoz and Gorter (2008, pp. 276-277) refer to the importance of symbolic and affective contact, because public space language contact can create learners' affective attachments towards these languages, influence attitudes, and consolidate or

undermine social language power and prestige hierarchies. These five domains underscore the pedagogical potential of linguistic landscape as input and critical, reflective, and inclusive language teaching tool.

Similarly, existing literature highlights the educational potential of involving students in linguistic landscape tasks. In their paper, Roos and Nicholas (2019) investigate the possibility of incorporating LL assignments with young English as a foreign language (EFL) students to support language learning in German elementary schools. The authors demonstrate that involving students in documenting and exploring their immediate language surroundings provides genuine potential for language learning, enhances sensitivity to linguistic diversity, and promotes intercultural competence. Their findings show that LL-based activities encourage learners to connect classroom learning with ordinary language use outside the classroom, thus consolidating both linguistic competence and critical language awareness. They also point out that the implementation of LL in EFL instruction enables learners' agency and prompts them to play an active role in exploring the multilingual realities of their environment (Roos and Nicholas, 2019).

Building on this, Gorter and Cenoz (2024) have extensively explored LL in educational contexts. They provide a comprehensive overview of the field's development over the past two decades, from theoretical approaches and research methods to key themes. They argue that linguistic landscapes reflect societal multilingualism and language policies, offering insights into language hierarchies, identity construction, and access to linguistic resources in various settings.

Apart from its pedagogic application, Linguistic Landscape is currently viewed as an effective tool to critically examining learning environments. By documenting and analyzing the variety of languages that are represented in schools, such as signs, posters, student productions, and official notices, researchers can bring to light the underlying ideology and policies that guide school teaching practices (Pütz & Mundt, 2019). This reflective capability enables LL not just to reflect existing language practice but also as a scientific approach to consider more universal systemic issues, like policies of assimilation, linguistic marginalization, or programs for equity promotion (Bagga-Gupta,

2017; Pütz & Mundt, 2019). Therefore, LL becomes a diagnostic as well as an agency-making tool in educational practice and research.

Explicit and implicit language policies continue to shape the linguistic culture of schools. García and Menken (2010, pp. 1-3) argue that even in officially multilingual contexts, monolingual norms are institutionally reproduced because languages are selectively made visible. Heugh (2017, pp. 209-211) also argues that language-in-education policies are frequently used to reinforce social hierarchies, particularly when minority languages are rendered invisible in public spaces such as classrooms. Exclusion or peripheral placement of minority languages on school signs, for example, communicates assimilationist messages even when official discourse promotes linguistic diversity. Pulinx, Van Avermaet, and Agirdag's (2017, pp. 543-544) study demonstrates how such hidden tendencies consecrate the dominant language symbolically and disempower minority students' repertoires, reproducing inequalities through everyday school habits. In this regard, linguistic landscape research can provide a critical lens through which to analyze how ordinary practices in schools implicitly convey ideologies on language, power, and belonging.

While most linguistic landscape studies in educational settings have been conducted in European settings, studies from diverse international contexts provide valuable comparative insights even when taking into consideration their specific sociolinguistic setting. In Canada, Malinowski (2015, pp. 100-101) describes how LL projects in multilingual schools are used as pedagogical interventions, reflecting a context where diversity is formally recognized but often instrumentally managed. In South Africa, Stroud and Mpendukana (2009, pp. 365-367) take an exploratory look at township schoolscapes situated within a post-apartheid struggle with entrenched inequalities. In these environments, informal signage defies linguistic hegemony and tries to reclaim marginalized identities. In Northern Europe, Pietikäinen and Kelly-Holmes (2013, pp. 10-12) describe Sámi language visibility in Norwegian and Finnish schools as both symbolic and superficial, and indigenous language recognition at the surface level while deeper integration within education remains limited. Together, these works indicate that the relationship between schoolscapes, policy, and student identity is always negotiated through wider sociopolitical conditions. They also demonstrate the potential of linguistic

landscape research in revealing inequities and guiding more socially just, inclusive educational practice in multilingual contexts.

In Austria, Lehner (2022) analyzed how linguistic landscapes in learning environments, in this case of a refugee learning club for children, can facilitate the creation of inclusive and empowering learning spaces. Her ethnographic study analyzed how presence, absence, and diversification of language existed in this setting and how the linguistic landscape did not only document the participants' multilingualism but also created a sense of belonging. Lehner (2022) highlights that visibility of a diverse set of languages, in this case Arabic, Dari, Somali, and German, is necessary in order to construct an environment of hospitality where students' linguistic identities are acknowledged. The study also highlights the way in which the intentional deployment of students' first languages in signage, pedagogical materials, and daily communication can be a counternarrative to dominant mainstream assimilationist demands.

Furthermore, García and Wei (2014, pp. 22–25) illustrate how translanguaging can be applied to linguistic landscape projects, for example by encouraging students to interpret multilingual posters or signage in their communities using their full linguistic repertoires. While they do not describe detailed case studies, their work frames LL tasks as opportunities for learners to engage critically with public language displays, validating everyday practices as legitimate classroom resources. Rather than conceptualizing languages as distinct, autonomous systems, translanguaging calls for learners to apply their overall linguistic repertoires in strategic and fluid ways, depending on each communication situation. This understanding recognizes that multilingual speakers do not operate at language borders but performatively bring and intersect linguistic resources to create meaning, voice identities, and act on the world. In the contexts of LL research, such focus encourages learners not only to observe multilingual signs but also to reflect on where languages intersect and what these intersections reveal about power and belonging.

The potential of translanguaging in LL studies is not without limitation, though. Translating documentation practice into critical pedagogy requires capable teachers who are proficient at dealing with more than one linguistic repertoire and institutional support that makes space for multilingual practices. In the absence of such conditions,

translanguaging risks being nothing more than a symbolic gesture that recognizes diversity but does not challenge monolingual norms. For LL research, its significance lies in illuminating this tension between inclusive pedagogical aspirations and ongoing structural constraints. In settings such as Austria, where standard language ideologies continue to be widely present in curriculum design, translanguaging underscores both the promise of more equitable practices and the difficulties of breaking with long-standing assimilationist assumptions.

Building on such studies, more recent research has increasingly brought attention to the role of linguistic landscapes in school environments, examining the ways in which schools as institutional arenas reflect and build multilingual worlds. This shift indicates the significance of LL research as an academic, pedagogical and critical tool for reconceptualizing educational practices, policies, and of linguistic variety in classroom and school environments. These pioneering studies provide a solid foundation for exploring the representation of languages in schooling that will guide the proposed research on the linguistic landscapes of an elementary and middle school. From a platform established by similar prior scholarship, this work aspires to contribute to the field of knowledge in visibility of multilingualism in an academic setting.

3. Research design

Both quantitative and qualitative approaches have strengths and limitations in linguistic landscape research. Therefore, this study adopts a mixed-methods approach to integrate the strengths of both methodology approaches, mitigating their respective limitations. A mixed-method approach allows for increased comparability, generalizability, and the inclusion of multiple variables while also ensuring a context-rich and nuanced understanding of linguistic landscapes (Gorter & Cenoz, 2024, pp. 11-13). Particularly, criticisms of the quantitative approach, such as its reductionist tendency to merely "count signs" (Blackwood, 2015, p. 40), are counterbalanced by qualitative insights that provide a deeper exploration of language ideologies and sociocultural contexts.

This research focuses on the linguistic landscape of a *Bildungscampus*, a combined building that contains both an elementary and a middle school. It analyzes the visibility and distribution of languages in this school environment, their correlation with student and teacher linguistic backgrounds, and educators' attitudes towards linguistic diversity. These focal points directly inform the research questions, which ask how linguistic diversity is represented, practiced, and perceived in the school context.

3.1. Data Collection

The following chapters provide a clear overview of the research steps.

3.1.1. Phase 1: Student and Teacher Linguistic Background Analysis

To examine whether the linguistic landscape reflects the linguistic composition of the school community, data on the language background of both students and teachers data are collected in the first phase. This follows the comparative approach to linguistic landscapes proposed by Blackwood (2015, pp. 44-45), in which linguistic diversity is mapped against the sociolinguistic composition of a given space. Therefore, the study collects both students and teachers' first language.

For this study, data on students' linguistic backgrounds were collected anonymously from existing school records, based on the first language information provided by parents during enrollment. Since these data were already available in the school databases, no additional parental consent was required. Access to both student and teacher records

was granted through the respective headmasters, who provided the information in anonymized form to ensure confidentiality. In addition, teachers' first languages were further determined during the third phase of the study by asking them to self-identify their first languages.

By comparing these data points with the linguistic landscape findings, the study assesses whether the representation of languages in the school space correlates with the linguistic diversity of students and teachers. This aspect provides a bridge between quantitative mapping and qualitative interpretation, as differences may display implicit language hierarchies or the marginalization of certain languages (Gorter & Cenoz, 2024, pp.12-13).

3.1.2.Phase 2: Linguistic Landscape Mapping

The second phase involves systematic mapping and categorization of linguistic elements present in the school environment, following established linguistic landscape research methodologies (Gorter & Cenoz, 2024). The objective is to document and analyze language varieties, patterns, and functions of language use in both elementary and middle schools. To ensure a structured approach, linguistic items are classified based on different aspects.

3.1.2.1. *Spatial distribution*

First and foremost, the linguistic items are organized by spatial distribution. Both the elementary and middle school are divided into four clusters, each including grades one to four, taught by a team of teachers. A cluster is a designated area within the school where four classrooms are located. These are taught by ten to twelve teachers each, who also have a separate teachers' lounge in the center of the cluster's classrooms. Furthermore, there is a common area for the students of each cluster, which are also treated separately in the linguistic landscape study to allow for a more nuanced analysis of how spatial context influences learning experiences, interactions, and overall educational dynamics. Due to the structure of the timetable, some teachers are active in more than their "home cluster". However, the overlap of teaching between clusters is limited to a few teachers who only spend a limited number of hours in other clusters and are hence not considered for the linguistic landscape assessment.

Due to the limited scope of this research, two clusters from each school were chosen as research areas. To ensure impartiality, the cluster I personally work in was ruled out for this study. Additionally, to ensure a comprehensive representation of the school environment, one cluster located downstairs and one upstairs were selected. This spatial structure allows to capture possible variation in learning settings, social processes, and physical conditions across floors. By including clusters from both floors, this study aims to provide a more holistic representation of the school environment rather than an isolated and potentially non-representative segment. Additionally, the corresponding clusters in the elementary school were chosen to enhance comparability across school levels.

3.1.2.2. Functional categories

To provide a detailed analysis, the language signage found within the selected clusters are categorized into ten distinct functional categories. These include general information, educational information, general instruction, educational instruction, classroom management, labels, student artwork, decorative artwork, transgression, and awards (see coding grid in Appendix). However, as not all pieces of language found can be put neatly in one specific category, some items are categorized and coded with multiple codes to represent their multifunctionality. As there are overlapping purposes such as informing and instructing, a single label would not capture their full communicative function. Furthermore, during data collection, some written elements are grouped together when it is evident that they were created simultaneously and with a shared purpose. Rather than counting each instance separately, such cases are recorded as a single unit to reflect the collective intent. This approach ensures that the analysis accurately represents the way language is used functionally within the school environment, rather than inflating the data with multiple entries that are essentially part of the same communicative act.

These categories are based on a LL understanding grounded in well-established linguistic landscape research, where not only the visibility of languages in public space but also the social, pedagogical, and ideological functions of written texts are emphasized (Shohamy & Gorter, 2008, pp. 9-10). Inside schools, the landscape is constructed both by top-down forces commissioned or sanctioned by the institution, such as official signs, curriculum

postings, or classroom instructional material, and bottom-up contribution, which comes from students or individual teachers and is typically more personalized, informal, or expressive in communication (Scollon & Scollon, 2003, pp. 12, 15-16).

Examining the functional categories more closely, *general information* is non-instructional, but school-related content such as announcements, schedules, or direction signs. These are typically top-down in nature. *Educational information* includes displays that relate to subject matters outside of the immediate instructional context such as science posters, history timelines, or vocabulary boards, and reflects top-down signage created or curated by educators. *General instruction* encompasses school-wide rules and behavioral expectations (e.g., “No running in the hallway”), while *educational instruction* refers to learning support texts, such as procedural guides that scaffold academic tasks. All four categories are institutional and therefore classified as top-down.

Classroom management texts help organize routines, for example, chore charts, daily timetables, or group labels. While created by teachers for internal organization, these are still considered top-down as they stem from general school routines and standardized teacher planning. *Labels* serve a simple referential function, identifying resources or areas within the classroom (e.g., “Art Supplies”). These too are predominantly top-down, though they may vary in formality depending on the respective creator.

More expressive and overtly bottom-up forms are considered a separate category. *Student artwork* refers to texts and images written by students for classroom assignments or creative writing, depicting student identities, language use, and potentially multilingual representation (Dressler, 2015, pp. 128-145). *Decorative artwork* can result from both top-down and bottom-up input. It will usually include decoration materials chosen by teachers or the school administration used to make classroom spaces more aesthetically pleasing, but student-directed ornamental presentations will sometimes appear as well.

The *transgression* category includes unauthorized texts such as graffiti, notes, or stickers. These are forms of linguistic display that challenge institutional norms and offer an insight into student voice and informal agency (Shohamy, 2006, pp. 110-114, 147-150). Such bottom-up signs are especially significant to an understanding of how

students negotiate institutional constraints and live out identity or resistance in regulated educational settings.

Finally, the category of Awards recognizes a smaller but symbolically important part of the school's linguistic landscape. These are certificates or awards. While such items are typically initiated or approved by the school (and are hence top-down), their content is individualized and directed to specific students or student groups. They are symbols of achievement, recognition, and belonging, and shape the symbolic and emotional life of the school. They may be small in number, but awards affect students' sense of visibility and sense of belonging to the school community and provide an interesting insight into the values an institution determines to be significant.

This categorization encapsulates the vision of linguistic landscapes as multilayered and dynamic, developed through ongoing negotiation among pedagogy, authority, and pupil identity. The classification is also in line with theoretical frameworks of linguistic landscapes as dialogic spaces of meaning-making, particularly in multilingual education contexts (Scollon & Scollon, 2003 , pp. 2-4, 8-10; Shohamy & Gorter, 2008 , pp. 1-6, 9-10). This typology allows researchers to investigate more thoroughly how schools represent language use visually, structure communication, and consider social language hierarchies and inclusion policy.

Transgressive elements also highlight learner agency in enacting linguistic identities, and artistic representations and can provide an arena where multilingualism is either celebrated or disregarded. By analysis of these features, this study seeks to uncover the ways in which language use within the school context evidences broader orientations to multilingualism and linguistic diversity.

Studying the language of these categories provides insight into the school's approach to multilingualism. If and how more than one language is present in informational texts, rules, and classroom displays can show that the school promotes linguistic diversity or favors a single dominant language (Dressler, 2015, pp. 128-145). How many languages coexist side by side, if they are on an equal basis, included in translations, or reserved for specific functions, reflects the school's stance towards inclusion and access for multilingual students. By analysis of these features, this study seeks to outline the ways in which language use within the school context affects broader orientations to

multilingualism and linguistic diversity (García & Lin, 2017, pp. 117-130). Items could be assigned to multiple functional categories; languages were coded using the scheme German, English, BCS, Turkish, Arabic, other, and multilingual, and language appearance was noted for both main texts and subtexts (see coding grid and language coding in Appendix, Sections 2-4).

Data was photographed and recorded in a digital spreadsheet to ensure transparency and replicability (Appendix). A permissive yet strictly delineated approach is employed to define what counts as a sign: all written language objects openly displayed to the school community and intended as permanent or semi-permanent features (e.g., on walls, windows, doors, pinboards, shelves, or tables) were included; loose or transitory materials and texts for individual children (e.g., individual plans or non-shared name tags) were excluded. Where multiple items formed a single communicative unit (e.g., rule sets), they were coded as one entry (Appendix) in line with common LL coding procedures (Gorter, 2018, pp. 38-57; Blackwood, 2015, pp. 38-53). However, criteria such as color, size, or position within rooms or common areas were not considered in this research. This phase of linguistic landscape mapping provides quantitative insights into the prevalence and distribution of languages in different school spaces, allowing for cross-school comparisons (Gorter & Cenoz, 2022, pp. 277-290).

3.1.3. Phase 3: Teacher questionnaire

The third phase involves a semi-open questionnaire with teachers to explore their perceptions of linguistic diversity and their engagement with multilingualism in the school context. The questionnaire was conducted in German in order to reduce language-related barriers and encourage higher response rates. The guiding research questions for this phase align with previous linguistic landscape studies that explore institutional attitudes and policies (Blackwood, 2015, pp. 38-53; Gorter & Cenoz, 2024, pp. 14-16). The questionnaire includes four different subtopics – general, teaching praxis, school environment, and personal assessment that reflect the overarching research questions of this study. These themes guide the inquiry into how teachers experience and respond to linguistic diversity in their schools and classrooms. By doing so the questionnaire directly operationalizes the broader research questions concerning the representation, practice, and perception of multilingualism in the school setting.

Specifically, the items address whether and how students' linguistic backgrounds are considered in teaching practices and school design, how teachers perceive and engage with diversity in classroom management and school spaces, and what policies exist regarding language representation and support for multilingual learners. Furthermore, the questions probe potential areas of willful blindness, where diversity may be consciously or unconsciously disregarded, and examine teachers' self-perceived preparedness to manage multilingual classroom contexts.

To try to investigate willful blindness, the study both infers such instances from questionnaire responses as well as identifies contradictions between teachers' beliefs and the linguistic landscape. For example, if a teacher reports that multilingualism is actively encouraged in school, but the language environment vigorously promotes just the majority language, this might be an implicit bias or perception-action gap. This aligns with traditional methods to sociolinguistic landscape studies that recognize the limitations of self-reporting measures to unveil concealed ideologies (Blackwood, 2015. pp. 40-45).

3.2. Analytical Approach

A triangulation of methods is employed to integrate the three data sets:

- Linguistic landscape data (quantitative analysis of sign distribution and categorization)
- Student and teacher language data (correlation analysis)
- Teacher questionnaire (qualitative thematic analysis)

The linguistic landscape data is analyzed using descriptive statistics (e.g., frequency distributions of languages per category and school). The data on the language backgrounds of students and teachers are compared with school landscape patterns through correlation analysis, assessing whether the linguistic environment aligns with or diverges from student and teacher language profiles. The teacher interviews will be thematically coded, with recurring themes covering language ideologies, school policy, and implicit bias (see Appendix: Questionnaire & Coding Manual).

By integrating quantitative and qualitative findings, this research provides a general picture of the status of a linguistic landscape in an Austrian school and contributes to language representation and educational policy debates.

4. Findings

This chapter presents the empirical data of the study based on the three sources of data described in the research design: student and teacher language background data, linguistic landscape mapping, and teacher questionnaires. The research aims to analyze how multilingualism becomes visible in the school environments, how this visibility intersects with the linguistic composition of the school population, and how teachers perceive and respond to linguistic diversity in their practice. The chapter is split up into three sections: official statistics regarding the linguistic background of teachers and pupils, classification and mapping of observable language in school environments, and returns to a teacher questionnaire regarding language ideologies, inclusion, and preparedness. All three sources contribute to a different perspective on how language is represented, experienced, and interpreted within the school context.

4.1. Findings from Student and Teacher Language Background

This section provides an overview of the language backgrounds of both students and teachers in the observed schools.

4.1.1. Student data

When taking a closer look at the language background of both elementary and middle school students, it quickly becomes clear that both schools have a diverse linguistic makeup in their student population. This section outlines the first-language distribution of students, based on internal school records from the school year 2024/25.

