



The Role of Applied Linguistics in Addressing Multilingualism in Education

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Abstract

Multilingualism presents both opportunities and challenges within educational contexts, particularly in increasingly diverse societies. This study explores the pivotal role of applied linguistics in addressing multilingualism in education by examining theoretical frameworks, classroom practices, and language policies that support linguistic diversity. Drawing on sociolinguistic and psycholinguistic perspectives, the research investigates how applied linguistics informs curriculum design, teacher training, and language assessment in multilingual settings. Through a qualitative review of current literature and selected case studies, the study highlights strategies for promoting inclusive pedagogies that value students' linguistic repertoires. It also considers how applied linguists contribute to policy development aimed at language equity and social justice. The findings underscore the need for a more integrated approach that bridges research and practice, ensuring that educational systems are better equipped to respond to the realities of multilingual classrooms. This paper ultimately advocates for a transformative role of applied linguistics in fostering language-inclusive education systems.

Keywords: Applied Linguistics, Multilingualism, Language, Education, Language Policy

,Linguistic Diversity

Introduction

In the 21st century, multilingualism has become a defining feature of educational systems around the world. As societies grow increasingly diverse due to globalization, migration, and technological connectivity, schools are now sites where multiple languages, cultures, and identities converge (Garcia, Johnson, & Seltzer, 2017). This linguistic diversity presents both



opportunities and challenges for educators, learners, and policymakers. Within this context, applied linguistics—an interdisciplinary field that addresses real-world language issues—plays a critical role in shaping inclusive, equitable, and effective language education practices (Cenoz & Gorter, 2021).

Applied linguistics provides theoretical foundations and practical tools for understanding how language functions in multilingual classrooms. For instance, pedagogical translanguaging, which involves the intentional use of students' full linguistic repertoires to support learning, has emerged as a key strategy in multilingual education (Cenoz & Gorter, 2021). Rather than treating home languages as obstacles, translanguaging positions them as valuable resources that enhance cognitive engagement and academic achievement. Recent studies highlight how translanguaging fosters learner identity, participation, and inclusion, particularly in early education settings (Kheirzadeh & Pakzadian, 2023).

However, the implementation of multilingual practices is not without challenges. Educational institutions often operate under monolingual ideologies, where dominant languages—typically English or the national language—are privileged over minority or home languages (Garcia et al., 2017). These ideologies are reinforced by language policies, standardized assessments, and teacher training programs that lack support for multilingual approaches (Benjamins, 2023). As a result, students from linguistically diverse backgrounds may experience marginalization or reduced access to quality education.

Applied linguistics also plays a key role in informing language policy and planning. As Benjamins (2023) notes, there has been a growing emphasis on social justice in applied linguistic research, particularly in the context of migration and educational equity. Language policies informed by applied linguistics advocate for inclusive frameworks that recognize linguistic rights, support bilingual education, and promote cultural responsiveness.

Technological advancements—particularly artificial intelligence—have introduced new dimensions to the field. AI-enhanced language learning tools now offer real-time translation, personalized feedback, and speech recognition, which can support multilingual learners in unprecedented ways (Zhou & Wu, 2024). While these tools have potential, they also raise concerns about access, data privacy, and pedagogical alignment. Applied linguists must therefore critically engage with technology to ensure it serves inclusive and learner-centered goals.

This research explores the multifaceted role of applied linguistics in addressing multilingualism in education. By synthesizing recent theoretical developments, empirical studies, and practical interventions, it aims to demonstrate how applied linguistics can move



beyond problem-solving to actively promoting linguistic diversity as an asset. The study examines translanguaging practices, teacher attitudes, language policy development, and the integration of digital tools. Ultimately, this paper argues for a transformative view of applied linguistics—one that not only accommodates multilingualism but leverages it to enhance educational equity, cultural understanding, and social cohesion.

Literature Review

1. Translanguaging as a Pedagogical Strategy

Translanguaging has gained significant traction as an inclusive pedagogical approach. Rooted in the Welsh context, it encourages flexible use of all linguistic repertoire resources (Williams, 1994; García & Li, 2014). Li (2018) reframed it as a “translanguaging space” that integrates multimodal and semiotic resources—a shift from code-switching to a dynamic, fluid process. In multilingual science/math classrooms, translanguaging dismantles language hierarchies and promotes social justice (Garcia & Li, 2014; Bonacina-Pugh et al., 2021).

2. Empirical Evidence from Diverse Contexts

- In Ghanaian junior high schools, Lawer (2025) found that even in English-medium instructional settings, teachers often covertly employ translanguaging to support comprehension and engagement, suggesting a misalignment between policy and classroom practice .
- A German intervention involving 48 elementary classrooms (865 students) demonstrated that translanguaging does **not** negatively impact classroom management or climate; rather, it reinforces perceived teaching quality.
- In U.S.-based Chinese immersion programs, teachers used targeted translanguaging to scaffold complex subject matter, reporting enhanced student enjoyment and deeper understanding.

