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TEACHERS' PEDAGOGICAL RESISTANCE OF EMI THROUGH CLASSROOM TRANSLANGUAGING IN NEPALESE SCIENCE CLASSROOMS

Khem Raj Rauteda[1*] and Bhawana Luitel[2]
[1,2] Tribhuvan University, Nepal
krauteda@gmail.com[1] and bhawanaluitel98@gmail.com[2]
*correspondence: krauteda@gmail.com
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Abstract
English as a Medium of Instruction (EMI) refers to the practice of teaching academic subjects in English, especially in regions where English is not the primary language of most of the population. In Nepal, the increasing adoption of EMI in public schools has sparked significant debate among educators, policymakers, and linguists. While local authorities promote EMI, teachers often use both English and Nepali and allow space for students' home languages in the classrooms. However, the multilingual strategies employed by science teachers in EMI settings, particularly their resistance to exclusive English instruction, remain underexplored. The study aimed to analyze how secondary-level EMI science teachers incorporate students' home languages in the classroom. Using phenomenology, we collected data from two science teachers teaching at EMI public schools in Sunsari through in-depth interviews and analyzed thematically. Findings revealed that teachers frequently use both English and Nepali and strategically incorporate students' home languages through translanguaging. This practice served not only as a pedagogical tool to enhance comprehension, engagement, and inclusivity but also as a form of resistance against rigid monolingual EMI policy. The study concludes that EMI science teachers in Nepal use translanguaging both as a pedagogical strategy and as a form of micro-level resistance through teacher agency.

Keywords: medium of instruction, multilingualism, translanguaging

Introduction

Nepal has vast linguistic diversity, with 124 languages spoken across 142 distinct ethnic groups (NSO, 2021). Despite this rich tapestry, only Nepali and English are recognized as the languages of instruction in educational settings, which marginalizes the multilingual identity of the people (Gautam & Paudel, 2022; Phyak, 2013). The interim Constitution of Nepal, enacted in 2063 B. S., acknowledged the multilingual identity of Nepal for the first time (Phyak, 2013). Unfortunately, during the Panchayat system, a monolingual ideology prevailed, emphasizing a narrative of "one nation, one country, one language" (Gautam & Paudel, 2022; Phyak, 2013; Phyak et al., 2022). This approach, referred to as

'Nepalization' (Phyak, 2013); refers to the rapid expansion of Nepali as an official language, language of media, and education, reinforced the dominance of Nepali while the Nepal National Education Planning Commission (NNEPC) implemented policies that prohibited the use of mother tongues of linguistic minorities in schools, promoting Nepali as the sole medium of instruction (Phyak & Ojha, 2019).

English is one of the dominant international languages and is crucial in various fields, including education, trade, politics, and science. It operates as a 'global lingua franca' for cross-border communication (Fan & Hu, 2022), utilized by speakers from diverse linguistic backgrounds. Consequently, English is redefined as a 'multilingual franca' (Jenkins, 2014), wherein speakers recognize their identity as language users rather than taking it for granted. As a global medium for intercultural communication, English is taught as a second or foreign language worldwide, posing significant challenges related to language planning, pedagogy, assessment, and methodologies (Jenkins, 2014). English is also increasingly used as a medium of instruction in subjects extending beyond language studies (Rauteda, 2024a; Sah, 2022), leading to concerns about 'domain loss,' a phenomenon where local languages are overshadowed (Macaro et al., 2018).

The growing adoption of EMI in Nepalese public schools has sparked considerable debate among educators, policymakers, and linguists. Researchers, for example (Paudel & Choi, 2024; Rauteda, 2024a; Sah, 2022), found that increased use of EMI is accompanied by various ideologies and aspirations, creating inequalities within the educational landscape. Moreover, Sah and Karki (2023) state that over the past decade, EMI has become the preferred medium of instruction in many government-funded schools, particularly following Nepal's transition to a federal system in 2015. This transition empowered local governments to establish their language policies, leading to a notable shift towards EMI, especially in urban areas. This shift is in contrast to Mother Tongue-Based Multilingual Education (MTB-MLE) initiated by the Ministry of Education in 2007, which reflected a commitment to linguistic diversity, which was also included in the School Sector Reform Plan (SSRP) from 2009 to 2015. Furthermore, the Constitution of Nepal, adopted in 2015 A.D., ensures the right to promote one's culture and language. However, the Education Act (2028, 7th Amendment 2074) endorsed EMI, allowing instruction to be in Nepali, English, or both (Education Act, 2028, section 7). The School Sector Development Plan (SSDP) from 2016 to 2022 aimed to prioritize local languages in education as part of a bottom-up policy-making approach. Nevertheless, the practices appear to marginalize the representation of minorities or disadvantaged groups within the educational system. In spite of these aims, EMI has frequently been prioritized, as local authorities implement it in public schools under the guise of establishing model institutions for quality education.

The turn towards EMI in Nepal shows the developing world trends where English is increasingly seen as vital for economic and social opportunities. Nepal needs policies that continuously assess and implement EMI policies that meet the varied needs of its student population, while ensuring equitable access to quality education. However, it leads to the trend of cultural hegemony, where the dominant language might overshadow local languages and social inequities happen (Phillipson, 1992). Furthermore, privatization in education has rendered a situation in Nepal whereby only fee-based institutions have enough capacity to prepare students for high-stakes examinations; therefore, it further promotes English over

Nepali. The linguistic shift not alone but rather represents much larger socio-economic disparities about who can afford English-medium education and where social injustice happens.