Among the students at the elementary school level ($n = 205$), German is the most commonly reported first language, accounting for 29.27% ($n = 60$) of the student body. The next most prevalent languages are Turkish (26.34%; $n = 54$) and Bosnian/Croatian/Serbian (BCS; 18,05%; $n = 37$). Together, these account for nearly three-quarters of the cohort as can be seen in Figure 1.

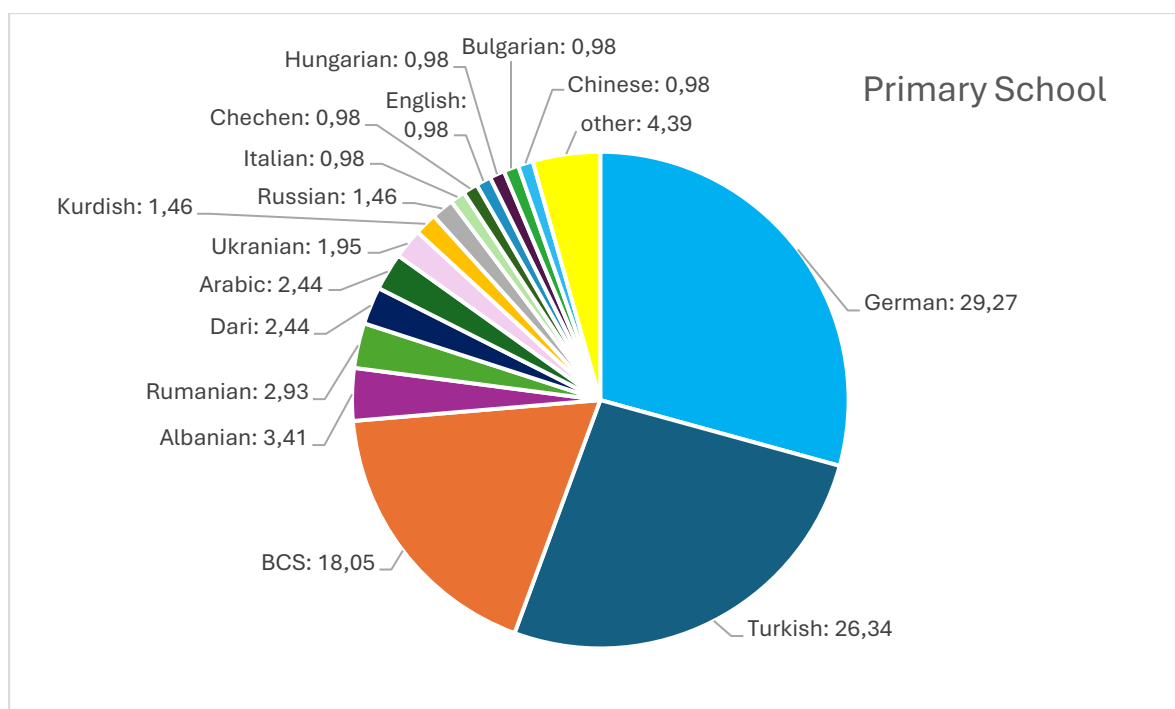


Figure 1 Linguistic Background Students ES

The remainder of the student population speaks a range of languages, including Albanian (3.41%; $n = 7$), Romanian (2.93%; $n = 6$), Dari and Arabic (both 2.44%; $n = 5$), and Ukrainian (1.95%; $n = 4$).

Additional languages with smaller representations, such as Kurdish, Russian, Italian, Chechen, English, Hungarian, Bulgarian, and Chinese, each account for less than 1% ($n = 2$) of the student body. An "Other" category (4.39%; $n = 9$) includes languages such as Polish, Hebrew, Persian/Farsi, Macedonian, Afrikaans, Slovakian, French, and unspecified African or other languages each spoken by a single student. The data highlights not only a high degree of multilingualism but also the presence of micro-diversity within individual classrooms.

At the middle school level ($n = 203$), linguistic diversity is even more pronounced as there are more languages represented. Turkish is the most prevalent first language, spoken by 32.47% of students ($n = 63$), followed by BCS (23.20%; $n = 45$), and Arabic (10.31%; $n = 20$). Notably, the share of students with German as a first language drops sharply to 7.22% ($n = 14$).

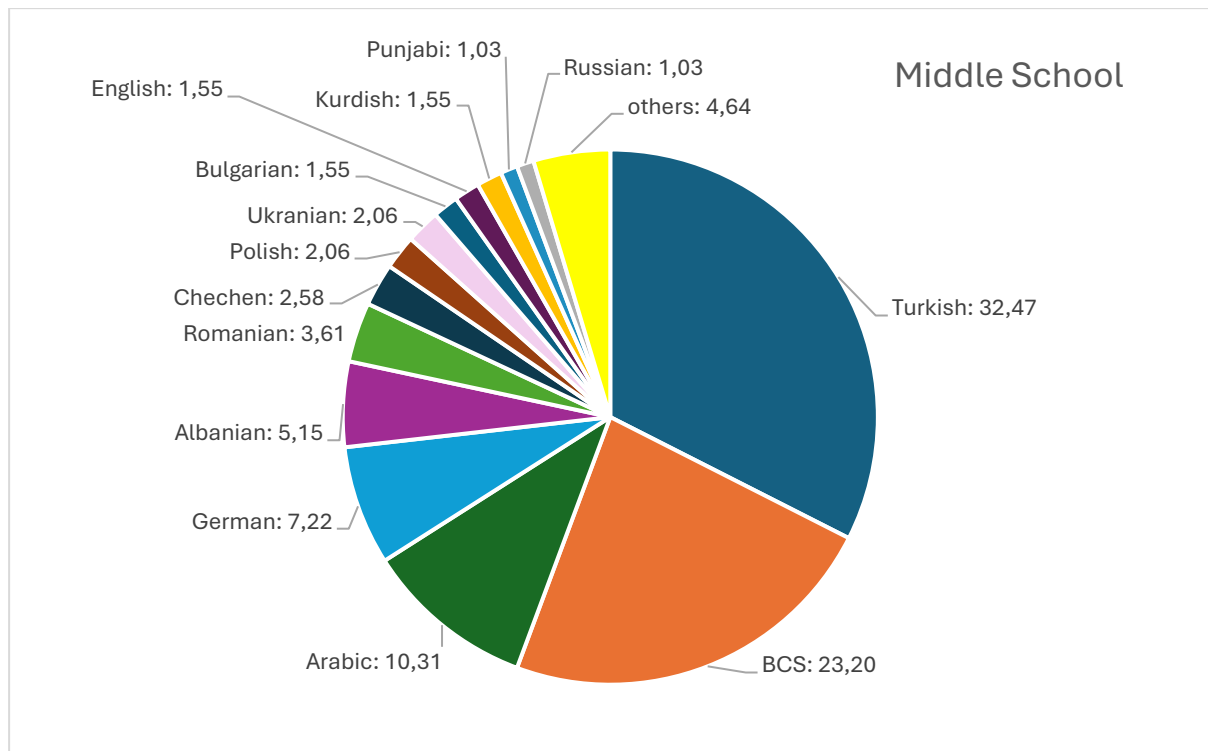


Figure 2 – Linguistic Background Students MS

As figure 2 illustrates, other languages spoken include Albanian (5.15%; $n = 10$), Romanian (3.61%; $n = 7$), Chechen (2.58%; $n = 5$), Polish and Ukrainian (both 2.06%; $n = 4$), Bulgarian, English, and Kurdish (each 1.55%; $n = 3$), as well as Russian and Punjabi (each 1.03%; $n = 2$). Like the data at elementary school level, the "Other" category (4.64%; $n = 9$) also includes other languages like Farsi, Italian, Macedonian, Slovakian, Tagalog, and Thai, with each language being spoken by one student (0.52%).

The comparison between school levels and internal clusters reveals significant variation in the language context and in the student language backgrounds. On the school level, the greatest difference appears in the percentage of German as an L1: although nearly 30% of elementary students report German as their first language (L1), this figure declines strongly to just 7.2% in the middle school. On the other hand, the number of L1 Turkish students grows from 26.3% in the elementary school to 32.5% in the middle school, and speakers of BCS go up from 18.1% to 23.2%. This shift is a clear reflection of a shift away from relatively German-dominant elementary school population towards a middle school student population where German L1 speakers constitute only a small percentage. The data also shows a broader range of languages with single speakers in the

middle school like Chechen, Kurdish, Punjabi, and Tagalog, which represent a higher degree of micro-linguistic diversity during subsequent school years.

When viewed at the cluster level within the middle school, further differentiation becomes visible. For example, Cluster C includes higher numbers of students with Arabic, Chechen, or Albanian as a first language, while the other cluster features more students with German or Romanian backgrounds. These within-school differences suggest that class composition may vary based on curriculum focus or institutional grouping, further affecting the linguistic dynamics in each cluster. By contrast, the elementary school clusters are quite similar, with nearly identical percentages of German, Turkish, and BCS speakers across all classes.

In general, the statistics demonstrate that the number of non-German L1 speakers, the micro-linguistic diversity, and that intra-school variation is more pronounced at the secondary level.

4.1.2. Teacher linguistic background

The information on teachers' linguistic backgrounds presented in this chapter is based on both questionnaire responses and internal school records, as not all teachers participated in the survey.

An analysis of the teachers' linguistic backgrounds across school levels and clusters reveals slight but important differences (Figure 3). Each teaching team consists of 9-11 teachers responsible for one cluster. Across all groups, the most commonly cited first language is German, and 6-8 teachers (65-70%) per cluster cite German as L1 as shown in Figure 3. This represents a relatively homogeneous German-speaking teacher population for both elementary and middle school levels. However, important variation exists in the linguistic representation of other languages, and Turkish and Bosnian/Croatian/Serbian (BCS) are particularly notable. Cluster C in the middle school has two teachers each with Turkish and with BCS as a first language, and one teacher of each language background in Cluster D. This represents slightly increased linguistic diversity among staff in Cluster C.

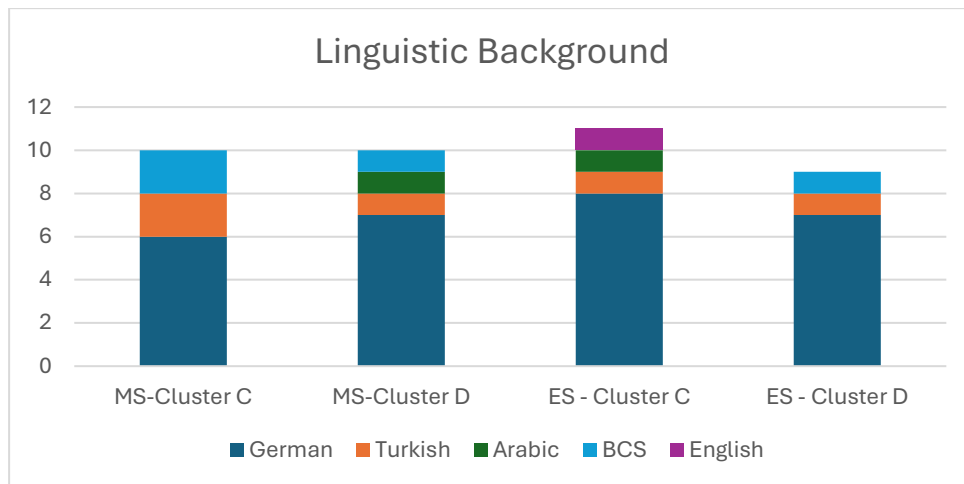


Figure 3 – Linguistic background of the teachers

German predominates across all clusters. In the middle school, MS-Cluster C has the highest share of non-German teachers (6 German; 2 Turkish; 2 BCS), while MS-Cluster D includes 7 German and one each of Turkish, BCS, and Arabic. In the elementary school, ES-Cluster C has 8 German and one each of Turkish, Arabic, and English, and ES-Cluster D has 7 German plus one Turkish and one BCS. English appears only once (ES-C), and Arabic appears once in each school (MS-D and ES-C). Overall, the middle school, especially MS-C, shows the greatest proportional linguistic diversity among teachers.

4.2. Linguistic Landscape

This section presents the findings from the linguistic landscape analysis conducted across selected clusters of the Austrian *Bildungscampus*, encompassing both the elementary and middle school levels. The analysis documents the quantity, type, spatial distribution, and linguistic composition of signs visible in the school environment, including classrooms, hallways, and other common areas. Furthermore, these aspects are compared to gain insight into the linguistic landscape.

4.2.1. Quantitative breakdown of sign types

During the week of 24.-28. of February 2025 a total of 485 linguistic items were documented in the four observed clusters in both the elementary school (ES) and middle school (MS) sections. These items were categorized into ten functional groups, allowing for a detailed quantitative overview of how written language is distributed and employed in the educational setting.

Of the 485 language objects, 14 were double-coded, categorized with more than one code because they held attributes characteristic of more than one function. However, for the purposes of quantitative analysis and tabular representation, each of these signs has been assigned to a single primary category. This was necessary to maintain consistency and clarity in the data presentation. Four of the 14 objects were coded for both *Decorative Artwork* and *General Information*, as shown in Figure 4. In all cases, the texts have a dual function: they are decorative in appearance (e.g., mounted on windows) and convey specific informational content.

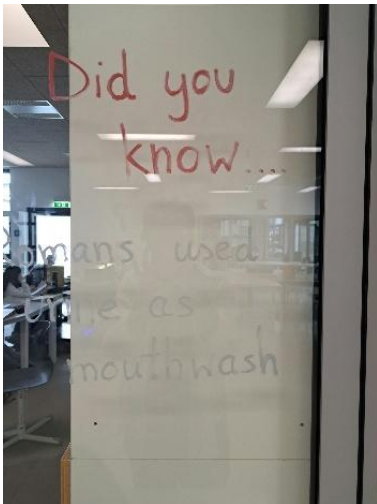


Figure 4 – MS – Decorative Artwork – General Information

In addition, four items initially coded as *Labels* also included further language components that provided *Educational Instructions* or *Educational Information*, as shown in Figure 5. There, the label *Lernbüro* (study area) clearly belongs to the inspirational and guiding sentences underneath it. Two other items combined *Labels* with the categories *General Information* and *General Instruction*.

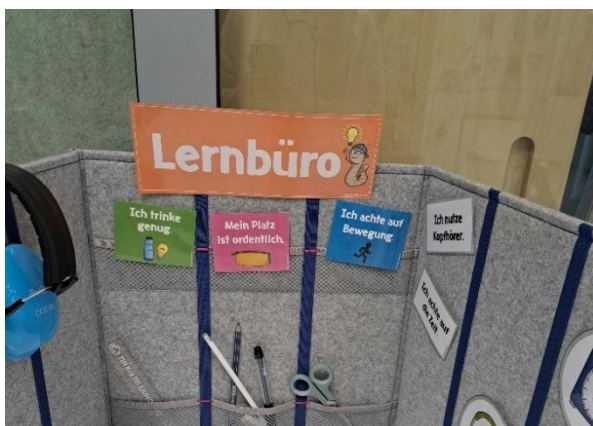


Figure 5 – ES – Labels – Educational Instruction

Furthermore, two items were created by students and thus fall under *Student Artwork*; however, as they display classroom rules, they were also coded as *Classroom Management* (Figure 6). The remaining two multi-coded items include one item coded as both *Classroom Management* and *Decorative Artwork* and one as both *General Instruction* and *Student Artwork*.



Figure 6 – MS – Student Artwork – Classroom management

As can be seen in Figure 7, the most common category was *Labels* ($n = 123$; 25.3%), which were widely used in both ES and MS areas. These signs typically served to name classroom materials, storage areas, group working stations, or learning centers. Their visibility emphasizes the environmental print's functional purpose as a means of classroom organization, particularly for the younger students who tend to be more reliant on visual cues for orientation and task comprehension (Dressler, 2015, pp. 128–145).

Categories	ES	MS	Total	%
<i>Labels</i>	67	56	123	25.3%
<i>Educational Information</i>	67	18	85	17.5%
<i>General Information</i>	32	50	82	16.8%
<i>Classroom Management</i>	41	23	64	13.1%
<i>Student Artwork</i>	16	36	52	10.7%
<i>Decorative Artwork</i>	21	13	34	7.0%
<i>Educational Instruction</i>	15	2	17	3.5%
<i>General Instruction</i>	4	7	11	2.3%
<i>Transgression</i>	7	3	10	2.1%
<i>Awards</i>	0	7	7	1.8%
Total	270	215	485	100.0%

Figure 7 Functional language categories of LL signs

However, the category *Labels* includes more than just educational or instructional signs. Figure 8 illustrates that some labels play pedagogical roles in direct service, with visual verification of subject-matter knowledge or organizational procedures. Figure 9 illustrates, however, that some labels have administrative or institutional functions, like room identification, teacher workspaces, or health and safety signs.



Figure 8 – ES - Labels



Figure 9 – ES – Labels

The second most frequent category, as shown in Figure 7, is Educational Information (n=85; 17.5%), which comprises content-oriented materials, such as vocabulary charts,

math tips, science facts, or theme word walls. Notably, Educational Information was much more prevalent in the elementary school (n=67) than middle school (n=18).

This disparity might reflect pedagogical differences in how content support is externalized at different developmental stages. In elementary education, environmental print is often treated as an extension of instruction, reinforcing key concepts visually and continuously as can be seen in Figure 10. In contrast, middle school learners may receive more abstract or individualized instructions, which in turn results in fewer instructional materials displayed permanently (Malinowski, 2015, pp. 95-113).

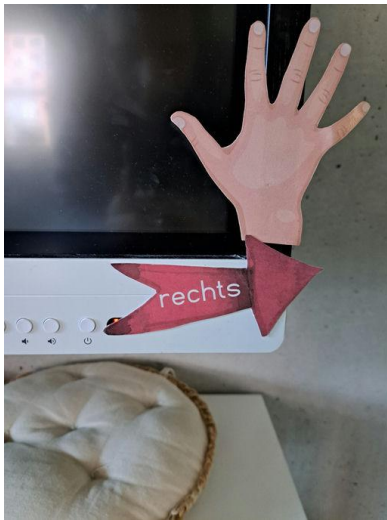


Figure 10 – ES – Educational Information

The next most frequent category was *General Information* (n = 82; 16.8%), encompassing signs that convey institutional or procedural messages, such as school rules or navigation aids. These signs were present in both classrooms and communal areas and contribute to the regulation of school life. However, they were more common in the MS (n = 50) than in the ES (n = 32), possibly reflecting the more complex administrative environment and student autonomy expected at the secondary level.

The visibility of *General Information* suggests an effort to scaffold school-wide behavior and routines through consistent written reminders. A typical example of such a sign can be found in Figure 11, which informs students of the procedure for being allowed to spend their break time in the library.



Figure 11 – MS – General Information

Another functional category featured in the linguistic landscape is *Classroom Management*, which was found a total of 64 times (13.1%), 41 at the elementary school (ES) and 23 at the middle school (MS). These signs would typically include timetables, classroom rules, job charts, group rotation, and behavior systems such as Figures 12 and 13. They serve a different function from content teaching, as they desire to structure the learning environment by guiding routines, assigning responsibilities, and establishing behavior expectations. In the elementary school, the relatively high presence of management-related indicators reflects the developmental need for clear and consistent visual cues to promote autonomy and routine in the younger pupils.



Figure 12 – MS – Classroom Management



Figure 13 – ES - Classroom Management

In the middle school, although the overall number of such signs is somewhat lower, their continued presence suggests that visual management tools remain relevant even as

learners grow older. However, the decrease may reflect a pedagogical shift from teacher-led organization to student self-regulation. All items in this category were exclusively in German, which emphasizes the institutional norm that the dominant language governs not only content instruction but also the spatial and behavioral regulation of school life. The absence of multilingual signage in this category has the potential to limit accessibility for students who are still learning German and further illustrates how school spaces can implicitly prioritize assimilation over linguistic inclusivity, even in functional, non-curricular spaces. However, it could also just reflect the period of data collection.

