

Teacher's Experience on Using English as Medium of Instruction for Science in Islamic Educational Context

Diba Ramadhana¹

¹Universitas Sari Mulia, Banjarmasin, Indonesia

Corresponding Author

dbramadhana@gmail.com

Abstract: This study explores the lived experiences of a science teacher implementing English Medium Instruction (EMI) in an Indonesian Islamic elementary school. Amid the global push for EMI, it examines the often-overlooked intersection of pedagogical, linguistic, and cultural-religious pressures faced by educators in such unique contexts. Using a qualitative phenomenological approach, the study analyzes data from a semi-structured interview to understand the teacher's challenges and meaning-making processes. Findings reveal three key themes: (1) the teacher's daily experience as a constant balancing act between delivering science content and teaching in English; (2) the navigation of significant linguistic, pedagogical, and emotional challenges; and (3) the intentional effort to reconcile English instruction with Islamic values, framing EMI as a means to cultivate a "Global Muslim" identity. The study argues that the teacher functions as an intuitive, culturally responsive agent, employing strategies like translanguaging to bridge global educational demands and local cultural values. The study concludes that effective EMI implementation in culturally diverse settings must go beyond focusing solely on language proficiency. It calls for policies and professional development that support teachers in their complex roles as cultural mediators. These insights have implications for designing context-sensitive educational programs that empower teachers working at the intersection of global and local educational expectations.

Keywords: *teacher experience, EMI, Science, Islamic Education*

1. INTRODUCTION

In an era defined by globalization, the use of English as a Medium of Instruction (EMI) has emerged as a significant global phenomenon in education. Primarily concentrated in higher education but increasingly expanding into primary Ernawati et al., (2021) and secondary levels Kurniati (2024), EMI involves teaching STEM subjects such as science through English in countries where it is not the majority language. This educational shift is propelled by a powerful confluence of factors, including institutional ambitions for internationalization Simbolon (2021), the mobility of students and academics Lee et al., (2025), and the widely held belief that English proficiency provides graduates with a competitive edge in the global marketplace (Huang & Curle, 2021). Consequently, educational institutions worldwide are adopting EMI to enhance their international standing, attract students, and prepare a workforce capable of operating in a globalized economy. However, this rapid proliferation is often characterized by top-down policy mandates that significantly outpace the development of evidence-based implementation strategies and pedagogical support systems, creating a host of challenges for the educators and learners at the classroom level (Sukmawati & Pujiani, 2024).

The trend towards EMI is particularly pronounced in Indonesia, where such programs have flourished over the last decade. This growth was significantly spurred by national strategic goals, such as preparing graduates for the ASEAN Economic Community, which necessitates English proficiency for regional economic participation. Despite this enthusiasm, the expansion of EMI in Indonesia has occurred within a notable policy vacuum. There is a conspicuous absence of a comprehensive national policy framework to guide, regulate, and support EMI implementation across the country's diverse educational landscape (Coleman et al., 2023). This lack of centralized guidance has led to a significant "misalignment between what the policymakers expect and the practice of EMI in the classroom".

This disconnect manifests in numerous practical challenges. Since the national education system predominantly uses Bahasa Indonesia as the medium of instruction in primary and secondary schools, both students and teachers often enter EMI pro-grams with insufficient English proficiency to handle the linguistic demands of learning and teaching complex subject matter. Research within the Indonesian context consistently points to difficulties related to low language competence Sukmawati & Pujiani (2024), a lack of appropriate teaching materials Baa et al., (2023), and the need for teachers to frequently resort to translation, which can compromise the quality and efficiency of instruction (Emilia & Hamied, 2022). This situation creates a fertile ground for inequity; without a national standard for support and resources, the success of EMI programs becomes heavily dependent on

the capacity of individual institutions. This allows well-resourced schools to potentially succeed while less-resourced ones may struggle, thereby amplifying existing disparities in educational quality and access.