The transition to EMI is frequently interpreted as a manifestation of cultural hegemony. Researchers argue that the promotion of English serves to entrench existing inequalities within the education system, marginalizing local languages and cultures in the process (Phyak, 2013). Moreover, EMI has created problems related to students' understanding of the content, engagement, and learning achievement (Rauteda, 2024a). Additionally, the local languages are getting marginalized day by day. As Nepal continues to confront these challenges, educators and policymakers need to engage critically with the implications of EMI, ensuring that the rich linguistic heritage of the country is not only acknowledged but actively supported. The teachers are the primary arbiters of implementing policy, and their role in formulating the policy from the bottom-up level is pivotal. Thus, the teachers' practices in formulating policies in their classrooms are a matter to be studied. Now, the study aims to explore and analyze EMI content [Science] teachers' use of students' home languages in their teaching. The study attempts to answer the following research question: In what ways do EMI Science teachers incorporate students' home languages in the classroom?

Literature Review

English as a medium of instruction (EMI)

EMI is an educational approach where subjects other than language courses are taught using English. This approach is commonly found in areas where the majority of people do not speak English as their first language. According to Macaro (2020), EMI is defined as the use of English to teach academic subjects (excluding English itself) in regions where most people's first language is not English. It has been defined as a growing global phenomenon (Dearden, 2014), which is expanding in non-English speaking countries day by day.

EMI has gained considerable traction within the realm of school education, prompting extensive debate in educational settings. It is perceived as a strategic initiative aimed at improving students' English proficiency, thereby increasing their global competitiveness and broadening their opportunities for advanced education and career advancement (Rauteda, 2024a). Moreover, the movement towards EMI in schools is frequently linked to the dynamics of neoliberal globalization and has been commodified in Nepalese school education. From this viewpoint, English is considered the most effective medium for educational delivery (Al-Bakri, 2013). Ultimately, the dominant belief is that EMI acts as a mechanism to align local educational frameworks with international standards, thus providing students with improved resources and access to a broader base of global knowledge.

Consequently, EMI is identified as a form of linguistic capital, facilitating access, mobility, authority, and legitimacy. Moreover, Bourdieu (2000) asserts that 'language forms a kind of Wealth' (p. 467), with the English language emerging as a critical pathway to higher education. Furthermore, language is viewed as a distinct aspect of social capital, serving as a social tool that constitutes a resource shaping daily experiences. Various stakeholders, including parents, educators, students, and policymakers, recognize the importance of EMI in preparing learners with essential language competencies (Paudel & Choi, 2021). Additionally, there is an increasing

demand from parents for their children to receive an education in English (Brown & Bradford, 2018; Phyak, 2016; Rauteda, 2024a; Sah & Guofang, 2018). Therefore, the prominence of the English language has fostered a narrative where it is not merely seen as a communicative tool but also as a medium that encompasses knowledge and contributes to intellectual development.

Issues in English as a Medium of Instruction (EMI)

The use of EMI in multilingual contexts has grown significantly due to globalization and the perceived economic and academic advantages of English proficiency. However, this trend presents several challenges, particularly in countries where English is not the dominant language. Research studies show that EMI gave birth to issues such as inequitable access, pedagogical difficulties, identity conflicts, and policy implementation gaps. Supporting the argument, (Paudel, 2021; Tupas, 2015) argue that EMI exacerbates educational inequalities by favoring the students from city areas and those who are from the elite class, having sufficient exposure to English. It is also responsible for creating educational inequalities by marginalizing non-English learners and creating distinct educational tiers. Moreover, English has become a matter of commodity in the neoliberal educational market which is causing the inequality in the society, dividing the schools in good and bad category, and hierarchizing the languages, and the people (Gao & Wang, 2017; Tupas, 2015).

EMI has also created pedagogical challenges for both the teachers and the students. Studies show that many governments adopt EMI policies without adequate teacher training or curriculum support (Hamid et al., 2021; Tollefson & Tsui, 2023). According to Macaro (2018), teachers in multilingual settings frequently lack English language proficiency, so that they cannot express all the things in English, which hinders student learning outcomes. Moreover, they [teachers] do not have adequate teacher training programs and proficiency in English presents obstacles to the effective implementation of EMI (Phyak, 2018). A study by Mohanty (2019) emphasizes that EMI increases the students' drop-out rates, particularly for low-income students. Additionally, EMI prioritizes monolingual teaching and learning practices. This phenomenon deprives learners of the opportunity to express their ideas and engage with knowledge through their native languages, but research studies show that students in multilingual settings can better learn if they are taught in their mother tongue or using their home languages (Garcia & Wei, 2014). This issue is further complicated by the absence of a coherent language policy that supports multilingual education (Poudel, 2019).

Schools in Nepal are transitioning to English Medium Instruction (EMI) without evaluating the resources at hand and the expected results. Giri (2020) contends that EMI diminishes the role of Nepali and indigenous languages in the educational system. Moreover, EMI policy has faced criticism from researchers such as (Rana, 2018; Sah, 2015) for lacking a solid foundation regarding teachers' English proficiency, students' capabilities, and the sociocultural context of the community. Furthermore, the policy appears to be implemented without taking into account the linguistic landscape of Nepalese classrooms and the communities. As a result, the rollout of EMI has pushed minority languages in Nepal to the sidelines. Researchers such as (Giri, 2020; Phyak & Ojha, 2019) assert that EMI sidelines local languages and contributes to language loss. The dominance of English in the

educational system not only sidelines minority languages but also reinforces the colonial legacy tied to the English language (Decosta et al., 2022).