A reverse trend was observed for *Student Artwork* ($n=52$; 10.7%), which occurred more frequently in the MS ($n=36$) than in the ES ($n=16$). Such a trend may reflect a pedagogical shift towards the construction of student voice and expression of identity as students mature and become increasingly independent. Middle school students are more likely to be nudged toward critical thinking and creative expression, which may be reflected in the increased number of learner-created visual texts on walls and bulletin boards. These items were typically thematic work, personalized content, or projects as seen in Figure 14.

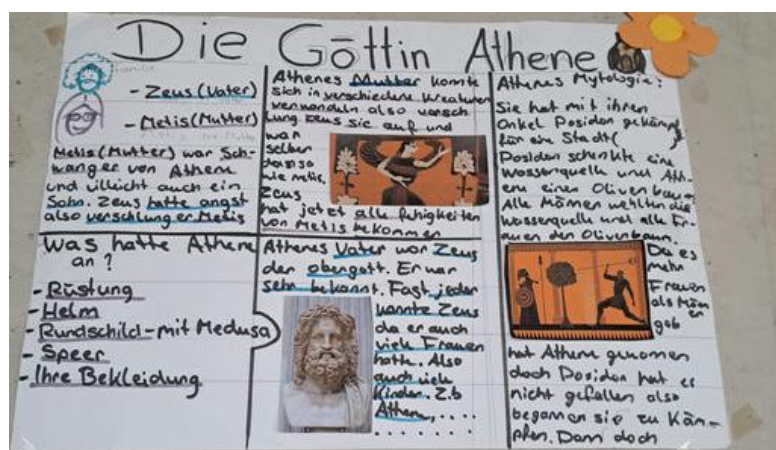


Figure 14 – MS – Student Artwork

Decorative Artwork constituted a smaller but notable portion of the observed linguistic landscape, with a total of 34 items (7%), 21 in the elementary school (ES) and 13 in the middle school (MS). While this category was less frequent than Labels or General Information, its semiotic value lies not only in instructional content but in aesthetic and atmospheric contributions to the learning environment. The category *Decorative Artwork* included commercially produced posters, inspirational quotes, seasonal displays, and

visually appealing classroom themes that were not necessarily related to educational instruction or student centered as revealed in Figures 15 and 16. These kinds of aesthetic texts are thus shaping the school's cultural climate advertising the LL's multi-purposed role beyond education.



Figure 15 – ES – Decorative Artwork



Figure 16 – ES - Decorative Artwork

Conversely, the number of explicitly instructional signs was relatively low. A total of 17 items (3.5%) were categorized as *Educational Instruction*, such as scaffolds for academic tasks (e.g., writing strategies, math steps). These low frequencies suggest that such support may be more often delivered verbally or temporarily displayed. Figure 17 illustrates how such educational instructions might present as and indicate a use in an organizational manner.

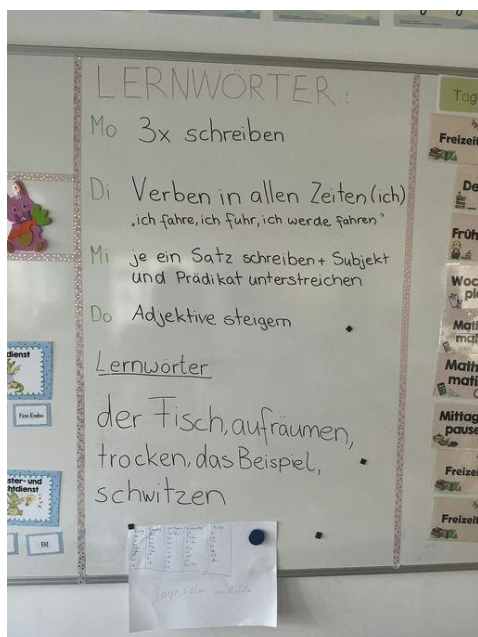


Figure 17 – ES – Educational Instruction

Only 11 signs (2.3%) fell under the category of *General Instruction*, which include signs that do not have any educational value in its narrow meaning; however, they still provide behavioral guidelines. Taking a look at Figure 18, the sign provides clear instructions that are relevant for all students as it provides information about who is allowed to use the table tennis set on Fridays. Similarly, Figure 19 could be interpreted as being aimed at both students and teachers to guide their handling of a specific situation, in this case getting materials.

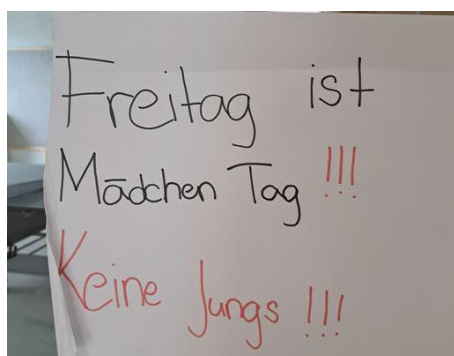


Figure 18 – MS – General Instruction

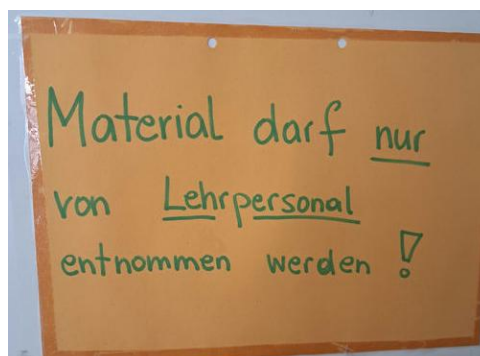


Figure 19 – MS - General Instruction

Items labeled Transgressions, such as unauthorized scribbles (Figure 20), doodles (Figure 21), or graffiti (Figure 22), appeared in 10 of the entries (2.1%). While small in number, these signs are educationally significant. They represent incidental and often

improvisational student use of space, offering another perspective of the controlled and institutional character of the official school signage.



Figure 20 – MS – Transgression



Figure 21 – MS – Transgression



Figure 22 – ES - Transgression

The category *Awards* comprises a small but noteworthy portion of the linguistic landscape, including a total of 7 signs (1.8%), all of which were located in the middle school. These items primarily consist of certificates or recognitions granted to individual students or classes, typically displayed in communal spaces such as hallways or classroom walls.

Although limited in number, the *Awards* signs hold symbolic significance: they signal achievement and school values, often emphasizing academic or behavioral excellence. As can be seen in Figure 23 and Figure 24 these include instances of artistic expression as well as sportive achievements.

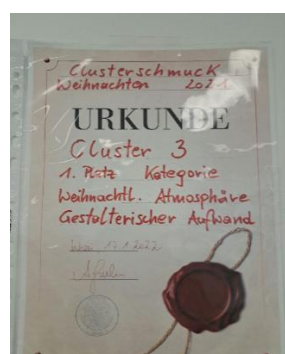


Figure 23 – MS - Awards



Figure 24 -MS - Awards

4.2.2. Overall Language use analysis

The analysis of language use across the documented signs reveals a pronounced imbalance in linguistic representation, indicating a strong monolingual norm within the school environment as outlined in Figure 25. It is important to note that multilingual signs are counted only in the “Multilingual” category and not double-counted in the individual

language rows in each table, which ensures the accuracy of the overall percentage distribution. That means that the following data not specifically talking about multilingual signs are all instances of monolingual occurrences. Furthermore, the languages German, English, BCS, Turkish, and Arabic have been used in this analysis as these are the languages primarily spoken by students (see Chapter 4.1.1. Student Data).

Language	n	% overall
<i>German</i>	407	83.9%
<i>English</i>	48	9.9%
<i>BCS</i>	1	0.2%
<i>Turkish</i>	0	0.0%
<i>Arabic</i>	9	1.9%
<i>other</i>	5	1.0%
<i>Multilingual</i>	15	3.1%
Total	485	100.0%

Figure 25 Languages Overall

German accounted for 83.9% of all signs ($n = 407$), firmly establishing itself as the dominant and near-exclusive language of public textual communication. English was present in 9.9% of signs ($n = 48$), while all other languages combined accounted for just about 3% of the linguistic landscape: Arabic appeared in 9 instances (1.9%), BCS (Bosnian/Croatian/Serbian) in 1 (0.2%), Turkish in none, and “Other” languages in 5 (1.0%). Category “Other” has instances of Chechen, Spanish, Italian, Bulgarian, Finnish, Chinese, Czech, and Russian. Of interest is the fact that just 3.1% of signs ($n = 15$) were multilingual, i.e., featured two or more languages. These figures draw attention to the monolingual nature of the school’s visual culture in which German is the unmarked, default language of institutional power and pedagogical authority.

When broken down by school level, important patterns emerge. Figure 26 presents the distribution of languages found in the elementary school (ES) section of the study, highlighting a striking degree of linguistic homogeneity. Out of a total of 270 documented items, an overwhelming 94.1% ($n = 254$) were written exclusively in German,

underscoring the dominant role of German as the language of school-based textual communication at this level.

English appeared in 15 instances (5.5%), typically in isolated words or short phrases. All other languages (BCS, Turkish, Arabic, and “Other” languages) were entirely absent from the elementary school linguistic landscape. Only one multilingual sign was recorded, amounting to just 0.4% of the total, further emphasizing the strong monolingual orientation.

<i>Language</i>	<i>n</i>	<i>% in elementary school</i>
<i>German ES</i>	254	94.1%
<i>English ES</i>	15	5.5%
<i>BCS ES</i>	0	0.0%
<i>Turkish ES</i>	0	0.0%
<i>Arabic ES</i>	0	0.0%
<i>Other</i>	0	0.0%
<i>Multilingual</i>	1	0.4%
<i>Total</i>	<i>270</i>	<i>100.0%</i>

Figure 26 Languages Elementary School

Figure 27 displays the language distribution of linguistic items documented in the middle school (MS) section. The data reveals a slightly more linguistically diverse environment compared to the elementary school. Of the 215 items, 71.2% ($n = 153$) were in German, which, while still the dominant language, represents a noticeably lower proportion than in elementary school (94.1%). This reduction suggests a somewhat more open linguistic landscape at the secondary level.

English appeared in 15.3% ($n = 33$) of the signs, twice as numerous as in elementary schools, reflecting more exposure to or incorporation of English within middle school settings. This may be explained through course contents, since English is an explicit school subject in middle school. Other languages were observed relatively infrequently: Arabic in 4.2% ($n = 9$), BCS in 0.5% ($n = 1$), and Turkish was not discovered. The *Other* category appeared in 2.3% ($n = 5$) of the signs.

Interestingly, 14 multilingual signs (6.5%) were found in the linguistic landscape of the middle school. Hence, the middle school showed greater linguistic diversity and higher frequency of multilingual signage compared to the elementary school. However, German is the default and unmarked institutional language in both environments and still holds the central communicative and regulatory role in the school environment.

Language	<i>n</i>	<i>% in Middle School</i>
<i>German MS</i>	153	71.2%
<i>English MS</i>	33	15.3%
<i>BCS MS</i>	1	0.5%
<i>Turkish MS</i>	0	0.0%
<i>Arabic MS</i>	9	4.2%
<i>Other</i>	5	2.3%
<i>Multilingual</i>	14	6.5%
Total	215	100.0%

Figure 27 Languages Middle School

4.2.2.1. Cluster-Level Comparison in the Middle School

As shown in Figure 28, exploring Clusters C and D of middle school in more detail shows important differences between language use, which suggests differing functional and didactic foci in the two environments. Of particular relevance to this analysis, Cluster C is oriented toward a health-related theme, while Cluster D self-reports an English language focus.

Within Cluster C, German remains the dominant language, employed in 67,92% of signs ($n = 72$). However, this cluster also has the highest proportion of Arabic signs, at 8,49% ($n = 9$), and includes the only instance of BCS (0,94%, $n = 1$). Furthermore, 5 (4,72%) signs were assigned to the category *Other*. It also includes a few English-language signs, a total of 7,55% ($n = 8$).

These numbers are particularly notable because Cluster C includes the Islamic religious education class, which could be the reason why there are instances of Arabic language and generally more diversity of language. As Islamic instruction is closely connected to

the Arabic language, both for liturgical and cultural reasons, engagement with the religion often leads to increased reflection on and use of multiple languages within the school context.

<i>Middleschool</i>	Cluster C	% in Cluster C	Cluster D	% in Cluster D
<i>German</i>	72	67.9%	81	74.3%
<i>English</i>	8	7.5%	25	22.9%
<i>BCS</i>	1	0.9%	0	0.0%
<i>Turkish</i>	0	0.0%	0	0.0%
<i>Arabic</i>	9	8.5%	0	0.0%
<i>Other</i>	5	4.7%	0	0.0%
<i>Multilingual</i>	11	10.4%	3	2.8%
Total	106	100.0%	109	100.0%

Figure 28 MS Cluster vs Languages

In comparison, items in Cluster D are mostly German (74.3%, $n = 81$) but much more English-oriented, with 22.9% of signs ($n = 25$) in English, more than three times the percentage in Cluster C. There were no other languages used in Cluster D, so it is less multilingual but more overtly bilingual in the context of German and English.

Multilingual signs made up a small but significant proportion of the analyzed linguistic landscape, with a total of 14 occurrences (6.5%) across the middle school. They were more prevalent in Cluster C (10.4%, $n = 11$) than Cluster D (2.8%, $n = 3$), potentially suggesting a greater degree of tolerance toward linguistic diversity in some spaces of learning. Their presence, though intermittent, speaks to efforts of self-reflection and reflection of the multilingualism of the student population, even within a broader monolingual context.

This variation highlights how a school's linguistic landscape is not monolithic, but rather reflects the pedagogical focus, student demographics, and institutional roles of specific areas within it. As research has shown, linguistic landscapes within schools can act as semiotic mirrors of power relations and inclusion policies, signaling who and what is made visible in educational space (García et al., 2016).

4.2.2.2. Cluster-Level Comparison in the Elementary School

Taking a closer look at the elementary school, these differences cannot be identified as both Clusters show almost the same amount and language distribution in their signage, which is very uniform and strongly monolingual. In both Cluster C and Cluster D, German dominates the linguistic landscape, appearing in 94.1% of the signs (n = 127 in each cluster).

This towering presence of German indicates a consistent institutional preference for the national language across both classroom environments.

<i>Elementary school</i>	Cluster C	% in Cluster C	Cluster D	% in Cluster D
<i>German</i>	127	94.1%	127	94.1%
<i>English</i>	7	5.2%	8	5.9%
<i>BCS</i>	0	0.0%	0	0.0%
<i>Turkish</i>	0	0.0%	0	0.0%
<i>Arabic</i>	0	0.0%	0	0.0%
<i>other</i>	0	0.0%	0	0.0%
<i>multilingual</i>	1	0.7%	0	0.0%
Total	135	100.0%	135	100.0%

Figure 29 ES Cluster vs Language

English is the only other language that occurs, with 7 signs (5,2%) in Cluster C and 8 signs (5,9%) in Cluster D. These signs are limited to single words, slogans, or decorated phrases, and do not form part of a general multilingual strategy. No instances of BCS, Turkish, Arabic, or other languages were found in either cluster. Furthermore, only one multilingual sign was observed and this occurred in Cluster C (0,7%), while Cluster D featured no multilingual signage at all.

This comparison shows that, unlike in the middle school, the elementary school environment is almost entirely German-dominated, with minimal variation between clusters. The near-absence of multilingual or minority language visibility suggests a linguistic landscape that does not reflect the full diversity of the student population and may contribute to a monolingual learning atmosphere in which German is positioned as

the only legitimate language for school-based written communication (García & Lin, 2017; Piller, 2016b).

4.2.3. Spatial distribution

In total, $n = 485$ signs were noted with an evident variance among classrooms and common areas within the elementary school (ES) and middle school (MS). In the ES, a vast majority of signs was located in classrooms ($n = 229$; 84.8%), while only a smaller percentage was located in common areas ($n = 41$; 15.2%). In contrast, the middle school showed a more balanced distribution. 114 signs (53.0%) were located in classrooms and 101 signs (47.0%) in shared spaces.

This contrast suggests that the ES environment is primarily inward-oriented, focused on classroom-based communication and instructional support. However, the MS context allows for a more visible textual presence in shared public spaces. Across both school levels, however, classrooms were dominated by functional signage. In ES classrooms as seen in Figure 30, Educational Information ($n = 65$; 24.1%) and Labels ($n = 49$; 18.2%) were most common, followed by Classroom Management signs ($n = 40$; 14.8%). Expressive signage such as Student Artwork remained limited at just 1.8% ($n = 5$).

Elementary School	Classrooms	%	Common areas	%	Total	Total %
<i>Labels</i>	49	18.1%	18	6.7%	67	24.8%
<i>Educational Information</i>	65	24.1%	2	0.7%	67	24.8%
<i>Classroom Management</i>	40	14.8%	1	0.4%	41	15.2%
<i>General Information</i>	27	10.0%	5	1.9%	32	11.9%
<i>Student Artwork</i>	5	1.9%	11	4.1%	16	5.9%
<i>Decorative Artwork</i>	21	7.8%	0	0.0%	21	7.8%
<i>Transgression</i>	6	2.2%	1	0.4%	7	2.6%
<i>Educational Instruction</i>	14	5.2%	1	0.4%	15	5.6%
<i>General Instruction</i>	2	0.7%	2	0.7%	4	1.5%
<i>Other</i>	0	0.0%	0	0.0%	0	0.0%
Total	229	84.8%	41	15.2%	270	100.0%

Figure 30 Distribution of signs ES

MS classrooms followed a similar functional pattern (see Figure 31), with Labels (n = 24; 11.2%), Classroom Management (n = 22; 10.2%), and General Information (n = 22; 10.2%) as the most frequent categories. However, Student Artwork (n = 12; 5.6%) and Decorative Artwork (n = 10; 4.7%) appeared more often in MS than in ES, suggesting that student expression plays a somewhat larger role in the older age group.

Middle School	Classrooms	%	Common areas	%	Total	Total %
<i>Labels</i>	24	11.2%	32	14.9%	56	26.0%
<i>Educational Information</i>	15	7.0%	3	1.4%	18	8.4%
<i>Classroom Management</i>	22	10.2%	1	0.5%	23	10.7%
<i>General Information</i>	22	10.2%	28	13.0%	50	23.3%
<i>Student Artwork</i>	12	5.6%	24	11.2%	36	16.7%
<i>Decorative Artwork</i>	10	4.7%	3	1.4%	13	6.0%
<i>Transgression</i>	1	0.5%	2	0.9%	3	1.4%
<i>Educational Instruction</i>	1	0.5%	1	0.5%	2	0.9%
<i>General Instruction</i>	2	0.9%	5	2.3%	7	3.3%
<i>Other</i>	5	2.3%	2	0.9%	7	3.3%
Total	114	53.0%	101	47.0%	215	100.0%

Figure 31 Distribution of signs MS

In shared spaces, the differences become more pronounced. ES common areas were still dominated by Labels (n = 18; 6.7%) and General Information (n = 5; 1.9%), with no Decorative Artwork recorded. In contrast, MS common spaces showed a greater diversity of sign types: Labels (n = 32; 14.9%) and General Information (n = 28; 13.0%) remained prominent, but Student Artwork (n = 24; 11.2%) and even small amounts of Decorative Artwork (n = 3; 1.4%) contributed to a more expressive environment.

Overall, the data indicate that while both school levels rely heavily on signage for functional purposes, written primarily in German, the MS environment provides comparatively more space for student voice and identity expression, especially in common areas. This spatial and functional distribution reflects differing orientations toward textual visibility, with ES remaining strongly classroom-bound and MS beginning to open up public visual space for more varied and participatory uses of language.