Within this national context, Indonesian Islamic schools represent a unique and particularly complex site for EMI implementation. For these institutions, adopting EMI alongside an international curriculum serves as a powerful branding strategy. It signals modernity and global relevance, increasing the school's credibility and attracting parents who seek an education that combines rigorous religious instruction, such as Quran memorization programs, with the skills needed for global competitiveness. This strategic positioning often leads to increased enrollment and enhances the school's social prestige. However, this pursuit of global standing introduces a profound tension. The adoption of English—a language deeply embedded in secular, Western cultural contexts—to teach subject like science creates a potential conflict with the core mission of Islamic schools: the preservation and transmission of local cultural heritage and Islamic values. This places teachers at the critical intersection of these competing pressures. They are tasked not only with navigating the pedagogical and linguistic hurdles of EMI but also with mediating the complex relationship between global knowledge systems and local religious identity (Ghufron et al., 2024). This creates a "prestige paradox": the very drive for institutional prestige through EMI results in immense, often unsupported, pressure on teachers who must manage the practical and cultural contradictions on the ground. The symbolic value of EMI can thus overshadow the substantive requirements for its effective and culturally sensitive implementation. Despite the significance of this dynamic, research on EMI with-in Islamic educational contexts remains remarkably sparse, with a particular dearth of qualitative studies that explore the subjective, lived experiences of the teachers who navigate this challenging terrain daily.

The central problem this study addresses is the multifaceted challenge that science teachers face when implementing EMI in an educational setting where pedagogical, linguistic, and cultural-religious pressures converge. While the general challenges of EMI are well-documented, a significant research gap exists. There is a lack of in-depth, phenomenological research that explores how teachers experience, interpret, and negotiate these challenges within the specific socio-cultural and religious milieu of an Indonesian Islamic school. This study aims to fill this gap by providing a rich, nuanced, and contextualized understanding of the teacher's lived reality. By focusing on the subjective meanings that a teacher ascribes to their experience, this research moves beyond a simple inventory of problems to explore the deeper processes of professional and cultural adaptation. The significance of this study is threefold. First, it contributes novel empirical data to the under-researched field of EMI in Islamic education. Second, it offers a theoretical contribution by proposing a framework that integrates EMI research with Culturally Responsive Pedagogy to analyse the teacher's role as a cultural broker. Finally, its findings have the potential to inform the development of more effective, sustainable, and equitable educational policies and teacher professional development programs that are contextually sensitive to the unique needs and values of Islamic educational institutions in Indonesia and beyond.

2. METHOD

This study employs a qualitative approach situated within an interpretive paradigm. Specifically, it utilizes a phenomenological research design (Groenewald, 2004). This design is deliberately chosen as it aligns directly with the study's central aim: to understand the subjective, lived experiences of a teacher implementing EMI. Phenomenology is uniquely suited to explore the essence of a phenomenon from the perspective of those who have experienced it, focusing on the meanings that individuals attribute to their experiences. The core research questions which investigate how a teacher experiences their role, what challenges they face, and how they make meaning of the interplay between language and identity are inherently phenomenological. This approach provides a theoretical tool that allows for an in-depth exploration of complex human social experiences within educational settings. It requires the researcher to "bracket" or set aside preconceived assumptions about the phenomenon to gain a more authentic understanding from the participant's viewpoint (Sohn et al., 2017).

The primary method of data collection was semi-structured interview because it allowed the researcher to ensure that all key areas outlined by the research questions were covered, while also providing the freedom to probe emergent topics and ask follow-up questions based on the participant's responses. This approach is essential for capturing the depth and richness of the participant's lived experience. The interview was audio-recorded with the participant's permission and lasted approximately 45-60 minutes. Ethical considerations were paramount throughout the research process. Prior to the interview, the researcher obtained written informed consent, clearly explaining the purpose of the study, the voluntary nature of participation, and the participant's right to withdraw at any time without consequence. To ensure confidentiality and anonymity, the participant's name and the school's name have been replaced with pseudonyms in all research documents and reports. All data, including the audio recording and transcript, were stored securely on a password-protected device accessible only to the researcher.

The research was conducted in an Integrated Islamic Elementary School (Sekolah Dasar Islam Terpadu/SD IT) located in East Java. This type of school is characterized by its integration of the national curriculum with an intensive Islamic studies program. The specific school was selected because it has formally implemented an EMI program in Science subject. A total sampling technique was employed to select the research participant. This non-

probability sampling method is ideal for qualitative and phenomenological research, as its goal is not generalizability but rather to gain deep insights from an individual who is "information-rich" and possesses direct, sustained experience with the phenomenon of interest. The participant selected for this study is a Science teacher who has been teaching the subject through the medium of English for a minimum of two years. This criterion was established to ensure the participant could offer reflections that go beyond the initial challenges of adaptation and speak to the sustained, day to day reality of working within an EMI framework in this specific context.

3. RESULTS AND DISCUSSION

3.1. Results

Teacher 1's narrative painted a vivid picture of her classroom as a space of constant negotiation and balance. Her daily professional life was not simply about teaching science; it was about perpetually managing the competing demands of curriculum delivery, language barriers, student engagement, and institutional expectations. This experience was characterized by a dual role she was forced to assume. While officially a science teacher, she described feeling equally like a language instructor, constantly monitoring students' comprehension, explaining vocabulary, and simplifying sentence structures. This dual labor was often invisible and unacknowledged in her formal job description but consumed a significant portion of her preparation and class time.