In Nepalese classrooms, students come from various linguistic, ethnic, and indigenous backgrounds who speak Nepali as a second language and English, typically the third. Due to this reason, many students struggle to articulate their thoughts effectively in English. Moreover, it diminishes the opportunities to practice the native language in EMI classrooms where instructional materials, pedagogical approaches, and communication primarily occur in English. Furthermore, EMI is also commodifying the English language and selling it in the Nepalese educational market. Due to this reason, many public schools are shifting into English medium from Nepali and taking fees from the students (Rauteda, 2024a; Sah & Guofang, 2018). This transition has imposed financial burdens on students, exacerbating disparities between privileged and underprivileged learners.

Teacher agency in English as a Medium of Instruction (EMI) in the context of Nepal and the global

Agency is described as an individual's intention or ability to act, initiate actions, self-regulate, or bring about changes to their circumstances. It can also be viewed as a form of resistance (Giddens, 1984; Ortner, 1984) or an exercise of choice (Pickering, 1995). Archer (2000), a theorist in social realism, introduced the concept of reflective agency, where individuals contemplate their surroundings, and this internal dialogue informs their future actions. Additionally, Lantolf and Pavlenko (2001, p. 148) define agency as something that is "constantly co-constructed and renegotiated with those around the individual and with society as a whole." This understanding indicates that agency involves comprehending, analyzing, and reflecting on one's circumstances and practices, formulating strategies to address challenges, and working towards change, reform, and transformation.

Teacher agency refers to educators' ability to act purposefully and positively within various structural, cultural, and institutional limitations to impact their teaching methods (Priestley et al., 2015). This concept is fluid, influenced by personal beliefs, sociocultural situations, and policy frameworks. Language policy is seen as a complex and multifaceted aspect, noted for its layered and multi-level characteristics (Ricento & Hornberger, 1996). Schiffman (1996) categorizes language policy into five frameworks known as micro, macro, meso, top-down, and bottom-up. A thorough understanding of language policy and planning necessitates exploring its various levels and diverse layers. Johnson (2013) describes the layers of language policy through the processes of formulation and interpretation, followed by appropriation. The conceptual framework posits that policymakers develop policies that then undergo interpretation by both practitioners and policymakers. According to Menken and Garcia (2010), teachers must take ownership of how language policies are implemented in the classroom. The choices educators make regarding policy implementation are influenced by their beliefs and contextual elements, as they may choose to adhere to or resist these guidelines through appropriative practices. Garcia and Wei (2014) highlight that agency is demonstrated not just through resistance, but also via negotiation, as teachers adapt EMI policies to align with local contexts, employing strategies such as code-switching and translanguaging alongside selective compliance. Educators act as

transformative intellectuals, with agency defined as a counteraction to oppressive systems (Giroux, 1988). An advanced understanding of teacher agency recognizes how educators navigate various sociolinguistic contexts in policy execution.

EMI policies often enforce top-down requirements that restrict teachers' freedom. In spite of structural limitations, educators actively modify policies to fit their specific classroom contexts, resulting in diverse applications. Research indicates that EMI content instructors intentionally use multilingual techniques, with translanguaging becoming a prominent method. As Phyak et al. (2022) explain, translanguaging encompasses the intentional and fluid mixture of various languages to improve the delivery of content. Likewise, Creese and Blackledge (2015) highlight its significance in enhancing student understanding and engagement. In the context of Nepalese EMI classrooms, for example, teachers skillfully integrate Nepali and English into their teaching to achieve multiple educational objectives (Rauteda, 2024b). This multilingual strategy not only helps clarify content and promotes a deeper grasp of the material but also functions as a means of encouragement and a subtle form of opposition to monolingual ideologies (Rauteda, 2022; Sah & Karki, 2023).

The position of teachers is crucial in influencing EMI classrooms, as their influence allows them to contest limiting norms and promote more inclusive and effective teaching methods (Phyak et al., 2022; Phyak, 2023; Rauteda, 2024b; Tai & Wei, 2020; Tai, 2021). By utilizing their linguistic knowledge and teaching creativity, teachers can navigate constraints imposed by EMI policy while enhancing their students' learning experiences. This highlights the necessity for a more flexible EMI framework—one that acknowledges and supports the multilingual realities present in the classroom. The ongoing conversation surrounding EMI necessitates a critical reassessment of language policies and teaching practices in Nepal, ensuring that educators' perspectives are recognized and valued in the quest for a more inclusive educational system. This study is novel in foregrounding the lived experiences of EMI science teachers in Nepal who strategically employ translanguaging to resist monolingual norms. By focusing on a rarely explored intersection of EMI, science classroom, and multilingual pedagogy, it offers fresh insights into teacher agency and language policy negotiation at the classroom level.

Method

We conducted the study in two English-medium public schools in the Sunsari district, named Kankai Secondary School (pseudonym) and the Kanchanjangha Secondary School (pseudonym). Despite both schools shifting into EMI, the former school is practicing both English and Nepali mediums, and the latter is practicing only EMI. Both schools are located in a multilingual community where students primarily come from ethnic communities such as 'Tharu', Sardar, Rai, Limbu, and Yadav. However, the students from the Nepali-speaking community and other language-speaking communities are also studying in the school. According to the head teacher, the Kankai School was shifted into EMI in 2072 B.S., whereas the Kanchanjangha was shifted into EMI in 2070 B.S. In both schools, students who belong to minority language communities speak their mother tongue at home and speak the Nepali language at school. Hence, the Nepali language has become the lingua franca among students and teachers.