4.2.4. Comparing language vs sign type

An analysis of language distribution across the ten functional sign categories (see Figure 32) reveals both the dominance of German and the limited yet patterned visibility of other

languages, shedding light on the ideological and communicative functions of language in the school's visual space. With 407 out of 485 signs (83.9%) presented in German, the data confirms that the linguistic landscape of the school is heavily shaped by a monolingual orientation. German occurs in all the functional categories and most characteristically in structurally significant kinds of signage: Labels ($n = 116/123$; 94.3%), Educational Information ($n = 75/85$; 88.2%), General Information ($n = 73/82$; 89.0%), and Classroom Management ($n = 58/64$; 90.6%). The consistent occurrence in both instructional and organizational categories further indicates German as the default language of authority, order, and pedagogical legitimacy.

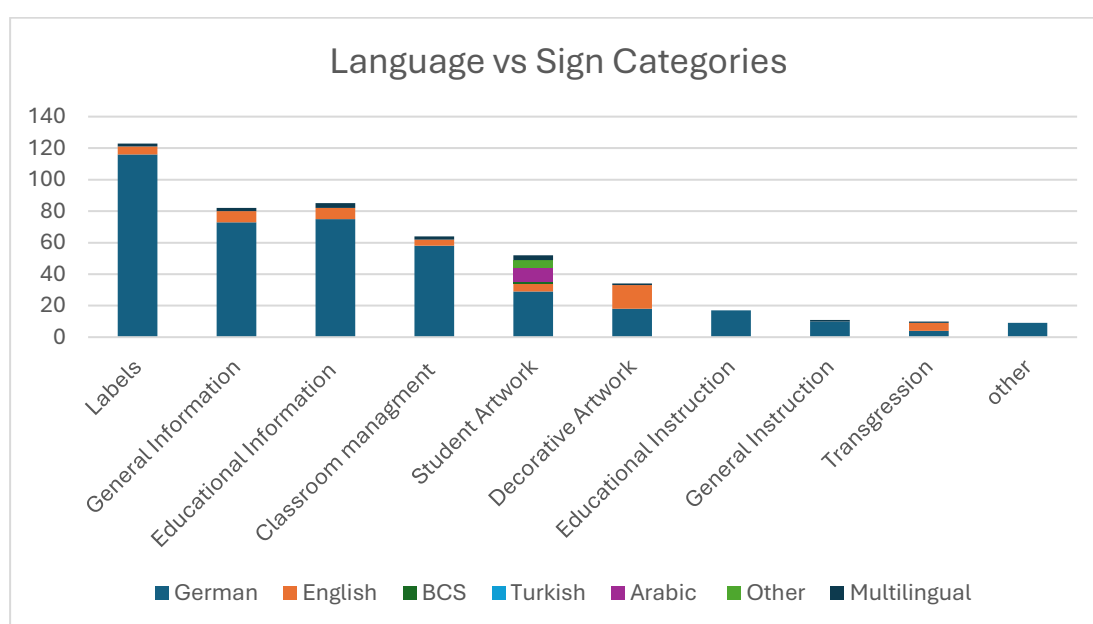


Figure 32 – Language vs Sign Categories

English, the second most visible language, appears in 48 signs (9.9%), with notable concentrations in *Decorative Artwork* ($n = 15/34$; 44.1%), *Educational Information* ($n = 7/85$; 8.2%), and *General Information* ($n = 7/82$; 8.5%). The categories *Transgression*, *Labels*, and *Student Artwork* all show five instances and *Classroom Management* includes four. The contexts in which English appears are mostly expressive or culturally influenced, rather than regulatory or instructional. For example, English terms in *Decorative Artwork* are more likely to appear in motivational posters or visually appealing elements rather than as assistants to content delivery.

This means that English is holding a semi-official symbolic role, reflecting its importance as a school subject and its functions with modernity, creativity, and aspirational identity

(Gorter & Cenoz, 2017; Piller, 2016b). It is, however, more restricted in status to German and largely absent from categories bearing the burden of institutions, such as rules or labels.

In-depth inspection of minority languages shows a less pervasive and functionally narrower role. Arabic (n = 9; 1.9%), BCS (n = 1; 0.2%), and Other languages (n = 5; 1.0%), more explicitly Chechen, Spanish, Italian, Bulgarian, Finnish, Chinese, Czech, and Russian, appear only in the Student Artwork category. They occur only in bottom-up, student-generated material, often as part of assignment connected with creative expression, self-expression, or identity. Their complete absence from top-down categories such as Classroom Management, Educational Instruction, or Labels strongly suggests that they are not institutionally acknowledged as part of the school's communicative repertoire. Instead, they function as personal or community-based resources, legitimized only when voiced by students themselves.

It is striking that multilingual signs only account for 3.1% of all written signs in the school linguistic landscape (n = 15 out of 485). This indicates that linguistic diversity only plays a small role within the observable school environment. Even though these signs potentially indicate a degree of openness to multilingualism, closer analysis shows that they are often limited in function and routinely symbolic. The majority of multilingual signs (11 of 15) are simple translations from German to English.

This pairing reinforces the dominant institutional norm: German as single language of instruction and English as high-prestige foreign language offered in the curriculum. Rather than extending the linguistic environment to cover the full range of student home languages, these signs reinforce the legitimacy of the two already legitimated languages through formal school organization.

Functionally, multilingual signs are spread across a number of categories but remain thin across each. *Educational Information* and *Student Artwork* contain three multilingual examples (0,6%), possibly reflecting scattered attempts to include heritage languages in thematic material or student-sponsored creative activity. These are exceptions, however, and no indicators for a normal practice. There are two multilingual signs in each of the *General Information*, *Classroom Management*, and *Labels* categories (0.4%). But even in those functional domains, where translation might enhance access, multilingualism is

far from systematically utilized. More disconcertingly, there is a virtual absence of multilingualism in core domains of instruction. *Educational Instruction* has no multilingual signage, and *General Instruction* has just one (0.2%). This means that pedagogically significant content is almost solely delivered in German, regardless of student language background. Similarly, *Transgression* and *Decorative Artwork* both consist of one multilingual occurrence each (0.2%), indicating occasional, marginal existence in an environment that is decorative.

The composition and organization of these multilingual signs might also reflect structural exclusion. Only two out of the entire set of signs in the dataset include more than two languages and both belong to the *Labels* category. These few instances are also the only times that Turkish is visible within the linguistic landscape. The same applies to BCS (Bosnian/Croatian/Serbian), which appears in these two multilingual signs for labels and one additional monolingual sign. Arabic is used more often, at least in student production; however, this could be influenced by the time of data collection as it was done during Ramadan.

The overall number and distribution of multilingual signs suggests limited use across functional domains. No multilingual signage is present in categories directly related to pedagogical instruction, such as *Educational Instruction*, and occurrences are sparse in regulatory or institutional contexts. The data also indicate that multilingual signs appear both in top-down (e.g., *Labels*, *Classroom Management*, *General Information*) and bottom-up (e.g., *Student Artwork*, *Transgression*) forms, though with a predominance in the latter. The inclusion of multilingual elements across multiple categories highlights a range of usage, though at relatively low frequencies.

Overall, the functional distribution of languages shows that German is structurally central, serving to define space, regulate behavior, and convey core curricular content. English is peripheral but used occasionally, especially in aesthetic and cultural contexts. Minority and heritage languages, on the other hand, are strategically relegated to expressive peripheries of the linguistic landscape, emerging only when they are used by students and invisible in the official school talk. A small number of multilingual signs that are mainly combining German and English are distributed across several categories but remain quantitatively and functionally marginal. This limited visibility reflects a broader

sociolinguistic dynamic of language policy, inclusion, and symbolic power. It illustrates how little emphasis is laid on the representation of first and heritage languages in the school context. In turn, it outlines how the linguistic landscape in schools represent institutional ideologies of belonging, legitimacy, and authority (Laihonen & Szabó, 2018).

4.3. Findings from Teacher Questionnaire

This section presents the results of the qualitative teacher survey, the third data collection step. The aim of this instrument was to research how teachers experience, negotiate, and respond to the multilingual reality in their classroom and the broader school environment. Twenty teachers participated in the study, seventeen from the middle school and three from the elementary school. Their responses offer rich data on the daily management of language diversity at the intersection of policy, pedagogical practice, and personal belief. Due to the strong imbalance in the number of participants from each school level, the responses are analyzed collectively as a single group in the following section.

Six overarching themes were found by thematic analysis of the questionnaire data: awareness to linguistic diversity, classroom practices, attitude towards multilingualism, institutional support and policy perceived, confidence and training of teachers, and evidence of willful blindness or contradiction. These themes not only outline personal opinions but also show the institutional ideologies and pragmatic constraints surrounding that influence language use in teaching contexts.

4.3.1.1. Awareness of linguistic diversity

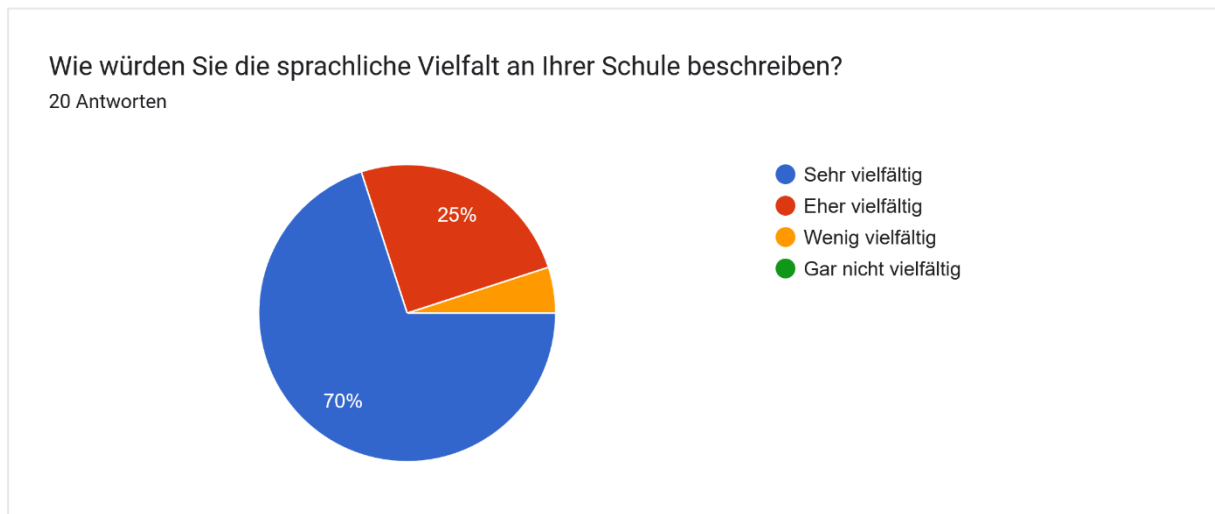


Figure 33 – Linguistic Diversity

Responses to the questionnaire by educators reveal a clear consciousness of linguistic diversity that is present in their classrooms. When asked to rate the extent of linguistic diversity of their students as shown in Figure 33, 14 of the 20 teachers (70%) labeled their classes as “very diverse” (*sehr vielfältig*) and five (25%) selected “somewhat diverse” (*eher vielfältig*). Only one teacher (5%) rated their classroom as not “very diverse” (*wenig vielfältig*), adding the note “*kaum bis gar nicht vorhanden*”. This is to be contrasted with other responses that report high rates of multilingualism, e.g., “*Sehr hoher Anteil an SuS (Schülerinnen und Schüler) mit Migrationshintergrund*” and “In some classes we reached more than 15 languages spoken amongst the children.”

These teacher-reports are corroborated by more detailed information provided in response to the open question concerning the languages used by students. Ten (50%) of the respondents reported six or more languages employed in their classes, one teacher (5%) as many as twelve. Six teachers (30%) reported five different languages, three (15%) stated three, and only one teacher (5%) noted two. Notably, all 20 participants (100%) identified Turkish and Bosnian/Croatian/Serbian (BCS) as part of their student cohort’s linguistic repertoire. Some used the umbrella term “BCS,” while others specified “Serbian” and “Croatian” separately, reflecting both socio-political complexity and differing levels of linguistic knowledge.

Arabic was mentioned by 17 teachers (75%), and several of these proceeded to distinguish between regional or dialectal varieties such as “Syrian,” “Afghan,” or “Iraqi.” The remaining

responses were a combination of minority languages (frequently spoken by only one or two students per class) highlighting the scale of micro-linguistic diversity in the school environment. These findings corroborate with the school demographic data that confirm the dominant presence of Turkish, BCS, and Arabic speakers. In summary, the results suggest that most teachers acknowledge their classrooms' multilingualism and can name several of the represented languages. The variation in the way the languages are being reported may be a function of familiarity, teaching experience, or usefulness in teaching.

4.3.1.2. Classroom practices

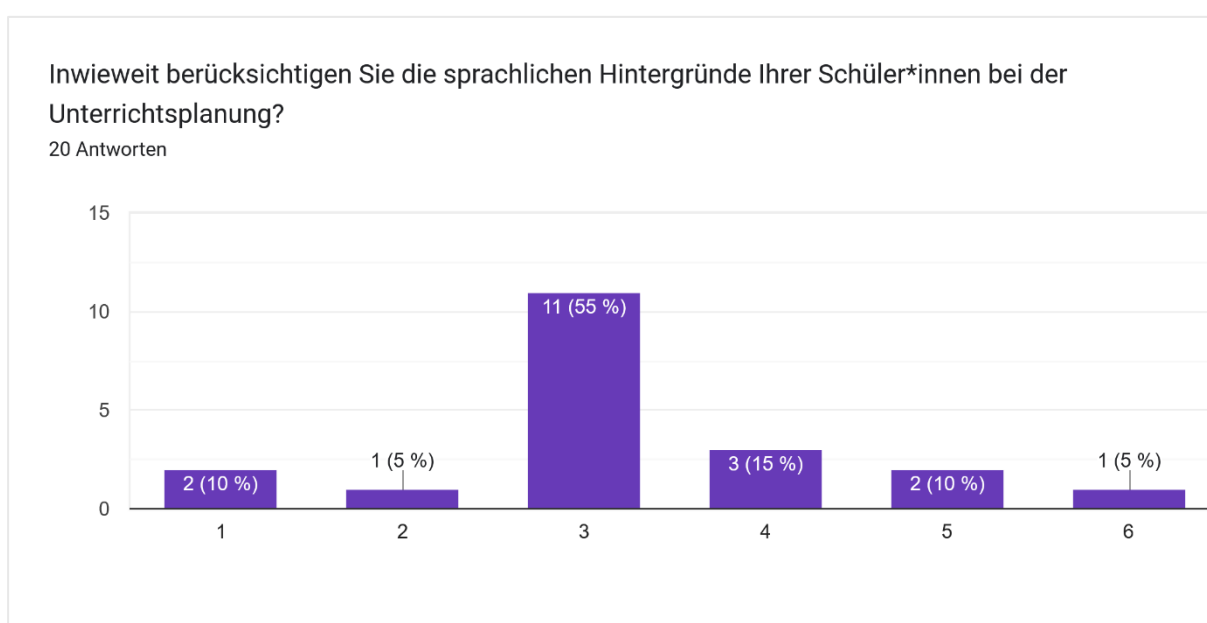


Figure 34 – Lesson Planning

While the vast majority of teachers acknowledge the presence of linguistic diversity among their students, their responses indicate quite limited incorporation of such diversity into lesson planning. When asked "*Inwieweit berücksichtigen Sie die sprachlichen Hintergründe Ihrer Schüler*innen bei der Unterrichtsplanung?*" (To what extent do you take your students' linguistic backgrounds into account when planning your lessons?), eleven out of the twenty teachers (55%) chose response 3 on a scale of 1 to 6 which shows moderate consideration (Figure 34). The scale shows a range from 1 (never) to 6 (always). Three (15%) selected 4, two (10%) selected 5, and one (5%) selected 6. In contrast, three teachers (15%) selected 1 or 2, indicating little attention to linguistic diversity in their lesson planning.

Wie regelmäßig nutzen Sie mehrsprachige Materialien oder Ressourcen (z. B. Bücher, Plakate, Arbeitsblätter)?

20 Antworten

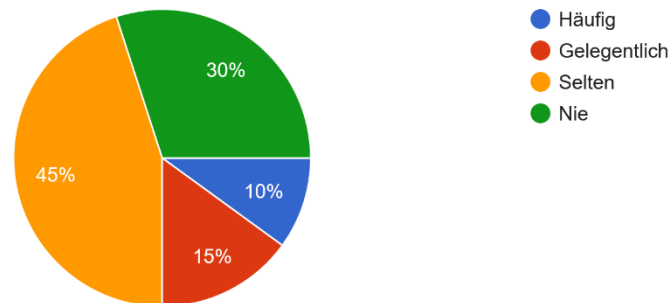


Figure 35 – Multilingual Materials

As depicted in Figure 35, this pattern extends to material selection. Nine teachers (45%) stated they rarely use multilingual materials (e.g. books, posters, worksheets), and six (30%) reported never using them. Only two (10%) used such materials regularly and three (15%) occasionally. Even with universal recognition of linguistic diversity, it would appear that inclusive materials are not part of recognized instructional practice.

Open-ended answers reflect a variety of strategies teachers deploy to effectively support students with low language proficiency in the language of instruction. Eight (40%) of the participants reported using bilingual dictionaries or translation programs as part of their pedagogy. Five (25%) reported applying *Einfache Sprache*, which reduces syntactic and lexical complexity without lowering content. As Pottmann (2020) explains, *Einfache Sprache* equates to plain language and is intended for low-level language ability readers, distinguishing it from *Leichte Sprache*, which adheres to more formalized rules and is intended for individuals with intellectual disabilities.

Additionally, four teachers (20%) described using principles of *sprachsensibler Unterricht*, including visual scaffolding and contextualized vocabulary support. Other responses included the use of English-language media (books, songs, videos), online programs, or in one case no language-related support at all ("*keine*"). While these practices demonstrate initiatives on the individual teacher's level, their sporadic and varied nature suggests that inclusive pedagogies are not systematically implemented at the institutional level.

4.3.1.3. Attitudes toward multilingualism

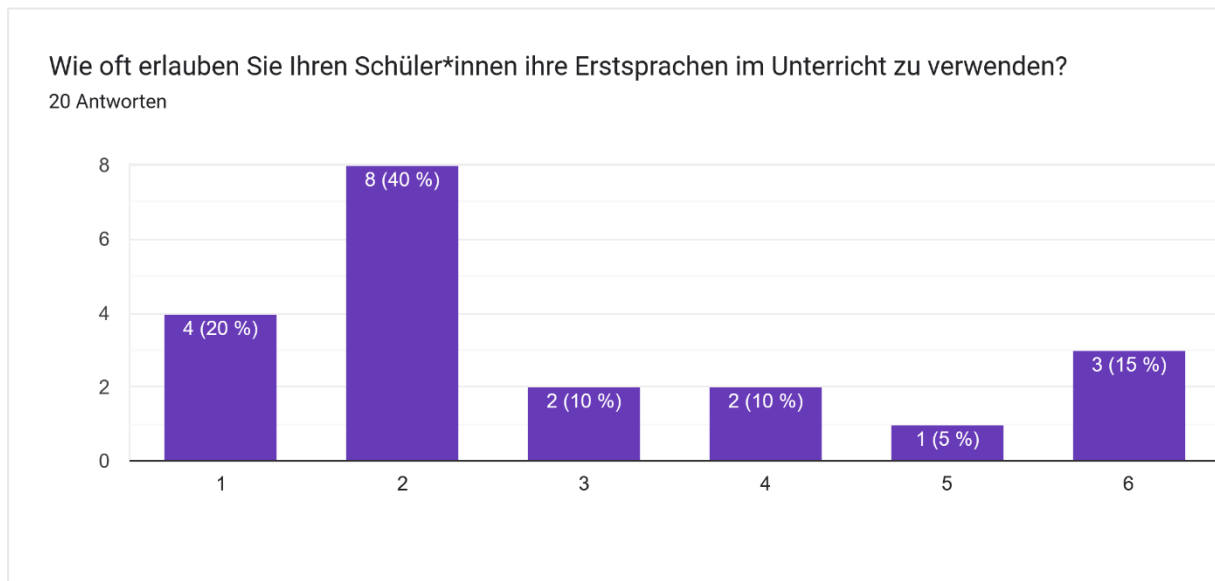


Figure 36 – Language Use during Class

The responses in Figure 36 indicate a generally cautious to restrictive stance toward the use of students' first languages (L1) in the classroom. When asked *“Wie oft erlauben Sie Ihren Schüler*innen ihre Erstsprachen im Unterricht zu verwenden?”* (How often do you allow your students to use their first languages in class?), 60% of the respondents (n = 12) selected the lowest two values on a six-point scale, suggesting that first language use is permitted rarely or not at all. Only three teachers (15%) reported allowing frequent use of L1, while the remaining responses reflect varying degrees of conditional acceptance.