A central strategy in this balancing act was the fluid and frequent use of code-switching between English and Bahasa Indonesia. Teacher 1 described this not as a planned pedagogical choice but as a "survival strategy." When faced with blank stares after explaining a concept like photosynthesis in English, she would immediately switch to Bahasa Indonesia to ensure foundational understanding before reintroducing the English terms. This practice, while essential for content comprehension, contributed to a feeling that she was not conducting a "pure" EMI class, creating a tension between pedagogical pragmatism and the school's international branding. The preparation for each lesson was consequently immense, involving not only mastering the scientific content but also anticipating linguistic hurdles, preparing bilingual glossaries, and simplifying complex English texts from curriculum materials.

This theme directly addresses the specific obstacles Teacher 1 encounters, which align closely with those documented in the broader EMI literature but are inflected by her specific context. The challenges were linguistic, pedagogical, and affective. Linguistically, the most significant barrier was what she termed "the vocabulary gap." Students, coming from non English speaking home environments, possessed a very limited English vocabulary, especially for abstract scientific terms. Words like 'ecosystem,' 'molecule,' or 'gravity' were not just new concepts but also formidable linguistic hurdles. This forced her to spend a disproportionate amount of time on vocabulary drills, often at the expense of deeper conceptual exploration.

Pedagogically, this linguistic challenge led to what Teacher 1 felt was a "pedagogical compromise." To ensure all students could follow along, she often had to simplify complex scientific ideas, which she worried might dilute the rigor of the curriculum. She felt a constant tension between covering the breadth of the Cambridge curriculum and ensuring the depth of student understanding. Her primary goal became comprehension, even if it meant sacrificing the development of English fluency during her class time. This reflects a common EMI challenge where teachers must adapt their pedagogy to bridge the language gap, often without formal training on how to do so effectively.

Affectively, Teacher 1 spoke candidly about "the weight of anxiety." Despite her years of experience, she admitted to feeling nervous before classes, particularly when introducing a new and complex topic. Her anxiety stemmed from a fear of making pronunciation or grammatical errors in English, which she felt could undermine her authority as a teacher. This mirrors research identifying teaching anxiety and a conflict in professional identity—feeling like a subject expert but a language novice—as significant psychological burdens for EMI teachers. She described a fear that students might "lose respect" if they perceived her English as imperfect, a pressure amplified by the school's high prestige positioning.

The most nuanced theme to emerge was Teacher 1's conscious effort to make sense of her role at the intersection of English, science, and Islam. She did not see these three domains as inherently contradictory but viewed her role as one of actively "weaving the threads" together to create a coherent educational experience for her students. This theme encapsulates her approach to the third research question regarding the relationship between EMI and cultural religious values.

One key sub-theme was "finding harmony" between scientific concepts and Islamic values. When teaching topics like the creation of the universe or the intricacies of the water cycle, she would make explicit connections to verses from the Qur'an that discuss these natural phenomena. For her, this was not about altering the science but about framing it within an Islamic worldview, showing students that scientific inquiry and faith could coexist and even enrich one another. She saw this as a crucial part of her responsibility in an Islamic school, ensuring that students did not perceive science as a purely Western or secular enterprise that was disconnected from their faith.

Another aspect of this was her evolving view of English as a "neutral tool versus a cultural carrier." Initially, she was concerned that using English might implicitly transmit Western cultural values that could conflict

with Islamic principles. Over time, however, she came to view and present English primarily as a neutral tool for accessing global knowledge. She emphasized to her students that learning English was a way to "share our knowledge with the world and learn from the world," framing it as a skill for participating in a global conversation as confident Muslims. This approach aimed to foster what she called a "'Global Muslim' identity"—an identity that is both deeply rooted in Islamic faith and comfortable engaging with the wider, globalized world through the medium of English. This represents a sophisticated act of cultural mediation, moving beyond a simple language of instruction policy to a deeper project of identity formation.