To conduct this study, we used phenomenology as a research design. Based on interpretivism research paradigms, phenomenological research design tries to explore the lived experiences of individuals to uncover the essence of a phenomenon. According to Cohen et al. (2018), phenomenological research is a design where the researcher explores, understands, describes, and interprets the experience of the individuals. It believes that knowledge is rooted in experiences (Hammersley, 2013). We employed this research design to analyze the teachers' experiences and understanding of the integration of multiple languages in the EMI science classrooms. Design is significant to the study as it believes in subjectivity and multiple realities. Ary et al. (2002) say that phenomenological research focuses on the subjective experience of the participants. We purposively selected two secondary-level science teachers, namely David (pseudonym) and Virat (pseudonym), who have been teaching at the EMI public schools for 10 and 7 years, respectively. David is a teacher at Kankai Secondary School, and Virat is teaching at Kanchanjngha Secondary School. Both teachers are male, and they are multilingual. David has completed his master's in Chemistry and has experience teaching in both private and public schools. David has completed his master's in microbiology and is teaching as a permanent teacher at the government schools. We used both primary and secondary sources of information. The previous theoretical and empirical literature were used as secondary sources of information, and the selected teachers teaching science at the English-medium public schools were used as primary sources of information. We used in-depth interviews as a research tool. The teachers were interviewed individually using the interview guidelines, which were prepared in the Nepali language. We asked questions related to their pedagogical practices, whether they use and give space to the home languages of the students in the classroom, and in what way they practice and experience the use of learners' home languages in the teaching of science in EMI settings. Moreover, we tried to explore in what ways they perceive the use of translanguaging or the dynamic use of multiple languages in EMI science classrooms. We recorded data using cellphones, and then we transcribed it through Romanization. Then, we translated the transcription into English, coded the data, categorized, and thematically analyzed them using Braun and Clark's (2006) model of thematic analysis.

Findings and Discussions

After the recursive analysis and interpretation of the data, the study presents the findings of the study in the following two themes;

Translanguaging as a pedagogical resource: Utilizing students' home languages in EMI science classrooms

Translanguaging is utilized as a pedagogical resource in a multilingual setting, where both teachers and students can purposefully, dynamically, and simultaneously draw on their linguistic repertoire. In EMI content classrooms, students' home languages can be used as a teaching resource where students and teachers can utilize their linguistic knowledge to understand, simplify, praise, and motivate students (Phyak, 2018; Rauteda, 2022; Rauteda, 2024b). Science teachers incorporate learners' linguistic and cultural knowledge purposefully in the EMI context. During the interview, we asked the participants, "How do you perceive the

use of students' home languages (Translanguaging) in your classroom? In this question, one of the participants, David, responded;

> *The majority of the students in my classroom are multilingual. They speak Tharu, Rajbansi, Nepali, and Maithili at their home. In my classroom, though it is English Medium, I frequently use Nepali along with English. I mix them both; otherwise, my students could not understand the content. My students also use the Nepali language in the classroom to ask questions and share their emotions. The students remained silent and disengaged while I used only English. To be honest, I also find it difficult to share all the things in English. So, I use Nepali to encourage them, to make fun, and to connect the content with real-life examples.*

The interview excerpt illustrates the complex linguistic reality of multilingual classrooms where students speak Tharu, Rajbansi, Nepali, and Maithili at home while being instructed in English. Despite the formal designation of the school as an English-medium institution, the teacher frequently employs Nepali alongside English to facilitate comprehension, acknowledging that exclusive use of English leads to student disengagement and silence. This practice aligns with the concept of translanguaging, which serves as a pedagogical strategy to bridge linguistic gaps and foster an inclusive learning environment (Canagarajah, 2011; Garcia & Wei, 2014). Moreover, teachers' experience shows that students use the Nepali language in EMI classrooms to ask questions, express their emotions, and conduct discussions. It further shows that the use of home languages helps to engage students and empower them (Rauteda, 2022). Additionally, the verbatim discloses that teachers also have difficulty sharing all the things in English. This further reveals that teachers' low proficiency caused the use of both Nepali and English in EMI science classrooms. It further shows the practical necessity of translanguaging in multilingual classroom settings where neither the students nor the teachers speak English as a mother tongue. As the teacher experienced exclusive English as a cause of learner disengagement in his classroom, the use of language with which the learners are familiar seems significant for the enhancement of participation, creating fun, encouraging learners for learning, and contextualizing the content with real-life experiences. It further resembles the sociocultural perspective on language learning, where meaning-making is deeply embedded in social interactions (Vygotsky, 1978). Moreover, the snippets illustrate that teachers are challenging the dominant language ideologies that favor the monolingual approaches of teaching in EMI settings. It reflects the teacher agency through which teachers resist top-down language policies by creating spaces for the learners' home languages in the classrooms. In the Nepalese context, the teacher's experience further shows the mismatch between the policy and practice, and reinforces the argument that translanguaging is not merely a compensatory mechanism, but a basic strategy for effective teaching and learning in linguistically diverse settings. Researchers, for example (Garcia & Wei, 2014; Tai & Wei, 2023) state that translanguaging can serve as an effective technique of teaching that is useful to make the learners engaged and comprehend the complex scientific content by relating it to their own linguistic and cultural backgrounds. This resistance is often rooted in the belief that when science education is detached from students' sociocultural contexts, it can alienate them and diminish their involvement (Canagarajah, 2013).