Particularly interesting, however, are the responses to unsanctioned uses of first languages, the spontaneous student use that occurs without teacher prompting. Here, a clear pattern of regulation emerges: 12 teachers (60%) explained that they intervene when students use their home languages in class, often justifying this intervention with the phrase “not everyone understands.” These interventions range from polite reminders to direct correction, as seen in the following examples:

- *„Ich ermahne sie, dass sie Unterrichtssprache reden sollen.“*
- *„Ich weise sie höflich darauf hin, dass es anderen Menschen gegenüber, die diese Sprache nicht sprechen, unhöflich sei, in einer anderen Sprache zu sprechen und deswegen Deutsch gesprochen werden müsse.“*

- *„Ermahnen & sie darum bitten, Deutsch zu reden, damit alle Kinder verstehen, was gesagt wird.“*

Such claims suggest that the regulation of language is generally framed not just as a question of pedagogical clarity but also as a behavioral issue in terms of social norms and a conception of justice. The underlying presumption would appear to be that the use of languages other than the teaching language (German) is an obstacle to inclusion, rather than an enabler of peer support or representation of identity.

A smaller group of teachers adopted more flexible approaches. One teacher (5%) stated they encourage students to repeat what was said if the content might align with the lesson's objectives, or else does not react. Two others (10%) reported they respond to spontaneous L1 use by asking students either to repeat what was said in German, thereby attempting to bridge linguistic inclusion with group comprehension. These strategies reflect a more pragmatic stance, where students' languages are acknowledged and briefly incorporated without disrupting the flow of instruction. Additionally, five teachers (25%) stated they react relaxed and do not mind when students use their first language, implying a passive acceptance rather than active support.

4.3.1.4. Perceived Support or Lack of School Policy

Teachers' responses reveal a mixed picture regarding institutional support for linguistic diversity in their schools. When asked whether multiple languages are visible in signage, displays, or communication materials within the school building, only 10% (2) responded with a clear "yes" as Figure 37 presents. Seven people (45%) answered "teilweise," while 25% (n = 5) stated that no such multilingual visibility existed. Notably, 20% of respondents (n = 4) selected "weiß ich nicht," suggesting limited awareness or attention to the linguistic landscape of their school environment.

Sind in Ihrer Schule mehrere Sprachen in Beschilderungen, Aushängen oder Kommunikationsmaterialien sichtbar?

20 Antworten

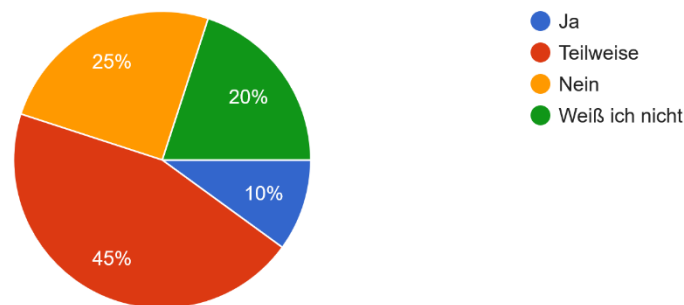


Figure 37 – Signage

This uncertainty is echoed in other aspects of the questionnaire. When asked about available resources or structures that support linguistic diversity, only five teachers (25%) mentioned participation in *Voxmi*, a national initiative promoting multilingualism in schools. Four (20%) indicated the presence of native speakers within the teaching staff as a potential asset, and just one teacher (5%) referred to online native language support. However, beyond these mentions, several responses imply a lack of awareness of existing resources or strategies within the school setting. This is in line with findings of earlier studies that even when policies make support structures available, they may not be made aware to or utilized by teaching staff (Duarte, 2020).

Teachers were also asked if linguistic diversity is valued in their school. Eleven (55%) of the sample answered "yes," four (20%) answered "partly," and five (25%) said "no." The qualitative comments show how imbalanced these perceptions are among staff and settings.

One teacher wrote:

„Ja, ich denke schon, dass die sprachliche Vielfalt an unserer Schule wertgeschätzt wird. Den Kindern ist es freigestellt, welche Sprache sie bspw. beim Essen oder in der Pause reden.“

This response shows some degree of tolerance for linguistic variation in informal contexts, such as lunch or recess. But the phrasing suggests that this freedom is allowed rather than fostered, and it is not known whether or not such openness transfers to instruction classrooms or school policy.

In contrast, another teacher critically described staff attitudes as conditional or even dismissive:

„Vom Großteil des Kollegiums nicht. Je mehr Kinder die selbe Muttersprache haben, desto weniger gut oder ‚wertvoll‘ ist diese.“

This comments on how the appreciation of linguistic diversity is lost if it reaches quantitative majority. It indicates that certain members of staff have a more positive affinity with minority languages when regarded as exceptional and cultural add-on but become more critical of the use when a majority of students speak it. This reflects a deficit-oriented view in which multilingualism is not seen as a collective strength but rather as a potential problem when widespread. In this context, the comment might also indicate a raised concern that the use of minority languages could lead to a decline in the use of the instructional language within the classroom. Moreover, there is apprehension that the increasing dominance of certain minority languages may result in the exclusion of students or teachers who do not speak these languages, thereby potentially shifting the linguistic imbalance rather than resolving it.

A third comment addressed the internal language culture within the teaching staff:

„Nein. Selbst ich als Deutscher musste mich an die österreichischen Wörter gewöhnen, während bestimmte deutsche Wörter beim österreichischen Lehrkörper ‚verboten‘ sind.“

Here, the teacher diverts the focus from the students' languages to dialect variations within the German language. The remark implies that even within the majority language, there are colloquial norms that can discriminate linguistic difference and point toward a general tendency of linguistic standardization and norm enforcement. This can indicate the presence of unstated hierarchies not only between languages but also within one language, according to regional or national variation. However, it might also just display one teacher's personal experience.

In summary, these claims do not add up to a monolithic institutional position towards multilingualism. Rather, it represents a combination of tolerance, resistance, and de facto exclusion. Tolerance for linguistic diversity exists up to a point, for instance within private domains, but there is little evidence of school-level processes or clearly formulated policies that would press multilingualism as a pedagogic or institutional value.

4.3.1.5. Personal confidence and training

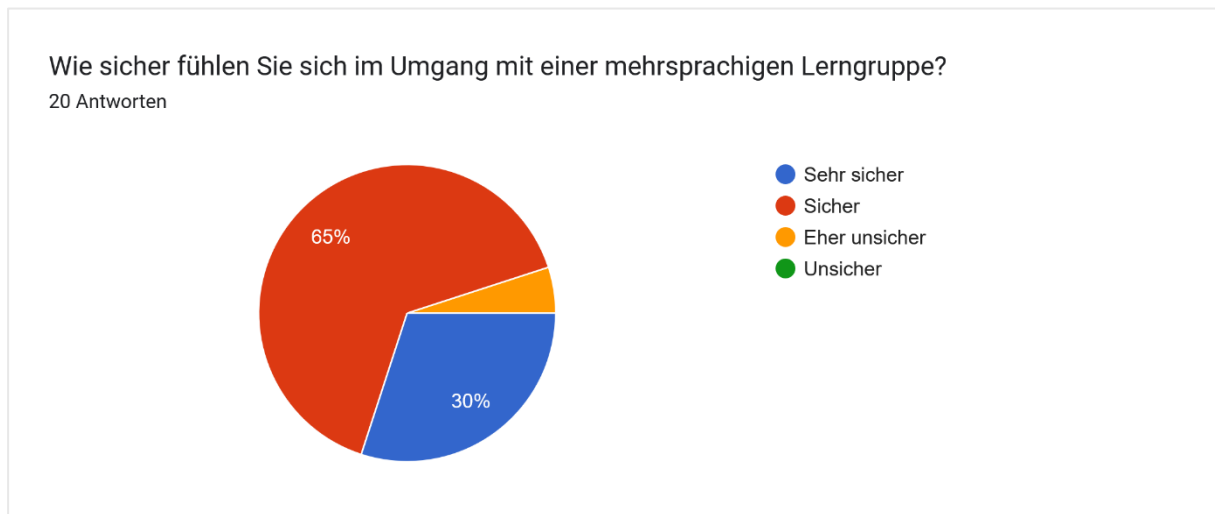


Figure 38 – Personal Confidence

As displayed in Figure 38, most teachers in this research express that they feel confident in handling multilingual classes. To the question "Wie sicher fühlen Sie sich im Umgang mit einer mehrsprachigen Lerngruppe?", 30% (n = 6) ticked "sehr sicher" and 65% (n = 13) chose "sicher", which reveals that 95% (n = 19) of participants rate their confidence level as high or very high. Only one teacher (5%) chose "eher unsicher", and none indicated that they felt completely unprepared. This range suggests a general feeling of confidence among teachers in their ability to deal with linguistically heterogeneous student groups. However, such self-evaluations must be interpreted with care. Confidence and competence are not always the same, particularly in the absence of formal preparation or systematic support structures. Additionally, this reported confidence possibly reflects a broader institutional culture in which multilingualism is the norm in the student body but not yet solidified in terms of pedagogical approaches. While most teachers express high levels of confidence, their teaching practices and the structural support underpinning this confidence might be uneven and are unknown. This extremely high

degree of perceived confidence contradicts the real training experience of the teachers, as is evident in Figure 39.

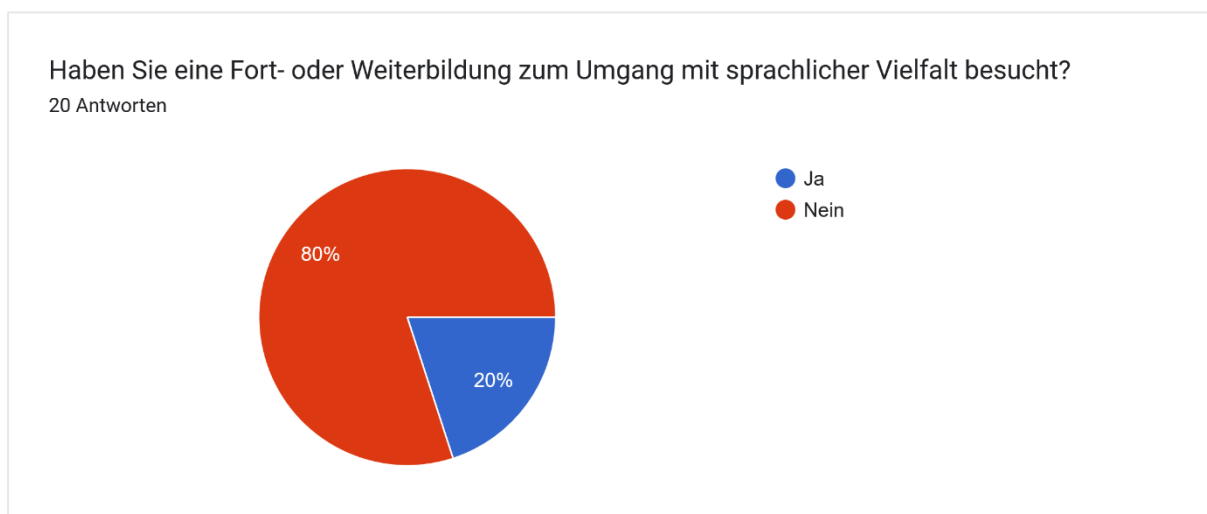


Figure 39 – Further Education

When asked about whether they had attended any kind of professional development focused on linguistic diversity or multilingual education, a mere 20% ($n = 4$) stated that they had received such training. These services included DaF/DaZ (*Deutsch als Fremdsprache/Deutsch als Zweitsprache*) education, intercultural parent involvement strategies, language-sensitive teaching, and multilingualism in STEM (Science, Technology, Engineering, and Mathematics) subjects. The remaining 80% of teachers ($n = 16$) received no official training in this area. This discrepancy between self-perceived preparedness and actual participation in relevant professional development suggests a critical gap that warrants further empirical investigation.

While it is feasible that many teachers may feel confident in addressing linguistic diversity, the lack of formal training suggests that such confidence may not be grounded in evidence-based pedagogical knowledge or practices. What emerges clearly is that many teachers work in the absence of a particular theoretical or methodological framework for managing linguistic diversity within the classroom. In response to the question regarding what types of support would enhance their ability to work effectively in multilingual environments, teachers articulated a clear need for both systemic and practical resources, as reflected in their expressed requests for such support.

The majority (12 of the 20; 60%) of the teachers asked for compulsory professional development courses providing explicit instructional strategies and pedagogical

guidance for multilingual classrooms. Three of the teachers (15%) specifically expressed a desire for language classes that would help them better know and connect with minority or heritage language-speaking students. Some of the other suggestions were learning from their older colleagues, exposure to internet resources, and in-school assistance. One of the teachers did not know what would be helpful. Such responses are reflective of the need for systems over and above personal effort and an overall appeal for institutional systems that offer effective and sustainable tips.

While there is a high degree of confidence, the majority of teachers are nevertheless aware of the need for more extensive training modules and material resources to address the complexity of linguistic diversity in a meaningful and pedagogically effective way.

4.3.1.6. Instances of willful blindness or contradictions

In several responses, contradictions emerge between the awareness of linguistic diversity and the actions taken in response to it. One teacher described their school as "*wenig vielfältig*" despite being able to report eleven languages their students speak. This may reflect a form of willful blindness, where linguistic diversity is acknowledged in principle but in reality is not treated as pedagogically relevant. However, it might also be the case that the teacher misunderstood the question as later the teacher states when asked if linguistic diversity is valued within their school context:

“Nicht wirklich. Ich denke, dass sich die meisten Lehrpersonen stark darauf fokussieren, dass die Kinder gut Deutsch lernen, was natürlich auch verständlich ist. Ob die SuS ihre Erstsprache können oder nicht ist den meisten egal. Ich denke auch, dass es den meisten Lehrpersonen relativ egal ist, was ich sehr schade finde, da an meiner Schule so viele verschiedene Sprachen vertreten sind.“

Therefore, this is clearly indicating that the teacher is aware of the linguistic diversity in the school. Hence, it seems that the previous statement stating that there is little diversity in the school contradicts with the later statement.

Despite acknowledging the presence of multilingual learners in their classrooms, most teaching practices in this study either turn to monolingual methods (primarily German, occasionally additions of English) or lack any proactive strategy to engage with students' full linguistic repertoires. A few teachers indicated that they took no specific actions to

promote multilingualism, simply responding "*Keine*" (none). The lacking connection between the awareness of linguistically diverse students to the application to a pedagogically inclusive method could arise from underlying issues, such as time constraints, curriculum restraints, a lack of supportive institutions, or the vague nature of policy or training.

Duarte (2020) has termed this phenomenon "willful ignorance". This is a situation in which teachers are aware of linguistic diversity but do not to address it systematically, which leads to the status quo. In their Finnish study, Alisaari et al. (2021) show that teachers consistently implement monolingual classroom norms, even in multilingual classrooms. They justify this behavior by referring to fairness, order, or curriculum requirements. In this way, it can be said that teachers are not openly positioned against multilingual practices, only that they do not have the resources, institutional support, or conceptual understanding to do so in a meaningful way. Thus, when it comes to language, inclusion is more of an aspiration than an on-the-ground reality.

While a few teachers demonstrated awareness of supporting resources, the majority did not, pointing to issues of poor communication, inconsistent implementation, or underuse by instructional staff. The apparent lack of awareness regarding available supports suggests that provisions for linguistic inclusion may exist at the school or system level, but are not widely recognized. This highlights the need for more clearly accessible, visible, and systematically embedded support structures for multilingual education. This relates to a possible lack of transparency and communication on the part of institutions, and not to a lack of goodwill or intention on the part of teachers. However, without clear policies or organized professional development that connects to a vision of a school or system that is inclusive of multilingual learners, teachers must manage complex multilingual realities without clear resources or support.

In addition, this lack of clarity may risk reinforcing an unfortunate framing of the "value" of languages. When linguistic diversity is acknowledged only sporadically- For instance, when a student's language is unique in the classroom, it can be framed as culturally enriching. By contrast, when a language is shared by a larger group of students, its presence may subtly shift classroom dynamics and be perceived as a challenge. In a small number of teacher comments, there were hints that the value ascribed to a

language could be inversely related to the number of its speakers. If so, this might complicate the acceptance of widely spoken minority languages such as Turkish or BCS and could be read as questioning their legitimacy. Similarly, reports of discouraging dialectal variation among first-language German speakers, such as proscribing words common among speakers from Germany, might reflect a preference for standardization. Such tendencies may be tied to institutional power relations and some discomfort with linguistic fluidity. These interpretations are tentative and based on limited comments; additional evidence would be required to substantiate them.

The restriction of students' home language use, often justified based on inclusivity with arguments such as "not everyone understands", is another area of interest. While promoting mutual comprehension is a reasonable pedagogical aim, treating home languages as inherently exclusive may risk reinforcing monolingual norms and overlooking possible peer-learning benefits. More integrative approaches—such as ad-hoc peer translation, translanguaging practices, or structured multilingual group work—could offer alternatives that validate students' linguistic identities while still supporting communicative clarity. In some settings, such approaches may draw on students' full linguistic repertoires and might enable richer language learning, though effects are likely to vary with context, implementation, and support. The limited visibility of these approaches in the practices reviewed tentatively suggests that linguistic diversity is still more often framed as a challenge to be managed than as a resource that could be productively leveraged.

Ultimately, the inconsistency of reported teacher confidence and professional teacher training in regards to multilingual classrooms indicates that the teachers' perceived competence is not necessarily aligned with pedagogical preparedness. This gap raises further questions on how varied their pedagogical knowledge is and hence on what their confidence is grounded on. These teachers may make light of challenges that they face and regard translanguaging issues as ordinary aspects of routine teaching that do not need pedagogical intervention or awareness. Because teachers might not be exposed to more monolingual teaching contexts, some difficulties may go unnoticed or unproblematized. As a result, teachers could have an increased confidence by having learned how to manage a multilingual classroom experientially, possibly without

reflecting on and acting upon intentional strategies of linguistic inclusion. This suggests the merit of reflective professional training that challenges teachers to critically reflect on not only their own teaching but also the broader institutionalized norms under which they act in response to linguistic diversity.

4.4. Cross-Phase Integration (Triangulation)

This chapter combines the results from the linguistic landscape mapping, student and teacher first language demographic statistics, and the teacher questionnaire. It intends to determine patterns of alignment and dissonance among these three dimensions and discuss how multilingualism is represented, practiced, and perceived within the researched school environment. Triangulation reveals both convergences, where the school's visible and lived realities align with pedagogical openness to language diversity, and divergences, contradiction, erasure, or institutional tendency to reproduce things as they are.