3.2. Discussions

The teacher's experience vividly illustrates the "double-edged sword" of EMI. Her account of the school's motivation for adopting EMI—to enhance its prestige and offer students a competitive edge—aligns perfectly with Maharani et al., (2024) research that identified the pursuit of global competence and social status as primary drivers of EMI adoption. However, the findings also powerfully demonstrate the "Prestige Paradox" outlined in the introduction. The institutional aspiration for global standing directly creates the challenging local realities that the teacher must navigate daily. As Sun (2023) stated, an ideal EMI (English-Medium Instruction) classroom teacher should be able to organize and plan learning tasks that help students acquire knowledge efficiently and with high quality. However, Teacher 1 experienced significant pressure to uphold the image of a high-quality international program. This pressure placed heavy linguistic, pedagogical, and emotional burdens on her, often without sufficient institutional support, such as targeted professional development. Her perpetual "balancing act" the labyrinth of challenges she faces are the direct consequences of a top-down policy decision that prioritizes the symbolic value of EMI over the substantive needs of its practitioners. The lack of a coherent national policy framework in Indonesia exacerbates this situation, leaving individual teachers like Teacher 1 to devise their own "survival strategies" to bridge the gap between policy ambition and classroom reality. Her story is a microcosm of the broader misalignment between macro level internationalization goals and the micro level pedagogical practices required to achieve them equitably and effectively.

While the EMI literature often frames challenges like limited teacher proficiency or the use of L1 as deficits, applying the lens of Culturally Responsive Pedagogy (CRP) to the findings offers a more nuanced and empowering interpretation. Teacher 1's pedagogical choices, born out of necessity, can be reinterpreted as sophisticated, intuitive acts of culturally responsive teaching. Her frequent code switching and use of Bahasa Indonesia to ensure comprehension is a prime example. Rather than viewing this as a failure to maintain an "English-only" environment, it can be understood as a form of translanguaging (Wahyu et al., 2022). She is strategically leveraging her students' full linguistic repertoire to scaffold their learning, validating their home language as a legitimate tool for meaning-making (Idaryani et al., 2024). This practice aligns with the core CRP principle of using students' existing knowledge and cultural assets to facilitate academic success. Similarly, her efforts to connect scientific concepts to Qur'anic verses is a direct application of the CRP tenet of maintaining students' cultural competence. By doing so, she makes the science curriculum more relevant and meaningful within her students' cultural and religious frame of reference, preventing the potential alienation that a purely secular, Western-centric curriculum might cause. These actions demonstrate that she is operating not just as a language conduit, but as an intuitive culturally responsive agent, actively adapting her practice to meet the holistic needs of her students.

Perhaps the most profound insight from this study is its illumination of EMI implementation as a site of intense identity negotiation. Teacher 1's experience transcends the technicalities of language teaching; it is a continuous process of reconciling her identity as a competent science educator, a non-native English speaker, and a Muslim teacher within an Islamic institution. Her anxiety about her English proficiency is not just a lack of confidence; it is a threat to her professional identity as an expert. Her deliberate efforts to frame English as a "neutral tool" and to foster a "Global Muslim" identity represent a conscious strategy to navigate the potential cultural conflicts inherent in her role. This process of weaving together science, English, and Islam is a form of sophisticated intellectual and cultural labor that is largely invisible and unsupported by standard EMI models and professional development programs. It highlights a critical flaw in many EMI policies: they are conceived as linguistic or economic instruments, failing to account for the deep sociocultural and identity-related work that teachers are required to perform. This study suggests that for EMI to be implemented successfully and ethically in culturally distinct contexts like Islamic schools, policies and support systems must move beyond a narrow focus on language proficiency and instead recognize and empower teachers in their role as cultural brokers and identity negotiators.

4. CONCLUSION

This phenomenological study sought to explore the lived experiences of a science teacher using English as a Medium of Instruction (EMI) within an Indonesian Islamic school. The analysis identified three core themes: the teacher's experience as a perpetual balancing act, her navigation of a labyrinth of challenges, and her active efforts to weave together English instruction with an Islamic identity. The study contributes to the literature by providing a

rare, in-depth qualitative account of EMI at the intersection of language, STEM, and Islamic education. It moves the scholarly conversation forward by applying the theoretical lens of Culturally Responsive Pedagogy (CRP) to the EMI context, reframing common teacher practices like code-switching as strategic forms of translanguaging and cultural affirmation rather than as pedagogical deficits. The central contribution is the conceptualization of the EMI teacher in this context as a culturally responsive agent engaged in a constant negotiation of professional and cultural identity.