Another participant, Virat, shared;

> *In my experience, teaching science using English only is challenging, as my students speak languages other than English at home. To help them understand complex concepts, I switch into Nepali using relatable examples like agricultural practices for teaching 'photosynthesis'. While this approach aids learning, I worry about criticism for not adhering strictly to English.*

The verbatim shows the pedagogical tensions in EMI science classrooms, particularly in multilingual contexts. The information shows that teaching science in an EMI context is challenging if the setting is multilingual. Moreover, the snippets disclose that exclusive English is unsuitable for students who primarily speak other than English as a home language. In such a situation, the teacher incorporates the Nepali language along with English to explain scientific concepts. Moreover, the teacher allows students to use their prior knowledge with new academic content. It further shows that teachers use students' home languages in the class as a scaffolding strategy (Vygotsky, 1978) to support them in understanding the content. Additionally, the teacher's use of learners' home language to explain scientific concepts like 'photosynthesis' resembles translanguaging. According to Garcia and Wei (2014), translanguaging is pivotal for content simplification, comprehension, and creating an inclusive learning environment. Moreover, the information reveals that the teacher connects the content with the students' lived experiences and bridges the gap between scientific concepts and students' sociocultural realities (Moll et al., 1992; Tai & Wei, 2020). Despite having several benefits of using more than one language in EMI science classrooms, the teacher's expressions show that he is worrying about the criticism from the stakeholders. Additionally, the information discloses that there is a provision of English only in EMI schools, and teachers are criticized if they do not strictly use English in science classrooms. It further shows the less practicality of policies in multilingual realities. Consequently, the fear of being criticized shows the English hegemony (Phillipson, 1992) in educational policies, where English is positioned as the only legitimate language for academic success. Further, the priority given to English-only instruction in EMI settings aligns with the concept of 'linguistic capital' (Bourdieu, 1991), where language seems to have symbolic power.

Harnessing home languages as a pedagogical resistance through translanguaging in EMI classrooms

Translanguaging not only serves as a pedagogical resource but also functions as a form of resistance at the bottom level. It is taken as a powerful pedagogical resistance to the rigid and monolingual imposition of English in EMI settings. Garcia and Wei (2014) argue that translanguaging validates linguistic and cultural diversity by respecting multilingualism. Moreover, they state that teachers use translanguaging to create an inclusive learning environment that celebrates every one's subject positions. Translanguaging empowers students to draw on their full linguistic repertoire, fostering deeper comprehension while simultaneously challenging the monolingual ideologies entrenched in EMI policies (Garcia, 2009; Rauteda, 2022; Rauteda, 2024a). By employing home languages through translanguaging, teachers not only address the practical challenges of EMI but also

advocate for equity in education, ensuring that linguistic diversity is celebrated rather than suppressed. In one of the interviews, the participant, Virat, shared;

> *In my classroom, I use both English and Nepali when I teach science. Many students struggle with English, especially when we talk about difficult topics in chemistry and physics. I also let my students discuss the difficult topics in their home languages during group work. It helps them understand better and feel more comfortable sharing their ideas. Incorporating multiple languages is important for me because it makes science easier to understand and connects the lesson with learners' prior knowledge…*

The verbatim shows that teachers use translanguaging as a response to the limitations of EMI policies in multilingual classroom settings. The information further demonstrates that translanguaging works as a remedial pedagogy in EMI science classrooms where the dynamic use of multiple languages simplifies the difficult scientific concepts of chemistry and physics. Moreover, it is helpful for students who struggle with English. The information also illustrates that teachers allow students to use their home languages inside the classroom to perform different classroom activities, such as group work and discussions. Along with the fact, the teacher's response further shows that students feel comfortable if they are allowed to use their home languages inside the classrooms. Through the participant's response, it is elicited that translanguaging is also important for collaborative learning, which enhances comprehension, engagement, and active participation. In this regard, Garcia and Wei (2014) argue that translanguaging is such a pedagogical strategy that leverages students' full linguistic repertoire to facilitate deeper understanding and ensure the intellectual engagement of the learners. Additionally, the teachers' emphasis on connecting the scientific concepts to students' tacit knowledge and experiences ensures the value of culturally responsive pedagogy. By incorporating students' home languages and respecting the sociocultural realities, the teacher not only simplifies the complex content but also enhances the students' confidence and sense of belonging. Consequently, using such a plurilingual approach in teaching the teacher is challenging the monolingual ideology and advocates for equitable and context-sensitive pedagogical practices. In essence, the verbatim presents 'translanguaging' as a transformative pedagogical technique that addresses linguistic barriers, fosters inclusivity, and enhances overall learning achievement in EMI science classrooms. It also resists to monolingual bias of the policy in multilingual realities.

Another participant, David, shared;

> *I remember when I brought up the subject of 'forces' in physics, I saw that my students were reluctant to respond to questions in English. Therefore, I designed activities that allowed them to explain concepts using examples from their local surroundings and communicate in their home languages. One student shared how they push carts at home and how force applies in that context using the 'Tharu' language—it was an excellent example that the whole class could connect with…*

The verbatim shows that in an EMI science classroom, students do not feel easy to respond in English, and the teacher designed activities that allow students

to use their knowledge and language to respond to the problem. The practice of using local languages and valuing locality-related things in EMI science classrooms enables translanguaging as a form of pedagogical resistance. Hence, the 'Tharu' speaking students' explanation of force through the culturally relevant example of pushing carts not only deepens their understanding but also resonates with peers, fostering inclusive engagement. Moreover, the teacher overcame the language barriers that occur in the EMI classroom through the use of translanguaging.