The triangulation of teacher perceptions, institutional signage, and students' linguistic demographics reveals a gap between the school's multilingual reality and its representation within education practice and observed use of language. Although most teachers perceive linguistic diversity in their classes, 70% (n = 14) describe their groups as "*sehr vielfältig*" and several identify six or more student languages. Such perception does not necessarily result in multilingual pedagogy or visual depiction in the schools. As shown in Figure 29, only few teachers incorporate home languages into lesson planning, and the majority report that they rarely or never employ materials in different languages. When students use their home languages independently in the classroom, 60% of the teachers (n = 12) intervene and urge that German is necessary so "everyone can understand." These regulative behaviors reflect a hidden monolingual ideology that incorporates assimilationist schooling norms, even though teachers affirm the presence and appreciation of linguistic diversity. This contradiction suggests that multilingualism is socially accepted but pedagogically marginalized. This split reflects a more deeply embedded conflict between linguistic and pedagogy awareness that has been pointed out in research on critical applied linguistics. It reflects a persistence of monolingual norms within structurally multilingual settings (Duarte, 2020; García & Wei, 2014).

The linguistic landscape of the observed schools encourages this imbalance. German dominates the landscape, appearing on 84% of all reported signage. English, the language most individuals associate with global applicability and that is made available in schoolbooks, accounts for another 10%. For comparison, the students' most commonly used heritage languages, Turkish, BCS (Bosnian/Croatian/Serbian), Arabic, are not found in top-down, institutional signage. One particularly notable result is the complete absence of monolingual Turkish signs across any category, despite a majority of Turkish speaking students within the school space. This could be a case of linguistic erasure or invisibility, a sociolinguistic phenomenon in which the language of a big or socially marginalized group is absent on public signs or among institutional languages. This invisibility raises questions about language hierarchies and whose identities are "valued" or "visible" within the public space in the school (García & Lin, 2017).

BCS appears once in a monolingual sign and enjoys co-visibility in those very same two multilingual appearances. Arabic appears nine times as a monolingual, in one bilingual Arabic–German sign, and again in the same two multilingual sign. However, almost all these appearances are found in student-created materials, not official school communication. This selective presence points out that the languages are not institutionally integrated but rather spoken informally or tolerated on the periphery of pedagogical space.

This underrepresentation becomes even more significant when compared to the language statistics of the schools. In the middle school, less than 10% of students name German as a first language, and the speakers of Turkish and BCS combined account for over 50% of the school body. Whereas the elementary school presents a comparatively more homogenous language make-up. Nearly 30% of the children report German as their first language and Turkish and BCS speakers are still nearly half of the students. Despite such a high degree of multilingualism, the linguistic context in the elementary school is still even more uniformly German. Over 94% of all signage is monolingual German, and only a single reported multilingual sign was seen across both observed clusters. Neither bottom-up nor top-down Turkish, BCS, or Arabic signage has been noted. This absence is particularly striking in school classrooms for early learners, whose linguistic

affirmation is especially important for the development of early identity and belonging (e.g., Piller, 2016b; Garcia & Wei, 2014).

A comparison of the two school levels provides a nuanced but important contrast to the negotiation of linguistic diversity. Both sites have strong monolingual norms, but the middle school has slightly more linguistic variation, both in the way of which languages are represented in official school communication and student-created signage. Middle school student work contains more Arabic or multilingual statements. Monolingual Arabic is found in several student-created displays, perhaps because the data collection took place during the weeks of Ramadan. The middle school is also staffed with a more language-diverse teacher corps, particularly in Cluster C, where many teachers have Turkish, BCS, and Arabic heritage. Although this diversity is not represented in the language environment and resources for teaching, it definitely is a potential asset for an increase in inclusive practice. In contrast, the elementary school, though it also has a multilingual population, displays even more homogeneity in its visual environment and seems to be less responsive to linguistic diversity in pedagogy and space. The consistency of German across sign categories, the near absence of English, and the total avoidance of heritage languages suggest a stronger adherence to traditional, assimilationist schooling norms in the lower grades.

Although a small number of teachers in both school sections report Turkish, BCS, or Arabic as their first language, the staff languages of those individuals appear only rarely in the visual environment of the school. That these languages are not included on official signage indicates that teacher and student multilingualism are not institutionally legitimated. The results of this research show that students' home languages are not really imbedded in the school setting. They are, instead, overlooked or restrained to informal, symbolic, or ephemeral spaces like personal artwork.

These results highlight an underlying issue of institutional invisibility of linguistic diversity policy. While the *Voxmi* project, an Austrian initiative that promotes language awareness and multilingual education through school networking and practical activities, was reported on by a small number of teachers, most participants questioned whether any organized support or school language policy exists. To the question if several languages are visible on signage in school, only 10% said "yes," while 20% replied "don't know"

(Figure 30). This divergence suggests that if there are policy initiatives toward multilingualism, they are likely theoretical and not implemented in tangible, observable ways. Without defined, implemented, and observable policies, multilingualism is more of an empty gesture than a structured institutional principle.

Moreover, certain responses in the questionnaire suggest that German use is regarded as neutral or default mode of communication in even highly heterogeneous classrooms. If students speak their home languages, some teachers see this as exclusionary practice and not as a learning tool. These positions, without being oppositional to multilingualism as such, articulate a logic of institutional monolingualism which infuses space and practice.

Finally, the spatial distribution of signage reflects broader patterns of language use and institutional visibility within the school environment. In the elementary school, signage is highly concentrated in classrooms, where 84.8% (n = 229) of all signs were located. These signs are primarily functional and instructional in nature such as labels, educational information, and tools for managing classroom routines, and are almost exclusively in German. Public areas in the ES, by contrast, contain relatively little signage (15.2%, n = 41), and multilingual or student-generated contributions are rare.

In the middle school, the distribution is more balanced, with 53.0% (n = 114) of signs located in classrooms and 47.0% (n = 101) in common areas. While classroom signage in the MS also emphasizes functional categories, shared spaces allow for greater diversity of sign types. Notably, bottom up signs such as Student Artwork (11.2%) and some Decorative Artwork (1.4%) contribute to a more expressive visual environment. Although multilingual signs remain relatively scarce, the presence of student contributions in common areas that often stemming from individual class projects, indicates a degree of openness toward visual forms of identity expression, even if not yet institutionally embedded. This limited and inconsistent symbolic recognition underlines a model of linguistic inclusion that remains fragmented and unstructured, occurring mostly in the margins of institutional sight. The spatial organization of the linguistic landscape thus reflects a school culture in which German is consistently reaffirmed as the dominant and default language, while multilingualism is only sporadically acknowledged and remains largely absent from the school's public and institutional discourse.

5. Discussion

This chapter analyzes and discusses the research results in context of literature and theoretical models. Drawing on linguistic landscape mapping information, teacher surveys, and student and teacher language background profiles, the discussion critically engages how linguistic diversity is represented and managed in the observed school settings. It analyzes the extent to which visual and pedagogic practices mirror, support, or counter dominant language ideologies such as monolingual norms and deals with the implications of these tendencies towards inclusive education. In triangulating analysis, the argument is developed from structural and symbolic disparities between the multilingual realities of the students and the institutional implementation of their languages. In doing so, empirical analysis is connected with broader debates in research on educational linguistics, translanguaging, raciolinguistic ideologies, and multilingual language schooling policies.

5.1. Connecting Findings to Previous Research

The findings of this study both confirm and challenge existing research in the field of linguistic landscapes (LL), particularly in educational contexts. As outlined in Chapter 2, early LL studies (e.g., Landry & Bourhis, 1997, pp. 23-49) emphasized the role of signage as a reflection of language hierarchies, power relations, and sociolinguistic ideologies. This concept is clearly supported by the conducted study: the dominance of German in the school's linguistic landscape illustrates how institutional signage continues to show the dominant status of the majority language and reflect monolingual norms.

At the same time, the results also try to extend the literature by offering a detailed comparison between an elementary and a middle school environment within a shared institutional setting. While both school levels exhibit strong monolingual tendencies, the middle school shows slightly more linguistic variation and bottom-up multilingual expression, particularly in student-generated materials. This finding is in line with Shohamy's (2006) observation that LLs are shaped by both top-down and bottom-up efforts, yet it also highlights the persistence of top-down communication in regulating which languages are considered appropriate for institutional visibility. The observation of student agency in producing multilingual texts supports the idea that learners use

linguistic space to affirm identity but also reveals how such practices are peripheral rather than central to the school discourse.

Viewed from a policy lens, these trends result from what educators call assimilationist school norms: structures where cultural and linguistic difference must be minimized or eliminated for the purposes of conformity to an existing language and identity structure (Cummins, 2001; García & Lin, 2017). In these structures, language diversity is not regarded as an asset but as a barrier to unity or academic success. German visual dominance and lack of any systematic incorporation of heritage languages in school signage or instructional planning form the foundation of this policy. Labeled as neutral or instrumental, assimilationist standards disproportionately exclude minority students and promote long-term disengagement and inequity (García et al., 2016). Research shows that the students who cannot observe a representation of their heritage and their languages in the school environment can have lower levels of engagement and motivation.

Anticipating counter-arguments, supporters of assimilationist education theory might argue that having a universal school language increases common understanding and literacy, reduces confusion, and constructs a unified learning environment. In multilingual environments with many different first languages, maintaining German as the instructional and administrative language might be considered essential for maintaining homogeneity and social cohesiveness. Some of the teachers in this study, for example, justified their focus on the German language and their stance against home language use in their classes based on of equity and comprehension. These are practical rationales that are oftentimes named in order to justify monolingual norms. However, perhaps they are working against more inclusive solutions that allow for both comprehension among speakers and for linguistic diversity like peer translation, multilingual scaffolding, or explicit translanguaging practice (Duarte, 2020, pp. 232-247; García & Lin, 2017, pp. 117-130).

Moreover, the findings contribute to ongoing debates about translanguaging in LL research. While García & Lin, (2017, pp. 117–130) argue for the recognition of the fluid linguistic practices of multilingual learners, this study shows that translanguaging is virtually absent from the formal school landscape. Only in isolated student-created

materials are observable instances of multilingualism, and even these are rare. This diverges strongly from Melo-Pfeifer's (2023) call for schools to embrace linguistic landscapes as pedagogical tools for inclusion, intercultural competence, and critical awareness. In the analyzed schools, multilingualism remains mostly unacknowledged in institutional signage, and according to the findings translanguaging is not leveraged as an educational resource.

Furthermore, as mentioned German overwhelmingly dominates the linguistic landscape of both the elementary and middle school sections. This dominance is visible in functional, instructional, and administrative signage, with little variation across school spaces. English is encountered more frequently in the middle school, most likely due to its incorporation in the curriculum. The most frequently used first languages of students (Turkish and Bosnian/Croatian/Serbian) do not appear prominently in institutional signage. Turkish does not appear in any monolingual signs and appears only twice in multilingual ones. BCS appears once in an individual sign and has the same two multilingual occurrences. Arabic appears slightly more often, particularly in student-generated content, which may be linked to cultural timing (e.g. Ramadan), but remains absent from top-down signage.

Taking a look at the categories of items analyzed, the analysis indicates that the category with the most instances *labels* span didactic support and infrastructural marking, demonstrating how school signage simultaneously scaffolds learning, organizes space, and communicates policy (Gorter, 2018, pp. 38-57; Blackwood, 2015, pp. 38-53). A similarly large share of *classroom-management* items aligns with research on visual structure fostering stability and learner independence in early years (Dallinger, 2023), and their overwhelming use of German underscores monolingual regimes that leave student linguistic diversity underrepresented in everyday procedures and infrastructure (García & Lin, 2017, pp. 117-130). Beyond instruction, *decorative artwork* helps produce a welcoming atmosphere; even where texts are monolingual, imagery often carries affective messages that can shape belonging (Dovchin, 2020, pp. 804-818), while their monolinguality again signals institutional ideologies about what is deemed "appropriate" (García & Lin, 2017, pp. 117-130). More broadly, such decorative signs act as multimodal resources that co-construct the school's cultural-emotional climate and merit closer

scrutiny at the intersection of visibility, normativity, and inclusion (Gorter, 2018, pp. 38-57). Finally, transgressive items (e.g., graffiti, unauthorized notes or stickers) surface student agency and everyday meaning-making, indexing peer dynamics, attitudes, and occasional resistance to hegemonic norms (Dovchin, 2020, pp. 804-818)

Teacher responses are another important source of information about the schools culture on multilingualism. While most of them report awareness of linguistic diversity in classrooms, it is not systematically applied to pedagogical practice. Fewer than one quarter of respondents report actually making use of students' home languages in lesson planning or classroom practice. Multilingual materials are rarely used, and the use of students' L1s in classroom talk is generally restricted or controlled. Many educators describe managing or discouraging students from using their domestic languages in class, especially when it is perceived as hindering collective understanding.

These findings align with Duarte's (2020) "pedagogical monolingualism" theory, where multilingualism is endorsed on the level of awareness but not in teaching methods or class planning (pp. 232-247). Instead, the usual pattern is a monolingual pedagogical norm (typically German) and the occasional symbolic use of other languages, such as English, when pedagogically advisable or institutionally authorized. Teachers will generally justify language management with arguments such as equity or intelligibility and argue that everyone in the group must be able to perceive what is being communicated. While this perspective speaks itself in terms of commitment to inclusion, it unintentionally creates linguistic diversity as a source of fragmentation more than enrichment. This practice has the ability to increase the adoption of language norm hierarchies and can limit the ability of learners to draw upon the full range of their linguistic repertoires as cognitive and social resources. Instead of taking advantage of peer support or translanguaging practices for the sake of enabling inclusion, variation in language is perceived as a source of complication for pedagogy. The result is a type of exclusion that benefits certain language practices over others, typically coordinating with broader social hierarchies and racialized ideologies of language suitability (Flores & Rosa, 2015, pp. 149-171). The lack of conscious reinforcement of multilingual pedagogies leads to classroom interactions being based on monolingual norms.

Institutional policy, or its limited visibility, plays a role in reinforcing this pattern. Although national frameworks exist to promote multilingual awareness, only a few teachers mentioned them, and none indicated that such initiatives influenced school-wide practices. This lack of visibility corresponds with what Shohamy and Gorter (2008) describe as “policy silence”, a situation where policy exists in principle but does not manifest in material or procedural ways within the institution. In the absence of clear policy guidance or explicit institutional messaging, language practices appear to remain under existing norms that privilege German and limit the presence of other languages.

When combined, the triangulated results present a continuous trend in which German is used as the institutional language and multilingual realities are neglected. The trend does not appear to be the result of a single policy decision but of a cluster of customary practice, underlying norms, and institutional policy deficits. The school's linguistic environment therefore does not merely point to communicative demands but to more universal institutional alignments with language and identity. The findings are consistent with critical LL research but introduce new empirical evidence by analyzing school-level differences, the disconnection between demographic presence and symbolic representation, and the ongoing neglect of heritage languages. They reiterate the need for more substantial translation of theoretical commitment into everyday spatial and pedagogical school practice.

5.2. Contradictions and Unexpected Patterns

Even though the general trends for the language environment of the school lean towards a powerful institutional preference for German and a limited visibility of the heritage languages, the data also contain some surprising imbalances that need to be explained. The findings presented here suggest that language visibility in schools is not always logical, and that contextual or local forces might influence the manner and timing of how and when certain languages become visible.

One particular surprising observation is the lack of Turkish in signage. At the middle school, Turkish is the home language of over 30% of the students, and BCS of over 20%. At the elementary school, the overall percentage of students for whom Turkish and BCS is the home language is also close to 50%. Yet Turkish is not apparent in any monolingual

sign and only on two multilingual signs. BCS appears once on a monolingual sign and in the very same two multilingual ones. These occurrences are far away from the demographic significance of the two languages and suggest that they are institutionally not recognized within the visual environment of the school. These challenge assumptions made in earlier literature that multilingual visibility naturally follows demographic realities (e.g., Cenoz & Gorter, 2006). Instead, the data here align more with critical perspectives (e.g., Blackwood, 2015; Pulinx et al., 2017) that emphasize the ideological filtering of which languages are permitted to become visible in educational spaces. The near-total invisibility of Turkish and BCS points out processes of exclusion and erasure, reinforcing what Dovchin (2020, 804-818) and Flores & Rosa (2015, pp. 149-171) describe as raciolinguistic ideologies, where certain languages are devalued regardless of the number of speakers. Raciolinguistic ideologies explain how language practices are evaluated and constructed by taking on racialized viewpoints, usually in manners that exclude speakers whose linguistic repertoires are incompatible with dominant norms. In the Austrian context, Turkish and BCS exemplify this process: as languages associated with racialized populations, they are frequently positioned as low-status or non-valuable repertoires, which helps explain their symbolic erasure from school signage (Flores & Rosa, 2015, pp. 149-171; Dovchin, 2020, pp. 804-818).

English, in contrast, is more present than other languages, particularly in the secondary school, where 15,3% of reported signage displays English, compared to 5,6% in the elementary school. Although English is not a home language of dominance among students, its presence is connected to English being a core school subject, especially in the middle school. English-language signage tends to appear in decorative or motivational forms and can serve both curricular and symbolic functions. As Gorter and Cenoz (2017) have argued, English often carries prestige value in educational settings, associated with global relevance, academic aspiration, and modernity. In this context, English appears to fulfill both instructional and identity-marking roles. However, its visibility also contrasts with the absence of heritage languages like Turkish and BCS, raising questions about how educational relevance and status intersect in shaping which languages are made visible in school spaces.

Another unexpected pattern emerges in the presence of Arabic in the school landscape. Arabic appears more frequently than Turkish or BCS, with nine monolingual signs, one bilingual Arabic–German sign, and two additional multilingual instances. These items primarily stem from student work and may be partially explained by the timing of data collection during Ramadan. The temporary prominence of Arabic suggests that cultural or religious events may increase the visibility of specific languages under certain conditions or for specific periods of time. This highlights the possibility that language inclusion in the school space is not only shaped by long-term policy but also by shorter-term cultural calendars or project-based activities. Compared to Turkish and BCS, Arabic seems more represented in student work, possibly pointing to different levels of comfort within the institutional level with the language, institutional acceptance, or student initiative in bringing these languages into public view.

These examples do not contradict the broader monolingual tendency, but they illustrate the nuance of the ways in which language visibility is negotiated on the ground. Rather than being predetermined, language representation appears to stem from a dynamic connection of tendencies, including teacher judgment, student agency, cultural timing, and implicit institutional desire. English and Arabic may benefit from symbolic or curricular prestige, either by virtue of their association with global competency or cultural salience, whereas Turkish and BCS, despite population size, are underrepresented.

This language environment does not correspond to the linguistic composition of the school community. In the middle school, most students report Turkish or BCS as a home language, but these languages are virtually non-existent in school environments. Similarly, few teachers report these heritage languages as their own, but this diversity is not marked in classroom texts and institutional signage. The teachers are familiar with the language profiles of their classrooms and can list a variety of the students' home languages, but only scarcely use this for inclusive pedagogical approaches. Multilingual resources are barely implemented, and the use of the students' first languages is often prohibited in class, typically argued for with inclusivity or intelligibility. The result is a language classroom where diversity exists but is not facilitated or brought to the surface. The physical organization of the school and public signs also reveal little interaction with students' linguistic diversity. The majority of signs are monolingual German, even in

contexts where multilingualism could increase overall accessibility or promote inclusion. It is only some student-created texts that reflect the multilingualism of the school community, and these are rarely incorporated into the official semiotic landscape. Furthermore, institutional language policies are absent or inactive. Although some teachers mentioned projects such as *Voxmi*, there was no observation that such models have a major impact on everyday practice. Instead, it seems that linguistic inclusion decisions are largely left up to individual teachers, with varying results and an increased reinforcement of monolingual norms. Taken together, the examination of the findings illustrates that while linguistic diversity is a feature of the school population, it is neither structurally acknowledged nor reflected systematically in the visual or pedagogical practices of the school. The school's linguistic landscape remains monolingually German with symbolic or context-specific exceptions. Teachers are aware of the multilingualism in their classrooms but lack the instruments, training, and policy support to address it on an equitable basis. Multilingualism in these schools is therefore a lived reality for children but not an institutionalized part of the schools' identities.