REFERENCES

- Baa, S., Maghfirah, N., & Borland, H. (2023). The Implementation of English Medium Instruction (EMI) at the Public Secondary Schools in South Sulawesi Indonesia: Students' Voices. *International Journal of Language Education*, 7(3). <https://doi.org/10.26858/ijole.v7i3.43567>
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Coleman, H., Ahmad, N. F., Hadisantosa, N., Kuchah, K., Lamb, M., & Waskita, D. (2023). Common sense and resistance: EMI policy and practice in Indonesian universities. *Current Issues in Language Planning*, 25(1), 1–22. <https://doi.org/10.1080/14664208.2023.2205792>
- Emilia, E., & Hamied, F. A. (2022). TRANSLANGUAGING PRACTICES IN A TERTIARY EFL CONTEXT IN INDONESIA. *TEFLIN Journal: A Publication on the Teaching and Learning of English*, 33(1), 47. <https://doi.org/10.15639/teflinjournal.v33i1/47-74>
- Ernawati, E., Sofendi, S., & Silvhiany, S. (2021). English as a Medium of Instruction (EMI): A primary school teachers' and students' perceptions. *International Journal of Research in Counseling and Education*, 5(1), 24. <https://doi.org/10.24036/00414za0002>
- Ghufron, M. A., Taufiq, A., & Firdaus, A. U. (2024). Intercultural Dynamics in English Language Learning at Islamic Schools: Impacts on Student Islamic Identity Construction in a Culturally Pluralistic Context. *Jurnal Pendidikan Bahasa Inggris Undiksha*, 12(2), 230–240. <https://doi.org/10.23887/jpbi.v12i2.85011>
- Groenewald, T. (2004). A Phenomenological Research Design Illustrated. *International Journal of Qualitative Methods*, 3(1). <https://journals.sagepub.com/doi/full/10.1177/160940690400300104>
- Huang, H., & Curle, S. (2021). Higher education medium of instruction and career prospects: an exploration of current and graduated Chinese students' perceptions. *Journal of Education and Work*, 34(3), 331–343. <https://doi.org/10.1080/13639080.2021.1922617>
- Idaryani, N., Reza, N., Hasmin, S., & Lestari, N. N. (2024). Teaching English to Young Learners: Proceedings of Malikussaleh International Conference on Multidisciplinary Studies (MICoMS), 4, 00029–00029. <https://doi.org/10.29103/micoms.v4i.917>
- Kurniati, M. (2024). Students' Perceptions of English Medium Instruction (EMI) in Secondary School Bilingual Classes: A Case Study. *Jurnal Pendidikan Bahasa Dan Sastra*, 23(2), 167–182. https://doi.org/10.17509/bs_jbpsp.v23i2.68687
- Lee, H., Rose, H., Macaro, E., & Lee, J. H. (2025). Success of EMI in higher education and its key components: A meta-analytic structural equation modelling approach. *Educational Research Review*, 47, 100684. <https://doi.org/10.1016/j.edurev.2025.100684>
- Maharani, A. F., Nurkamto, J., & Adi Putra, K. (2024). Choosing EMI Schools: A Case Study of Parental Decisions and Shifting Language Ideologies in Indonesia. *Voices of English Language Education Society*, 8(3). <https://doi.org/10.29408/veles.v8i3.27974>
- Simbolon, N. E. (2021). English Medium Instruction (EMI) practice: Higher education internationalization in Indonesia. *Englisia: Journal of Language, Education, and Humanities*, 8(2), 72. <https://doi.org/10.22373/ej.v8i2.8961>
- Sohn, B. K., Thomas, S. P., Greenberg, K. H., & Pollio, H. R. (2017). Hearing the Voices of Students and Teachers: A Phenomenological Approach to Educational Research. *Qualitative Research in Education*, 6(2), 121. <https://doi.org/10.17583/qre.2017.2374>
- Sukmawati, I. D., & Pujiani, T. (2024). English as Medium of Instruction (EMI) at Primary Schools in Indonesia: Challenges and Opportunities. *Deleted Journal*, 3(1), 14–20. <https://doi.org/10.21137/jeeval.2024.3.1.3>
- Sun, Y. (2023). The professionalization of English medium instruction lecturer: content and certification. *Frontiers in Education*, 8. <https://doi.org/10.3389/feduc.2023.1191267>
- Wahyu, R., Setiawan, S., & Anam, S. (2022). Translanguaging as a Scaffolded Practice in a Primary School Content and Language Integrated Learning Context During the COVID-19 Pandemic. *European Journal of Educational Research*, 11(4), 2043–2055. <https://doi.org/10.12973/eu-jer.11.4.2043>

ABOUT THE AUTHORS

Diba Ramadhana is a lecturer at English Education Department of Sari Mulia University, Banjarmasin. She graduated from Universitas Negeri Malang and her interests are in Listening, Teacher Development, Linguistics, and Critical Thinking. She can be contacted at dbiramadhana@gmail.com