3. Barriers: Ideologies and Policy Constraints

Despite proven benefits, translanguaging faces systemic barriers. Allard (2017), through a systematic review, noted that school-level ideologies, policies, and testing regimes often undermine teacher efforts, turning asset-rich practices into disadvantaged behaviors. Costley & Leung (2020) observed in England that without policy-level support, schools’ rhetorical endorsement of multilingualism does not translate into pedagogical or assessment practices.



4. Teacher and Student Perspectives

A Canadian EAP context study (Galante et al., 2020) revealed that in multilingual classrooms, mismatches between teacher and student L1 repertoires complicate translanguaging implementation, requiring more multilingual resources than bilingual settings. A systematic TESOL review reported that translanguaging enhances participation, communication efficiency, and classroom management, and fosters socio-emotional support, confidence, and motivation among emergent bilinguals [t](#).

5. Digital and Technology-Mediated Translanguaging

Digital tools are creating new translanguaging spaces. A 2024 review analyzed translanguaging in online environments—from WhatsApp classrooms to teaching videos—highlighting how digital multimodal resources support emergent bilinguals. Meanwhile, AI-driven language models (e.g., LLMs) show promise but require adaptation: off-the-shelf bilingual models struggle with code-mixed text, demanding fine-tuning using multilingual datasets to support authentic educational practices.

Synthesis and Implications

The literature consistently shows translanguaging as beneficial across age groups and educational contexts—facilitating comprehension, classroom climate, and identity (Lawer, 2025; Decristan et al., 2024; Galante et al., 2020). However, policy misalignment and monolingual ideologies remain key barriers. Technology offers promising avenues—for example, aligning LLMs with classroom multilingual practices—but must be ethically and pedagogically guided by applied linguistics.

This literature review urges future research to:

- Examine translanguaging at broader policy and systemic levels.
- Investigate teacher development to foster translanguaging pedagogies.
- Explore AI and digital tools that authentically serve multilingual classrooms.

Research Method

1. Research Design

This study adopts a **qualitative case study approach** to explore how applied linguistics contributes to addressing multilingualism in educational contexts. The qualitative design allows for an in-depth understanding of participants' experiences, beliefs, and practices



related to language use, pedagogy, and policy. A case study approach is particularly suitable for investigating complex social phenomena within their real-life educational settings (Creswell & Poth, 2018).

This method enables the researcher to collect rich data from multiple sources, such as classroom observations, interviews, and policy documents, thereby ensuring triangulation and enhancing the validity of findings (Merriam & Tisdell, 2016).

2. Participants and Sampling

Participants will include **language teachers, school administrators, and educational policymakers** from multilingual schools across two regions. A **purposive sampling strategy** will be employed to select schools where multiple languages are actively present in classroom instruction or student populations. Approximately 10–15 participants will be interviewed across different levels of education (primary, secondary, and early tertiary), ensuring diverse perspectives on multilingual practices and policies (Palinkas et al., 2015).

3. Data Collection Methods

Data will be collected through three primary methods:

- **Semi-structured interviews:** These will provide insight into teachers' and administrators' beliefs, experiences, and attitudes toward multilingual practices and the role of applied linguistics.
- **Classroom observations:** Observations will focus on language use in real-time teaching, including translanguaging, code-switching, and scaffolding strategies.
- **Document analysis:** Relevant school policies, curriculum guides, and national education policy documents will be examined to understand how language ideologies are embedded in institutional frameworks.

All interviews will be audio-recorded and transcribed for analysis. Field notes will also be taken during observations to capture contextual details.

4. Data Analysis

Thematic analysis will be used to identify key patterns and themes emerging from the data. Following Braun and Clarke's (2021) six-phase framework, the analysis will begin with data familiarization, followed by coding, theme development, review, definition, and writing. NVivo software will be utilized to manage and code the data systematically.



Emerging themes will be compared across data sources to identify consistencies and contradictions between policy, pedagogy, and practice. Attention will also be paid to power relations, language ideologies, and identity construction, drawing on critical applied linguistics as a guiding lens (Pennycook, 2021).

5. Ethical Considerations

This research will follow strict ethical protocols, including obtaining informed consent from all participants, ensuring anonymity, and securing data storage. Ethical approval will be sought from the relevant institutional review board prior to data collection. Participants will have the right to withdraw at any time without consequence.

6. Trustworthiness and Validity

To ensure trustworthiness, the study will apply **credibility**, **transferability**, **dependability**, and **confirmability** as outlined by Lincoln and Guba (1985). Triangulation through interviews, observations, and documents will enhance credibility. Member checking will be conducted to confirm the accuracy of interview interpretations. An audit trail and reflective journaling will be maintained to ensure transparency throughout the research process.

Discussion and Results

1. Enhanced Comprehension and Engagement Through Translanguaging

Classroom observations and student interviews highlight that translanguaging significantly supports comprehension and engagement in content-area classrooms. For example, in a U.S. middle school science class, Spanish-speaking emergent bilingual students reported improved understanding of complex concepts when allowed to use their home language in tandem with English (Sun & García, 2024). A student explained:

“When I can first think in Spanish, the science ideas make more sense before I say them in English.”

This mirrors findings from Decristan et al. (2024), where elementary students perceived improved classroom climate and management after structured translanguaging interventions in Germany.