Further, these findings suggest that the different areas of the school do not implement the same rules for language visibility. The middle school, for instance, has a slightly higher degree of linguistic diversity, particularly in student-generated content, and has more linguistically diverse staff. Although it has not yet been reflected in top-down signage or formal teaching resources, this could be a sign for a localized process for inclusive practice. Such within school differences emphasize the need to study school language practices both at the institution level and at the level of individual clusters or classrooms.

5.3. Contributions to Theoretical and Educational Research

This study is a small contribution to ongoing debates in educational linguistics, linguistic landscape research, and language policy, particularly in the context of increasingly multilingual school settings.

In LL research, the findings add to the critical shift of research initiated by scholars such as Shohamy and Gorter (2008), who emphasized that linguistic landscapes are not power-free reflections of language use but power-charged environments where visibility

and invisibility are enacted via power relations. The dominance of German signage around multilingual students illustrates how linguistic legitimacy is selectively distributed. This underlines that linguistic landscapes in schools are a mode of spatial discourse that presents norms regarding which languages have a place within institutional spaces.

From an educational linguistics perspective, the study shows how these schools reproduce or counteract hegemonic monolingual ideologies, not merely in pedagogy, but in the semiotics of the school buildings. While translanguaging theory, as formulated by García and Wei (2014), conceptualizes language practice as fluid, flexible, and positioned in the whole linguistic repertoire of multilingual speakers, the school contexts here are marked by a widespread lack of flexibility. Multilingualism exists in student practice, especially in artwork and daily life, but not in institutional form, signage, or teaching practice. This mismatch between language use and spatial representation points to potential gaps between theoretical frameworks and their practical application at the school level.

5.4. Limitations and Scope of the Study

While this study provides valuable information on how linguistic landscapes, assessments of school populations, and teachers' views are mutually interconnected, there are certain limitations to be taken into account when interpreting its results. Firstly, the scope of the data collection was structurally limited by the reality that it was a small-scale school-based case study. The analysis was limited to a single *Bildungscampus* alone and only included two clusters per school. Although this selection was made deliberately and with the aim of balancing representativeness and tractability, it does restrict the generalizability of the findings.

Second, linguistic landscape research is by its nature a snapshot of any given moment in time. The signs documented are representative of the visual field at one week observed during February 2025. Seasonal changes, curriculum focuses, or culturally themed events like Ramadan, may have contributed to the temporary dominance of specific languages (e.g., Arabic). Other indicators may have been added or removed immediately before, or just after, the data collection. The data thus captures a snapshot at one

moment in time and not a completed or definitive picture of the school's language practice.

Third, while the triangulation approach was a key strength of the research design, there was only a small sample size of teachers included in the teacher survey. Twenty teachers answered the questionnaire and participated, with participation being uneven between school levels. A sample of this size suggests that the findings are limited in representativeness and conclusions may not reflect the broader diversity of staff opinion throughout the schools. However, all the participants teach in one of the clusters sampled in the linguistic landscape analysis. Their comments are therefore directly transferable to the specific school environments researched in this study and contribute positively to the interpretation of the visual and spatial data.

A fourth limitation lies in the reliance on teacher self-report data, which is inherently shaped by individual perception and subjectivity. While the questionnaire offered valuable insights into how teachers understand and evaluate their engagement with linguistic diversity, self-perception may not always align with actual classroom practices. Factors such as social desirability bias or confirmation bias may influence responses. For instance, participants may report what they believe is expected of them or what aligns with institutional ideals, rather than their routine actions. As such, the findings should be interpreted with an awareness of the potential gap between reported beliefs and observable practice.

Finally, the study focused on written and visual language elements within the school. Interactions of students with each other and the oral use of language, as well as spontaneous informal multilingual communication, fell outside the scope of this research, even though they are important elements of how language functions within schools. Similarly, the study did not include direct student voice, which could have added to an analysis of how children use their linguistic environment within the school.

Being sensitive to these limitations does not diminish the worth of the outcomes but rather highlights the needs for additional research. In the absence of the limited scope, nevertheless, this study provides an extensive contribution based on the analysis of visibility, alignment, and contradiction patterns.

6. Conclusion

The previous analysis has investigated the linguistic landscape of a multilingual Austrian *Bildungscampus* to determine how languages are represented in school spaces, how these representations align with the linguistic profile of the student body, and how teachers perceive and engage with diversity. The study triangulates systematic LL mapping of signage, demographic data, and a semi-open teacher questionnaire. Guided by research that treats schools as materializations of language ideologies (Landry & Bourhis, 1997; Shohamy & Gorter, 2008), the core question is whether spatial and pedagogical practices reflect the community's repertoires or reproduce monolingual norms that marginalize heritage languages.

6.1. Summary Key Findings

The evidence shows a clear picture of a monolingual schoolscape: German overwhelmingly structures functional, instructional, and administrative signage, confirming that public display reproduces language hierarchies. Nevertheless, a comparison across levels shows nuance. Both schools are largely monolingual, but the middle school exhibits slightly more bottom-up multilinguality, which is visible mainly in student-generated materials, signaling agency while still remaining peripheral to official discourse. This sits alongside a striking demographics–visibility gap as heritage languages with strong student presence are nearly absent from institutional signs: Turkish appears in no monolingual signs and only twice in multilingual ones; BCS appears once monolingually and in the same two multilingual instances. By contrast, non-heritage languages enjoy selective visibility. English is more present in the middle school (15.3% of signage) than in the elementary (5.6%), reflecting curricular status and symbolic prestige, while Arabic shows comparatively greater presence (nine monolingual signs, one Arabic–German bilingual sign, and two additional multilingual instances), largely in student work and partly linked to cultural timing such as Ramadan.

Functionally, items cluster in ways that help explain these patterns. Labels are the most frequent and serve a dual role as didactic scaffolds and infrastructural markers, showing how signage simultaneously organizes learning, space, and policy communication. Classroom-management items are likewise abundant, yet they are overwhelmingly in

German, entrenching a monolingual operating code in everyday routines. Decorative texts, though they help cultivate a welcoming atmosphere, are also monolingual, signaling what counts as “appropriate” to display and leaving little room for everyday recognition of students’ repertoires. In contrast, transgressive items (graffiti, notes, stickers) surface student agency and everyday meaning-making, revealing how learners informally inscribe multilingual realities even when official displays do not.

Teacher voice corroborates the spatial analysis. Most respondents acknowledge linguistic diversity but seldom integrate home languages into planning or daily instruction; multilingual materials are rare, and L1 use is frequently restricted under equity and comprehension rationales, an enactment of pedagogical monolingualism that limits students’ opportunities to mobilize their full repertoires. This practice persists in a context of policy silence: staff seldom reference frameworks and no school-wide implementation is evident, so norms default to German-privileging routines. Taken together across LL mapping, teacher reports, and demographics, the pattern is coherent, that German functions as the institutional language while multilingual realities are sidelined, and occasional visibility (English through prestige, Arabic during cultural events) does not offset the systemic underrepresentation of Turkish and BCS. Even so, within-school variation hints at potential: the middle school’s slightly more diverse staff and richer student-driven displays could seed localized inclusive practice if taken up in top-down materials. Absent such structural support, the current configuration risks exclusionary effects on identity, motivation, and participation by normalizing monolingual routines and under-leveraging translanguaging and heritage-language resources.

6.2. Further implications

Building on the study’s triangulated evidence, several concise, mutually reinforcing steps can make school practice more inclusive, reflective, and responsive. Schools can make inclusion routine by normalizing home languages in everyday space. Examples could be adopting multilingual signposting in classrooms and communal areas, translating key information for families, and curating displays that reflect the student body. These moves do not need to be exhaustive, but they should signal that linguistic difference is noticed,

valued, and integrated into daily life. Given the dominance of German (and English's symbolic role), heritage languages such as Turkish, BCS, Arabic, and other should be included in context-sensitive, pedagogically purposeful ways, not merely as decoration. Furthermore, teachers should be provided with practical supports such as bilingual templates, visual aids, shared repositories, peer-translation and multilingual word-wall routines, so inclusion becomes a habit that aligns space and instruction (García & Lin, 2017; Duarte, 2020).

Nevertheless, sustained change hinges on teacher learning, leadership, and curriculum. Hands-on training in translanguaging and language-sensitive task design should be offered, as well as making school language policy explicit, visible, and co-owned by staff, students, and families in order to avoid “policy silence” (Shohamy & Gorter, 2008). Additionally, home languages could be imbedded as routine resources through bilingual instructions, multilingual exemplars, and LL projects (Landry & Bourhis, 1997).

Finally, future research should track change over time (e.g., seasonal and event-based shifts in visibility), center student perspectives on how the LL shapes belonging and identity, and replicate the study across urban, rural, and socioeconomically diverse sites to extend generalizability. The present findings highlight gaps, but also reveal pockets of possibility in teacher awareness and student agency. With clear policy, practical teacher supports, and curriculum routines that normalize multilingual practices, schoolscapes can move from mirroring monolingual norms to modeling equitable participation and inclusion (Blackwood, 2015; García & Lin, 2017; Duarte, 2020).

References

- Alisaari, J., Hurme, T.-R., Heikkola, L. M., & Routarinne, S. (2021). Finnish teachers' beliefs about students' home language use. *Critical Multilingualism Studies*, 9(1), 46–76.
- Angelis, G. de (2011). Teachers' beliefs about the role of prior language knowledge in learning and how these influence teaching practices. *International Journal of Multilingualism*, 8(3), 216–234. <https://doi.org/10.1080/14790718.2011.560669>
- Bagga-Gupta, S. (2017). *Marginalization processes across different settings: Going beyond the mainstream*. Cambridge Scholars Publishing.
- Benson, C., & Kosonen, K. (Eds.). (2013). *Language issues in comparative education: Inclusive teaching and learning in non-dominant languages and cultures* (Vol. 24). Brill | Sense. <https://doi.org/10.1007/978-94-6209-218-1>
- Bialystok, E., Craik, F. I. M., & Luk, G. (2012). Bilingualism: Consequences for mind and brain. *Trends in Cognitive Sciences*, 16(4), 240–250. <https://doi.org/10.1016/j.tics.2012.03.001>
- Blackwood, R. (2015). LL explorations and methodological challenges: Analysing France's regional languages. *Linguistic Landscape*, 1(1/2), 38–53.
- Blommaert, J. (2010). *The sociolinguistics of globalization*. Cambridge University Press. <https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=324096>
- Bredthauer, S., & Engfer, H. (2016). Multilingualism is great – but is it really my business? – Teachers' approaches to multilingual didactics in Austria and Germany. *Sustainable Multilingualism*, 9, 104–121. <https://doi.org/10.7220/2335-2027.9.5>
- Brubaker, R. (2001). The return of assimilation? *Ethnic and Racial Studies*, 24(4), 531–548. <https://doi.org/10.1080/01419870120049770>
- Cenoz, J., & Gorter, D. (2006). Linguistic Landscape and Minority Languages. *International Journal of Multilingualism*, 3(1), 67–80. <https://doi.org/10.1080/14790710608668386>
- Cenoz, J., & Gorter, D. (2008). The linguistic landscape as an additional source of input in second language acquisition. *IRAL - International Review of Applied Linguistics in Language Teaching*, 46(3), 267–287. <https://doi.org/10.1515/IRAL.2008.012>
- Cummins, J. (2014). *Detangling the lies about English-only and bilingual education*. In P. C. Gorski & K. Zenkov (Eds.), *The big lies of school reform: Finding better solutions for the future of public education* (pp. 53–66). Routledge.
- Cummins, J. (2010). *Language, power, and pedagogy: Bilingual children in the crossfire*. Multilingual Matters.
- Dallinger, S. (2023). *Teachers' beliefs about multilingual education strategies* (Master's thesis, Universität Wien). Universität Wien. <https://doi.org/10.25365/thesis.74205>
- Dovchin, S. (2020). The psychological damages of linguistic racism and international students in Australia. *International Journal of Bilingual Education and Bilingualism*, 23(7), 804–818. <https://doi.org/10.1080/13670050.2020.1759504>
- Dressler, R. (2015). Sign geist : promoting bilingualism through the linguistic landscape of school signage. *International Journal of Multilingualism*, 12(1), 128–145. <https://doi.org/10.1080/14790718.2014.912282>
- Duarte, J. (2020). Translanguaging in the context of mainstream multilingual education. *International Journal of Multilingualism*, 17(2), 232–247. <https://doi.org/10.1080/14790718.2018.1512607>
- Erling, E. J., Brummer, M., & Foltz, A. (2023). Pockets of possibility: Students of English in diverse, multilingual secondary schools in Austria. *Applied Linguistics*, 44(1), 72–102. <https://doi.org/10.1093/applin/amac037>
- Extra, G., & Gorter, D. (Eds.). (2008). *Multilingual Europe: Facts and policies*. Mouton de Gruyter. <https://doi.org/10.1515/9783110208354>

- Flores, N., & Rosa, J. (2015). Undoing Appropriateness: Raciolinguistic Ideologies and Language Diversity in Education. *Harvard Educational Review*, 85(2), 149–171. <https://doi.org/10.17763/0017-8055.85.2.149>
- Fuster, C. (2024). Translanguaging in Sweden: A critical review from an international perspective. *System*, 121, Article 103241. <https://doi.org/10.1016/j.system.2024.103241>
- García, O. (2009). *Bilingual education in the 21st century: A global perspective*. Wiley-Blackwell.
- García, O., Ibarra Johnson, S., & Seltzer, K. (2016). *The Translanguaging Classroom: Leveraging Student Bilingualism for Learning* (1st ed.). Brookes Publishing. <https://permalink.obvsg.at/>
- García, O., & Lin, A. M. Y. (2017). Translanguaging in Bilingual Education. In O. García, A. Lin, & S. May (Eds.), *Bilingual and multilingual education* (3rd edition, pp. 117–130). Springer. https://doi.org/10.1007/978-3-319-02258-1_9
- García, O., & Menken, K. (2010). *Negotiating language policies in schools: Educators as policymakers*. Routledge.
- García, O., & Wei, L. (2014). *Translanguaging: Language, bilingualism and education*. Palgrave Macmillan.
- Gorter, D., & Cenoz, J. (2017). Language education policy and multilingual assessment. *Language and Education*, 31(3), 231–248. <https://doi.org/10.1080/09500782.2016.1261892>
- Gorter, D. (2018). 2. Methods and Techniques for Linguistic Landscape Research: About Definitions, Core Issues and Technological Innovations. In M. Pütz & N. Mundt (Eds.), *Expanding the Linguistic Landscape: Linguistic Diversity, Multimodality and the Use of Space as a Semiotic Resource* (pp. 38–57). Bristol, Blue Ridge Summit: Multilingual Matters. <https://doi-org.uaccess.univie.ac.at/10.21832/9781788922166-005>
- Gorter, D., & Cenoz, J. (2022). Afterword. In E. Krompák, V. Fernández-Mallat, & S. Meyer (Eds.), *Linguistic landscapes and educational spaces* (Vol. 98, pp. 277–290). Multilingual Matters.
- Gorter, D., & Cenoz, J. (2024). *A panorama of linguistic landscape studies*. Multilingual Matters. <https://www.multilingual-matters.com/page/detail/?k=9781800417151>
- Heugh, K. (2017). Epilogue: Multilingual education policy and practice: Ten certainties. In C. Kerfoot & K. Hyltenstam (Eds.), *Entangled discourses: South-North orders of visibility* (1st ed.), 209–229. Routledge.
- Hornberger, N. H., & Link, H. (2012). Translanguaging and transnational literacies in multilingual classrooms: a biliteracy lens. *International Journal of Bilingual Education and Bilingualism*, 15(3), 261–278. <https://doi.org/10.1080/13670050.2012.658016>
- Josipovic, I., & Reeger, U. (2021). Refugee integration in Austria: Understanding the implications of the integration policy environment for individual motivations and resources. In J. Dahlvik, C. Reinprecht, & W. Sievers (Eds.), *Migration and integration in Austria: Socio-historical perspectives from the 19th to the 21st century* (pp. 299–315). V&R unipress. <https://doi.org/10.14220/9783737012373.299>
- Krompák, E., Fernández-Mallat, V., & Meyer, S. (2022). The symbolic value of educationscapes – Expanding the intersections between linguistic landscape and education. In E. Krompák, V. Fernández-Mallat, & S. Meyer (Eds.), *Linguistic landscapes and educational spaces* (Vol. 98, pp. 1–16). Multilingual Matters.
- Laihonon, P., & Szabó, T. P. (2018). Studying the visual and material dimensions of education and learning. *Linguistics and Education*, 44, 1–3. <https://doi.org/10.1016/j.linged.2017.10.003>
- Landry, R., & Bourhis, R. Y. (1997). Linguistic Landscape and Ethnolinguistic Vitality. *Journal of Language and Social Psychology*, 16(1), 23–49. <https://doi.org/10.1177/0261927X970161002>
- Lehner, S. (2022). Linguistic Landscapes and Constructions of Space in a Learning Club for Young Refugees in Vienna. In E. Krompák, V. Fernández-Mallat, & S. Meyer (Eds.), *Linguistic landscapes and educational spaces* (Vol. 98, pp. 31–54). Multilingual Matters. <https://doi.org/10.2307/jj.22730605.6>

- Lou, J. (2016). *The Linguistic Landscape of Chinatown: A Sociolinguistic Ethnography* (1st ed.). Channel View Publications.
<https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=4516155>
- Malinowski, D. (2015). Opening spaces of learning in the linguistic landscape. *Linguistic Landscape. An International Journal*, 1(1-2), 95–113. <https://doi.org/10.1075/ll.1.1-2.06mal>
- Marconi, G., Vergolini, L., & Bergonovi, F. (2023). The demand for language skills in the European labour market: Evidence from online job vacancies (No. 294). OECD.
<https://doi.org/10.1787/e1a5abe0-en>
- Marten, H., & Saagpakk, M. (2017). Linguistic landscapes und Spot German an der Schnittstelle von Sprachwissenschaft und Deutschdidaktik. https://ids-pub.bsz-bw.de/files/11507/marten_saagpakk_linguistic_landscapes_2017.pdf
- May, S. (2023). *Linguistic racism: Origins and implications*. *Ethnicities*, 23(5), 651–661.
<https://doi.org/10.1177/14687968231193072>
- Melo-Pfeifer, S. (Ed.). (2023). *Linguistic landscapes in language and teacher education: Multilingual teaching and learning inside and beyond the classroom* (Vol. 43). Springer.
- OECD. (2023). *PISA 2022 Results (Volume I)*. OECD Publishing.
<https://doi.org/10.1787/53f23881-en>
- Ortega, L. (2013). Sla for the 21st Century: Disciplinary Progress, Transdisciplinary Relevance, and the Bi/multilingual Turn. *Language Learning*, 63(s1), 1–24. <https://doi.org/10.1111/j.1467-9922.2012.00735.x>
- Otheguy, R., García, O., & Reid, W. (2015). Clarifying translanguaging and deconstructing named languages: A perspective from linguistics. *Applied Linguistics Review*, 6(3), 281–307.
<https://doi.org/10.1515/applirev-2015-0014>
- Pietikainen, S., & Kelly-Holmes, H. (2013). *Multilingualism and the periphery*. *Oxford studies in sociolinguistics*. Oxford Univ. Press.
- Piller, I. (2016a). *Linguistic diversity and social justice: An introduction to applied sociolinguistics*. Oxford University Press.
- Piller, I. (2016b). Monolingual ways of seeing multilingualism. *Journal of Multicultural Discourses*, 11(1), 25–33. <https://doi.org/10.1080/17447143.2015.1102921>
- Pottmann, D. M. (2020). „Leichte Sprache and Einfache Sprache“ – German plain language and teaching DaF German as a foreign language. *Studia Linguistica*, 38, 81–94.
<https://doi.org/10.19195/0137-1169.38.6>
- Pulinx, R., van Avermaet, P., & Agirdag, O. (2017). Silencing linguistic diversity: the extent, the determinants and consequences of the monolingual beliefs of Flemish teachers. *International Journal of Bilingual Education and Bilingualism*, 20(5), 542–556.
<https://doi.org/10.1080/13670050.2015.1102860>
- Pütz, M. & Mundt, N. (2018). *Expanding the Linguistic Landscape: Linguistic Diversity, Multimodality and the Use of Space as a Semiotic Resource*. Bristol, Blue Ridge Summit: Multilingual Matters. <https://doi-org.uaccess.univie.ac.at/10.21832/9781788922166>
- Rosenberger, S., & Gruber, O. (2020). *Integration erwünscht? Österreichs Integrationspolitik zwischen fördern, fordern und verhindern*. Czernin.
- Roos, J., & Nicholas, H. (2019). Policy and practice in early language learning. *AILA Review*, 32(1), 91–111. <https://doi.org/10.1075/aila.00022.roo>
- Schwab, S., Resch, K., Gitschthaler, M., Hassani, S., Latzko, D., Peter, A., & Walczuch, S. (2024). From policy to practice: how schools implement German language support policy in Austria. *Current Issues in Language Planning*, 25(2), 176–192.
<https://doi.org/10.1080/14664208.2023.2269726>
- Schwarzl, L., Vetter, E., & Janík, M. (2019). Schools as Linguistic Space: Multilingual Realities at Schools in Vienna and Brno. *Challenging Boundaries in Language Education* (pp. 211–228). https://doi.org/10.1007/978-3-030-17057-8_13