Similarly, in an interview, Virat shared;

> *Talking about my classroom and teaching, I use both English and Nepali while teaching science. Primarily, I use Nepali for summarizing the lesson. What I do in my classroom is, firstly, I explain the concept in English and then rephrase and reinterpret it in Nepali. I do so generally to make the content easy and make everyone understand. Though the EMI setting does not allow multilingual practices, I use multilingualism as a source purposefully. The mix of languages in the classroom has made the learning more interesting, meaningful, and active…*

The verbatim shows that the teacher switches between the languages, like Nepali and English, primarily to summarize the lesson. Moreover, it illustrates that teachers use translanguaging to explain the ideas. Additionally, the practice of using cross-linguistic explanations demonstrates the critical aspect of translanguaging as an act of pedagogical resistance in EMI classrooms. A rigid English-only policy like EMI creates challenges in understanding, engagement, equality, and inclusivity. In such a case, teachers strategically use bilingual explanations; first explaining in English and then translating into Nepali to summarize the content. Such sort of practices helps in teaching in multilingual settings on the one hand and foster an inclusive learning environment on the other (Garcia & Wei, 2014).

Translanguaging practice is against the monolingual ideology of EMI policies, which often turns a blind eye to the multilingual realities of classroom interactions. The teacher incorporates students' home languages and mixes Nepali and English; therefore, does not succumb to the pressure that English be treated as the priority at the cost of learning outcomes. This resistance is based on the belief that understanding and meaningful learning should be regarded as the ultimate goals of education rather than rigid language policies. Such bilingual explanations prove how translanguaging can enliven lessons with conscious relevance to students' contexts. Rephrasing scientific concepts into common speech acknowledges those linguistic resources brought by students; better comprehension results from such acknowledgment, but more importantly, it validates their cultural and linguistic identities, thereby producing belongingness and confidence from within (Rauteda, 2024b). Ultimately, the findings underscore the transformative potential of translanguaging as a pedagogical tool to challenge the limitations of EMI.

Conclusion

The study explored and analyzed how secondary-level science teachers in Nepal's EMI public schools navigate multilingual classroom realities by incorporating students' home languages into their instructional practices. Through a phenomenological exploration of teachers' lived experiences, the study revealed that teachers employ translanguaging as both a pedagogical strategy and a form of

micro-level resistance against rigid monolingual EMI policy. Despite institutional pressures to adopt English-only instruction, teachers frequently utilize both English and Nepali in the classroom. They purposefully incorporate students' home languages to simplify complex scientific concepts, enhance comprehension, increase student engagement, and create inclusive learning environments. The study also reveals that the teachers' use of translanguaging serves as a valuable pedagogical resource to connect content to students' prior knowledge and real-life experiences while promoting a culturally responsive and equitable learning atmosphere for transformation. However, many teachers still perceive multilingualism as a barrier to learning, reflecting the prevailing dominance of a monolingual ideology. Importantly, the study emphasizes that translingual practices arise from the teachers' agency, challenging the dominant belief that equates English proficiency with academic success and social mobility. Nevertheless, how teachers adopt translanguaging strategies demonstrates their commitment to resisting strict monolingual policies and advocating for teaching methods that are fair and considerate of students' diverse backgrounds.

The study asks for urgent attention to EMI policy and practices in multilingual contexts like Nepal. The findings of the study challenge the effectiveness and fairness of rigid English-only approaches, particularly in subjects such as science, where language accessibility is essential for meaningful learning. Additionally, this research unequivocally underscores the necessity of recognizing translanguaging within formal education systems. It should not be seen as a deficiency; rather, it must be embraced as a valid and effective teaching strategy that aligns with the linguistic realities of students.

In light of these insights, the study recommends a reevaluation of language in education policies to better reflect and support multilingual classroom practices. Educational policymakers would better consider developing flexible EMI frameworks that recognize and incorporate students' full linguistic repertoire. At the institutional level, teacher training and professional development programs would better include modules on multilingual pedagogy, equipping teachers with theoretical and practical tools to implement translanguaging effectively. Furthermore, school leadership should foster a supportive environment where teachers feel empowered to draw on students' home languages without fear of professional or institutional reprimand. Future research should explore institutional perceptions of translanguaging and examine its long-term impact on students' academic outcomes and identity formation. By embracing translanguaging as a legitimate pedagogical practice, education systems can move toward more inclusive, equitable, and contextually responsive approaches to language and learning in EMI classrooms.

References

Al-Bakri, S. (2013). Problematizing English medium instruction in Oman. *International journal of bilingual and multilingual teachers of English*, *1*(2), 55-69. http://dx.doi.org/10.12785/ijbmte/010203

Archer, M. S. (2000). *Being human: The problem of agency.* Cambridge: Cambridge University Press.

Ary, D., Jacobs, L. C., & Razavieh, A. (2002). *Introduction to research in education*. Belmont, CA: Wadsworth/ Thomson Learning.

Bourdieu, P. (1991). *Language and symbolic power.* Cambridge, MA: Harvard University Press.