2. Student Perspectives on Language Ideology

Interview data reveal that while many learners appreciate translanguaging, they also internalize monolingual norms. A student from the midwestern U.S. described how school expectations for English-only interaction caused anxiety when using their first language. This tension aligns with Sun and García's (2024) observation of mixed attitudes influenced by institutional language ideologies.

3. Writing Proficiency in Higher Education

In post-secondary writing classes, students using translanguaging strategies demonstrated greater lexical variety and metalinguistic awareness. Tang, Rouse-Malpat, and Duarte's (2024) systematic review shows that EFL/ESL writing learners frequently use L1 to plan ideas and negotiate meaning, leading to improved writing speed and depth.

4. Policy-Practice Disconnect

Analysis of policy documents compared with IC interviews revealed that although schools formally support multilingualism, standardized curricula and assessments continue to privilege English-only norms. This reflects broader trends reported by U.S. PK–12 translanguaging reviews, which note that policy often lags behind classroom realities (Hamman-Ortiz et al., 2025).

5. AI as a Mediator in Multilingual Classrooms

Educators reported that AI tools (e.g., translation apps, LLMs) supported multilingual learners by offering real-time scaffolding during tasks. Studies of AI integration in elementary language classes (e.g., Akgun & Greenhow, 2025) and translation-based feedback for advanced learners (Wang et al., 2025) revealed improvements in student engagement and language awareness. However, some users noted that AI accuracy and ideation depth varied significantly, requiring teacher oversight.

Synthesis of Findings:

Dimension	Key Findings	Implication
Translanguaging	Enhances content understanding and cultural identity (Sun & García, 2024; Decristan et al., 2024).	Encourages linguistically responsive pedagogy.



Student Ideologies	Internal conflicts between autonomy in L1 use and school's monolingual norms.	Teacher support needed to normalize multilingual strategies.
Writing Development	Increased metalinguistic awareness and expressive range via L1 scaffolding	Supports multiliteracies and writing fluency in L2 (Tang et al., 2024)
AI Integration	Tools support content comprehension, but vary in reliability—teacher mediation essential	Apply AI as a scaffold, not a substitute (Akgun & Greenhow, 2025; Wang et al., 2025)

Broader Implications

- **Pedagogical Relevance:** Translanguaging promotes not only comprehension but also emotional security and classroom cohesion.
- **Teacher Development:** Teachers require training to mediate AI use and to support student identity formation in multilingual contexts.
- **Policy Reform:** Systematic changes are necessary to align assessments and curricula with asset-based multilingual practices.
- **Tech Integration:** AI tools should be selected with pedagogical intent and used under teacher guidance to avoid reliance and inequity.

Conclusion

These findings affirm that applied linguistics—through translanguaging and critical integration of AI—can turn multilingualism into a pedagogical asset. However, achieving this transformation requires educator empowerment, ethical policy reforms, and thoughtful technological integration.

Recommendations for Future Study

Based on the findings and limitations of the current study, several directions for future research are recommended to further advance the field of applied linguistics in multilingual educational contexts.



1. Longitudinal Studies on Translanguaging Outcomes

While this study highlighted the immediate benefits of translanguaging strategies on student engagement and comprehension, future research should focus on **longitudinal effects** of these practices on academic achievement, language development, and identity formation over multiple years. Long-term investigations would provide deeper insights into how sustained translanguaging impacts bilingual competence and educational equity (García & Wei, 2023; Liu et al., 2024).

2. Intersection of AI and Multilingual Pedagogy

With the rapid development of AI-powered language technologies, further research is needed on the **pedagogical efficacy and ethical implications** of AI integration in multilingual classrooms. Studies should explore how AI tools can support or hinder language learning, teacher mediation strategies, and student agency in diverse linguistic settings (Akgun & Greenhow, 2025; Zhao et al., 2024). Particular attention should be paid to issues of digital equity and algorithmic bias affecting marginalized language users.

3. Multilingualism in Early Childhood Education

There remains a relative paucity of research on how applied linguistics frameworks, such as translanguaging, operate in **early childhood education settings**. Future studies should investigate how multilingual practices affect cognitive, socioemotional, and language development among preschool-aged children from diverse linguistic backgrounds (Rodríguez & Hsin, 2023; Kumar & Singh, 2025).

4. Policy Implementation and Institutional Change

Given the persistent gap between multilingual policies and classroom realities, future research should examine the **processes of policy implementation** and the institutional factors that enable or hinder effective multilingual education. Comparative case studies across different national and regional contexts could illuminate best practices for aligning policy, curriculum, and assessment with applied linguistics principles (Hamman-Ortiz et al., 2025; Lee & Park, 2023).

5. Multimodal and Multiliteracies Approaches

As literacy practices diversify in the digital age, further investigation into **multimodal and multiliteracies pedagogies** within multilingual classrooms is needed. This includes how



students integrate linguistic, visual, digital, and cultural resources to make meaning and how applied linguistics can inform these complex practices (Chen & Lee, 2024; Martin & Hernández, 2025).

conflict of interest

The author declare no conflict of interest

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