- Scollon, R., & Scollon, S. B. K. (2003). *Discourses in place: Language in the material world*. Routledge.
<https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=102105>
- Shohamy, E. (2006). *Language policy: Hidden agendas and new approaches*. Routledge.
<https://doi.org/10.4324/9780203387962>
- Shohamy, E., & Gorter, D. (2008). *Linguistic Landscape: Expanding the Scenery*. Routledge.
- Soland, J. (2019). English language learners, self-efficacy, and the achievement gap. *NWEA Research Brief*.
- Solmaz, O., & Przymus, S. (2021). A literacies-based pedagogical model to integrate linguistic landscapes into L2 teaching and learning contexts. *Linguistic landscapes in English language teaching: A pedagogical guidebook*, 26-38.
- Stroud, C., & Mpendukana, S. (2009). Towards a material ethnography of linguistic landscape: Multilingualism, mobility and space in a South African township 1. *Journal of Sociolinguistics*, 13(3), 363–386. <https://doi.org/10.1111/j.1467-9841.2009.00410.x>
- Weichhart, J. (2023, March 24). Deutschpflicht in der Schulpause sorgt für Debatten in NÖ. *Kurier*.
<https://kurier.at/chronik/niederoesterreich/deutschpflicht-in-der-schulpause-sorgt-fuer-debatten-in-noe/402377322>
- Wei, L. (2018). Translanguaging as a Practical Theory of Language. *Applied Linguistics*, 39(1), 9–30. <https://doi.org/10.1093/applin/amx039>
- Woll, N. (2017). The multilingual experience. *Dutch Journal of Applied Linguistics*, 6(1), 77–99.
<https://doi.org/10.1075/dujal.6.1.05wol>
- Wolter, F., & Sauer, B. (2024). Through the eyes of a child: the meaning and negotiation of integration from the perspective of pupils in Vienna. *Revista Española de Sociología*, 33(2), a216. [10.22325/fes/res.2024.216](https://doi.org/10.22325/fes/res.2024.216)
- Xia, T., An, Y., & Guo, J. (2022). Bilingualism and creativity: Benefits from cognitive inhibition and cognitive flexibility. *Frontiers in Psychology*, 13, 1016777.
<https://doi.org/10.3389/fpsyg.2022.1016777>

Appendix

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AI Use

Consistent with the AI guidelines as well as academic integrity principles, I used ChatGPT (OpenAI, GPT-4, June 2025 version) as a language editor to support my academic writing. The AI was used to improve English phrasing in regards to clarity, correctness, and fluency. Furthermore, I specifically asked the tool to check for logical flow and coherence across the different parts of the text. I used prompts like “Please check if the structure and progression of this methods sections makes logical sense. Are there any unclear gaps or transitions?” Based on the feedback, I clarified transitions between phases and topic sentences. The AI suggestions were seen as editorial support and critically reviewed before integration, in line with Principle 3 of AI-supported academic work. Nevertheless, I remain responsible for all content and final language choices.

Coding Manual for Linguistic Landscape Analysis

1. Introduction

This coding manual outlines the categorization scheme used to analyze written linguistic elements in the school environment during the Linguistic Landscape (LL) mapping phase. It ensures transparency, replicability, and consistency in identifying the function and language use of school signage.

2. Functional Categories

Each documented linguistic item was assigned to one or more of the following functional categories. Multiple coding was allowed where signs served more than one purpose.

Category	Definition	Example
General Information	Non-instructional, school-related informational texts, top-down	Announcements, Wayfinder posters, dates
Educational information	Subject-related displays not tied to immediate instructions, top-down	Science posters, vocabulary boards, grammar sheets
General Instruction	School-wide rules or behavioral expectations, top-down	“clean after use”
Educational Instruction	Learning aids or scaffolding tool that support academic tasks, top-down	Writing strategy charts, math problem-solving guides
Classroom management	Texts organizing routines or responsibilities within the classroom, top-down	Job charts, weekly timetables, schedules
Labels	Labels to identify objects, spaces, resources, top-down	“library”, “art supply”
Student Artwork	Student generated creative or project-based work, bottom-up	Posters, art projects
Decorative Artwork	Aesthetic materials selected by teachers, top-down	Motivational posters, seasonal decoration
Transgression	Unsanctioned, informal, or subversive text, bottom-up	Graffiti, joke notes
Awards	Certificates for achievements	1. Place Dodgeball Tournament

3. Language Coding

Languages on each sign were identified and recorded. Signs could be monolingual or multilingual. Language codes were standardized based on full names as follows:

- German
- English
- BCS
- Turkish
- Arabic
- other
- multilingual

4. Coding Notes

- When multiple items appeared as part of a single communicative unit (e.g., rule sets), they were coded as one entry
- Language appearance was noted for both main texts and subtexts.
- Decorative and transgressive items were also included to capture informal or implicit communication
- All data were cross-verified with photographs and logged using a digital spreadsheet
- Only permanent or semi-permanent items

5. Category Examples from Database

The following examples illustrate actual items coded from the linguistic landscape data collected.

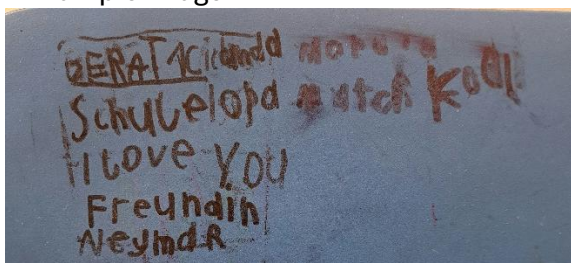
Student Artwork:

- Location: Cluster C, common space, MS
- Language(s): Chechen, Russian
- Example Image Filename:



Transgression:

- Location: Cluster C, classroom, ES
- Language(s): English, German
- Example Image:



General Information:

- Location: Cluster D, common space, MS
- Language(s): English
- Example Image:

	QUEUE ORDER	LOCATION
MON	2. 3. 4. 1.	FUNCOURT
TUE	3. 4. 1. 2.	GARDEN
WED	1. 2. 3. 4.	FUNCOURT
THU	4. 1. 2. 3.	GARDEN
FRI	4. 3. 2. 1.	FUNCOURT

Decorative Artwork:

- Location: Cluster C,common space,MS
- Language(s): English
- Example Image:



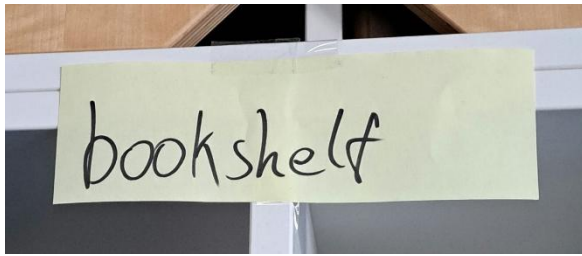
Educational Information:

- Location: Cluster C,common space,MS
- Language(s): English
- Example Image:



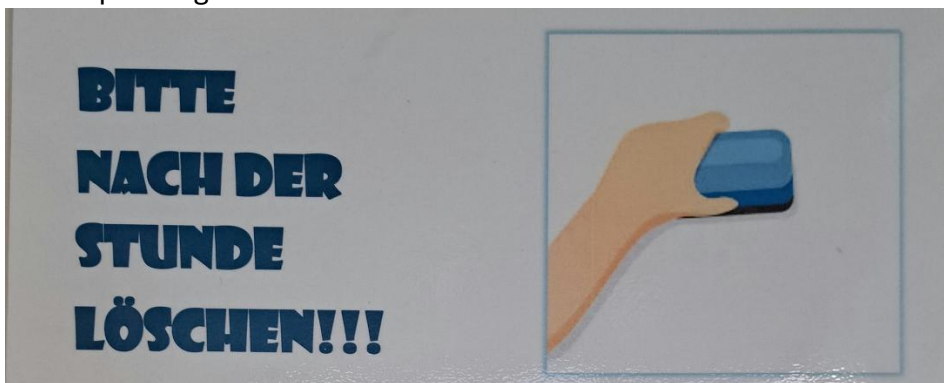
Labels:

- Location: Cluster D,classroom,MS
- Language(s): English
- Example Image:



General Instruction:

- Location: Cluster C, common space, MS
- Language(s): German
- Example Image:



Educational Instruction:

- Location: Cluster C, Classroom, ES
- Language(s): German
- Example Image:



Classroom management

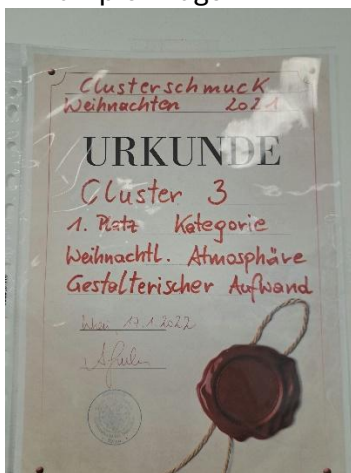
- Location: Cluster D, classroom, MS
- Language(s): German

- Example Image:



Awards

- Location: Cluster D, classroom, MS
- Language(s): German
- Example Image:



Multilingualism in a school context



Dear Teacher,

Thank you for taking the time to participate in this survey. The following questionnaire is part of a research study on the perception and handling of linguistic diversity in the school context. The aim is to better understand how teachers experience and engage with multilingualism in everyday school life.

The questionnaire includes both closed and open-ended questions and will take approximately 5 to 10 minutes to complete. Your responses will be collected anonymously and treated with strict confidentiality. There are no right or wrong answers – we are interested in your personal experiences and perspectives.

If you have any questions or comments, feel free to contact me at rebekka@walka.co.at.

Thank you for your support!

Participation in this survey is voluntary. No personal data such as your name or address will be collected. The data gathered will be used solely for academic purposes and evaluated in anonymized form. It will not be possible to trace the information back to you. By submitting the questionnaire, you consent to the anonymous use of your responses as part of this study.

Please click "Next" if you agree to participate and accept the data protection terms.

General

What is your first language (mother tongue) *

Meine Antwort

Are you a teacher in the elementary school or middle school? *

- ☐ Elementary School
- ☐ Middle School

How would you describe the linguistic diversity in your school? *

- ☐ very diverse
- ☐ somewhat diverse
- ☐ not very diverse
- ☐ not diverse

Please explain your answer to linguistic diversity. *

Meine Antwort

What languages do your students speak (besides the Language of Instruction)? *

Meine Antwort

Do you speak or understand one or more of these languages? *

- ☐ Yes
- ☐ A bit
- ☐ No

What languages do you understand or speak?

Meine Antwort

Teaching practice

To what extent do you take your students' linguistic backgrounds into account when planning your lessons *

	1	2	3	4	5	6	
Never	☐	☐	☐	☐	☐	☐	Always

Please provide examples. *

Meine Antwort

How regularly do you use multilingual materials or resources (e.g., books, posters, * worksheets)?

- ☐ frequently
- ☐ occasionally
- ☐ rarely
- ☐ never

Please describe the typical multilingual materials you use: *

Meine Antwort

How often do you allow your students to use their first languages in class? *

1 2 3 4 5 6

almost never ☐ ☐ ☐ ☐ ☐ ☐ very often

How do you respond when students use languages other than the language of instruction in class without being prompted? *

Meine Antwort

School environment & school policy

Are multiple languages visible in signage, notices, or communication materials at your school? *

- ☐ Yes
- ☐ Partly
- ☐ No
- ☐ I don't know

Please provide examples of multilingual communication materials: *

Meine Antwort

Are there school-wide policies or initiatives to support multilingualism or heritage languages? *

- ☐ Yes
- ☐ Partly
- ☐ No
- ☐ I don't know

What support is available for multilingualism or heritage languages? *

Meine Antwort

Personal assessment

Do you feel that linguistic diversity is valued and supported at your school? Why or why not? *

Meine Antwort

How confident do you feel in working with a multilingual group of students? *

- ☐ very confident
- ☐ confident
- ☐ rather not confident
- ☐ not confident

Have you attended any training or professional development on dealing with linguistic diversity? *

☐ Yes

☐ No

What specific topics were covered in your training or professional development? *

Meine Antwort

What would help you be better prepared to teach a multilingual class? *

Meine Antwort

Would you like to add anything else about language or diversity at your school?

Meine Antwort

Mehrsprachigkeit im Schulkontext



B *I* U

Liebe Lehrperson,

vielen Dank, dass Sie sich die Zeit nehmen, an dieser Befragung teilzunehmen. Der folgende Fragebogen ist Teil einer wissenschaftlichen Untersuchung zur Wahrnehmung und zum Umgang mit sprachlicher Diversität im schulischen Kontext. Ziel ist es, besser zu verstehen, wie Lehrkräfte Mehrsprachigkeit im Schulalltag erleben.

Der Fragebogen umfasst sowohl geschlossene als auch offene Fragen und nimmt etwa **5 bis 10 Minuten** in Anspruch. Ihre Angaben werden **anonym** erhoben und streng vertraulich behandelt. Es gibt keine richtigen oder falschen Antworten – wir interessieren uns für Ihre persönlichen Erfahrungen und Einschätzungen.

Bei Fragen oder Anmerkungen können Sie sich gerne an mich (rebekka@walka.co.at) wenden.

Vielen Dank für Ihre Unterstützung!

Die Teilnahme an dieser Umfrage ist freiwillig. Es werden **keine personenbezogenen Daten** wie Name oder Adresse erhoben. Die gesammelten Daten dienen ausschließlich wissenschaftlichen Zwecken und werden in anonymisierter Form ausgewertet. Eine Rückverfolgung Ihrer Person ist nicht möglich. Durch das Absenden des Fragebogens erklären Sie sich mit der anonymen Nutzung Ihrer Angaben im Rahmen dieser Studie einverstanden.

Bitte klicken Sie auf „Weiter“, wenn Sie mit der Teilnahme und den Datenschutzbedingungen einverstanden sind.

Allgemein

Was ist Ihre Erstsprache (Muttersprache)? *

Meine Antwort

Sind Sie Lehrkraft in der Volksschule oder Mittelschule? *

☐ Volksschule

☐ Mittelschule

Wie würden Sie die sprachliche Vielfalt an Ihrer Schule beschreiben? *

- ☐ Sehr vielfältig
- ☐ Eher vielfältig
- ☐ Wenig vielfältig
- ☐ Gar nicht vielfältig

Bitte erläutern Sie Ihre Antwort zur sprachlichen Vielfalt: *

Meine Antwort

Welche Herkunftssprachen sprechen Ihre Schüler*innen (außer der Unterrichtssprache)? *

Meine Antwort

Verstehen oder sprechen Sie selbst eine oder mehrere dieser Herkunftssprachen? *

- ☐ Ja
- ☐ Ein wenig
- ☐ Nein

Welche Sprachen verstehen oder sprechen Sie?

Meine Antwort

Unterrichtspraxis

Inwieweit berücksichtigen Sie die sprachlichen Hintergründe Ihrer Schüler*innen bei der Unterrichtsplanung? *

	1	2	3	4	5	6	
Nie	☐	☐	☐	☐	☐	☐	Immer

Bitte nennen Sie Beispiele: *

Meine Antwort

Wie regelmäßig nutzen Sie mehrsprachige Materialien oder Ressourcen (z. B. Bücher, Plakate, Arbeitsblätter)? *

- ☐ Häufig
- ☐ Gelegentlich
- ☐ Selten
- ☐ Nie

Bitte beschreiben Sie typische mehrsprachigen Materialien die Sie verwenden: *

Meine Antwort

Bitte beschreiben Sie typische mehrsprachigen Materialien die Sie verwenden: *

Meine Antwort

Wie oft erlauben Sie Ihren Schüler*innen ihre Erstsprachen im Unterricht zu verwenden? *

fast nie 1 2 3 4 5 6 sehr oft

☐ ☐ ☐ ☐ ☐ ☐ ☐

Wie reagieren Sie, wenn Schüler*innen im Unterricht unaufgefordert andere Sprachen als die Unterrichtssprache verwenden? *

Meine Antwort

Schulumgebung & Schulpolitik

Sind in Ihrer Schule mehrere Sprachen in Beschilderungen, Aushängen oder Kommunikationsmaterialien sichtbar? *

- ☐ Ja
- ☐ Teilweise
- ☐ Nein
- ☐ Weiß ich nicht

Bitte geben Sie Beispiele für mehrsprachige Kommunikationsmaterialien: *

Meine Antwort

Gibt es schulweite Richtlinien oder Initiativen zur Unterstützung von Mehrsprachigkeit oder Herkunftssprachen? *

- ☐ Ja
- ☐ Teilweise
- ☐ Nein
- ☐ Nicht bekannt

Welche Unterstützung gibt es für Mehrsprachigkeit oder Herkunftssprachen? *

Meine Antwort

Persönliche Einschätzung

Halten Sie sprachliche Vielfalt an Ihrer Schule für wertgeschätzt und unterstützt? *
Warum (nicht)?

Meine Antwort

Wie sicher fühlen Sie sich im Umgang mit einer mehrsprachigen Lerngruppe? *

- ☐ Sehr sicher
- ☐ Sicher
- ☐ Eher unsicher
- ☐ Unsicher

Haben Sie eine Fort- oder Weiterbildung zum Umgang mit sprachlicher Vielfalt besucht? *

- ☐ Ja
- ☐ Nein

Was waren die konkreten Themen Ihrer Fort- oder Weiterbildung? *

Meine Antwort

Was würde Ihnen helfen, besser auf eine mehrsprachige Klasse vorzubereiten zu sein? *

Meine Antwort

Möchten Sie noch etwas zum Thema Sprache oder Diversität an Ihrer Schule hinzufügen?

Meine Antwort

Database Link

<https://airtable.com/appsFYqfm422Uwp3n/shr8Rm1zYRV4ioug>