Bourdieu, P. (2000). The production and reproduction of legitimate language (1982). In L. Burke & A. Girvin (Eds.), *The Routledge language and culture reader* (pp. 467–477). London: Routledge.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Brown, H., & Bradford, A. (2018). Teaching subject content through English: CLIL and EMI courses in the Japanese university. In P. Wadden & C.C. Hale (Eds.), *Teaching English at Japanese universities* (pp. 103-108). London: Routledge. http://dx.doi.org/10.4324/9781315147239-11

Burke, L., Crowley, T., & Girvin, A. (Eds.). (2000). *The Routledge language and culture reader*. London: Routledge.

Canagarajah, S. (2011). Translanguaging in the classroom: Emerging issues for research and pedagogy. *Applied Linguistics Review, 2*(1), 1–28. https://doi.org/10.1515/9783110239331.1

Canagarajah, S. (2013). *Translingual practice: Global Englishes and cosmopolitan relations.* London: Routledge.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education*. London: Routledge.

Creese, A., & Blackledge, A. (2015). Translanguaging and identity in educational settings. *Applied Linguistics, 36*(5), 575-586. http://dx.doi.org/10.1017/S0267190514000233

De Costa, P. I., Green-Eneix, C. A., & Li, W. (2022). Problematizing EMI language policy in a transnational world: China's entry into the global higher education market. *English Today*, *38*(2), 80-87. https://doi.org/10.1017/S026607842000005X

Dearden, J. (2014). *English as a medium of instruction _ a growing global phenomenon.* Manchester: British Council.

Fang, F., & Hu, G. (2022). English medium instruction, identity construction and negotiation of Teochew-speaking learners of English. *Journal of Multilingual and Multicultural Development*, 1-16. https://doi.org/10.1080/01434632.2022.2051711

Gao, X., & Wang, W. (2017). Bilingual education in the people's republic of China. In Garcia, O., Lin, A. M. Y., & May, S. (Eds.), *Bilingual and multilingual education* (pp. 219–23). Cham: Springer. http://dx.doi.org/10.1007/978-3-319-02324-3_16-1

Garcia, O. (2009). *Bilingual education for the 21st century: A global perspective.* West Sussex: Wiley Black-Well.

Garcia, O., & Wei, L. (2014). *Translanguaging: Language, bilingualism and education.* London: Palgrave Macmillan. https://doi.org/10.1057/9781137385765

Gautam, B. & Poudel, P. (2022). Diversity, multilingualism and democratic practices in Nepal. *Bandung, 9*(1-2), 80-102. https://doi.org/10.1163/21983534-09010004

Giddens, A. (1984). *Constitution of society polity press.* Cambridge: Cambridge University Press.

Giri, R. A. (2020). *The politics of English language education in multilingual Nepal.* Bristol: Multilingual Matters.

Giroux, H. A. (1988). *Teachers as intellectuals: Toward a critical pedagogy of learning.* South Hadley, MA: Bergin & Garvey.

Hamid, M. O., Jahan, I., & Islam, M. M. (2021). Medium of instruction policies and language practices in higher education: A postcolonial analysis. *Language Policy, 20*(2), 215237.

Hammersley, M. (2013). *What is qualitative research?* London: Bloomsbury Academic.

Jenkins, J. (2014). *English as a lingua franca in the international university: The politics of academic English language policy*. London: Routledge. https://doi.org/10.4324/9780203798157

Johnson, D. C. (2013). *Language policy*. London: Palgrave Macmillan.

Lantolf, J. P., & Pavlenko, A. (2001). Second language activity theory: Understanding second language learners as people. In M. Breen (Ed.), *Learner contributions to language learning: New directions in research* (pp. 141-158). London: Routledge. https://doi.org/10.4324/9781315838465

Macaro, E. (2018). *English medium instruction: Content and language in policy and practice.* Oxford: Oxford University Press.

Macaro, E. (2020). Exploring the role of language in English medium instruction. *International Journal of Bilingual Education and Bilingualism, 23*(3), 263–276. https://doi.org/10.1080/13670050.2019.1620678

Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching 51*(1), 36–76. http://dx.doi.org/10.1017/S0261444817000350

Menken, K., & Garcia, O. (2010). *Negotiating language policies in schools: Educators as policymakers*. New York: Routledge. https://doi.org/10.4324/9780203855874

Ministry of Education. (2028, 9th Amendment, 2074). *Education act.* Government of Nepal.

Mohanty, A. (2018). *The multilingual reality: Living with languages*. Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781788921978

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice, 31*(2), 132-141. https://doi.org/10.1080/00405849209543534

National Statistics Office. (2021). *National population and housing census 2021 results.* Government of Nepal.

Ortner, S. B. (1984). Theory in anthropology since the sixties. *Comparative Studies in Society and History, 26*(1), 126-166. http://www.jstor.org/stable/178524

Paudel, J. (2021). Translanguaging as a pedagogy of enacting social justice in a multilingual setting. In *Teaching Practices and Language Ideologies for Multilingual Classrooms* (pp. 131-150). Hershey: IGI Global. http://dx.doi.org/10.4018/978-1-7998-3339-0.ch008

Paudel, P. P., & Choi, T. H. (2021). Policymakers' agency and the structure: The case of medium of instruction policy in multilingual Nepal. *Current Issues in Language Planning*, *22*(1-2), 79-98. https://doi.org/10.1080/14664208.2020.1741235

Paudel, P. P., & Choi, T. H. (2024). Enactment of English medium instruction in underresourced educational contexts: A case of multilingual public secondary schools in Nepal. *System, 121,* 103223. https://doi.org/10.1016/j.system.2024.103223

Phillipson, R. (1992). *Linguistic imperialism.* Oxford: Oxford University Press.

Phyak, P. (2013). Language ideologies and local languages as the medium of instruction policy: A critical ethnography study of a multilingual school in Nepal. *Current Issues in Language Planning, 14*(1), 127-143.

Phyak, P. (2016). Local-global tension in the ideologies and practices of English language teaching in Nepal. In Tupas, R. (Ed.), *Unequal Englishes: The politics of Englishes today* (pp. 53-69). London: Palgrave Macmillan.

Phyak, P. (2018). Translanguaging as a pedagogical resource in English language teaching: A response to unplanned language education policies in Nepal. In K. Kuchah, & F. Shamim (Eds.), *International perspectives on teaching english in difficult circumstances* (pp. 49–70). London: Palgrave Macmillan. https://doi.org/10.1057/978-1-137-53104-9_3

Phyak, P. (2023). Translanguaging as a space of simultaneity: theorizing translanguaging pedagogies in English medium schools from a spatial perspective. *Modern Language Journal, 107*(1), 289-307. https://doi.org/10.1111/modl.12830

Phyak, P., & Ojha, L. P. (2019). Language education policy and inequalities of multilingualism in Nepal: Ideologies, histories, and updates. In A. Kirkpatrick & A. J. Liddicoat (Eds.), *The Routledge international handbook of language education policy in Asia* (pp. 341–354). London: Routledge. https://doi.org/10.4324/9781315666235-24

Phyak, P., Sah, P.K., Ghimire, N., & Lama, A. (2022). Teacher agency in creating a translingual space in Nepal's multilingual English medium schools. *RELC Journal, 53*(2), 1-21. https://doi.org/10.1177/00336882221113950

Pickering, A. (1995). *The mangle of practice: Time, agency and science.* University of Chicago Press.

Poudel, P. (2019). The medium of instruction policy in Nepal: Towards critical engagement on the ideological and pedagogical debate. *Journal of Language and Education, 5*(3), 102-110. https://doi.org/10.17323/jle.2019.8995

Priestley, M., Biesta, G., & Robinson, S. (2015). *Teacher agency: An ecological approach.* London: Bloomsbury.

Rana, K. (2018). Retention of English language tension in multilingual communities of Nepal: A review of teachers' narratives. *Journal of NELTA, 23(*1-2), 40-53. https://doi.org/10.3126/nelta.v23i1-2.23347

Rauteda, K. R. (2022). *Translanguaging as a pedagogical resource in multilingual ELT classrooms: Exploring perceptions and practices* [Master's Thesis, Tribhuvan University].

Rauteda, K. R. (2024a). Use of EMI at secondary education: Exploring non-English Nepalese teachers' ideologies. *Siddhajyoti Interdisciplinary Journal, 5*(1), 33-43. https://doi.org/10.3126/sij.v5i1.63596

Rauteda, K. R. (2024b). Unveiling pedagogical translanguaging: Investigating teachers' translingual practices and purposes in ELT classrooms. *English Language Teaching (ELT) PERSPECTIVES, 9*(1-2), 51-66.

Ricento, T. K., & Hornberger, N. H. (1996). Unpeeling the onion: Language planning and policy and the ELT professional. *TESOL Quarterly, 30*(3), 401–427.

Sah, P. K. (2015). English medium instruction (EMI) in Nepalese education: Potential or problem? *ELT Chautari,* 1-6.

Sah, P. K. (2022). English medium instruction in South Asian's multilingual schools: Unpacking the dynamics of ideological orientations, policy/practices, and democratic questions, *International Journal of Bilingual Education and Bilingualism, 25*(2), 742755. https://doi.org/10.1080/13670050.2020.1718591

Sah, P. K., & Guofang, Li. (2018). English medium instruction (EMI) as linguistic capital in Nepal: Promises and realities. *International Multilingual Research Journal, 12*(2), 109-123. http://dx.doi.org/10.1080/19313152.2017.1401448

Sah, P. K., & Karki, J. (2023). Elite appropriation of English as a medium of instruction policy and epistemic inequalities in Himalayan schools, *Journal of Multilingual and Multicultural Development, 44*(1), 20-34. https://doi.org/10.1080/01434632.2020.1789154.

Schiffman, H. F. (1996). *Linguistic culture and language policy*. London: Routledge. https://doi.org/10.4324/9780203021569

Tai, K. (2021). Translanguaging as inclusive pedagogical practices in English-medium instruction science and mathematics classrooms for linguistically and culturally diverse students. *Research in Science Education, 52*(3), 975-1012. https://doi.org/10.1007/s11165-021-10018-6

Tai, K., & Wei, L. (2020). Co-learning in Hong Kong English medium instruction mathematics secondary classrooms: A translanguaging perspective. *Language and Education, 35*(3), 241-267. https://doi.org/10.1080/09500782.2020.1837860

Tai, K., & Wei, L. (2023). Embodied enactment of a hypothetical scenario in an English medium instruction secondary mathematics classroom: A translanguaging approach. *Language Teaching Research*, 136216882311528. https://doi.org/10.1177/13621688231152858

Tollefson, J. W., & Tsui, A. B. M. (2023). *Language policy, culture, and identity in Asian contexts.* New York: Routledge. https://doi.org/10.4324/9781315092034

Tupas, R. (2015). *Unequal Englishes: The politics of Englishes today*. London: Palgrave Macmillan. https://doi.org/10.1057/9781137461223

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.