Journal homepage: http://jurnal.uinsu.ac.id/index.php/analytica

Journal Analytica Islamica

CODE MIXING IN ENGLISH COURSE LEARNING IN THE PHARMACY UNDERGRADUATE STUDY PROGRAM AT INSTITUT KESEHATAN HELVETIA MEDAN

Horia Siregar[1], Munawaroh[2], Mariana[3], Rudi Purwana[4]

[1,2]Universitas Muslim Nusantara Al-Washliyah, Indonesia
[3,4]Institut Kesehatan Helvetia, Indonesia
*Corresponding Author: horiasiregar@gmail.com

Article Info

Article history:

E-ISSN: 2541-5263
P-ISSN: 1411-4380

ABSTRACT

This study explores the use of code-mixing in English language learning within the Pharmacy Undergraduate Program at Institut Kesehatan Helvetia Medan in 2024. Code-mixing, which involves blending elements from two or more languages within a single utterance, is considered to enhance communication effectiveness between lecturers and students. Previous research has indicated that this strategy can support vocabulary acquisition and improve overall English language skills. The research focuses on the types of code-mixing frequently employed, students' perceptions of this practice, and its impact on their comprehension of the material as well as their English proficiency. A descriptive qualitative approach is applied, with data collected through observation and audio recordings. Data analysis involves reduction, display, and conclusion drawing to gain an in-depth understanding of this phenomenon.

Keywords: *Code-Mixing, Learning, English Language*

1. INTRODUCTION

The combination of lexical elements and grammatical structures from two different languages in a single utterance is known as code-mixing. This phenomenon occurs when speakers combine elements from two or more languages during communication, usually spontaneously and to achieve effective message delivery (Tarihoran et al., 2022). In the context of multilingual classrooms, particularly in English language learning, this practice serves as a communication bridge between lecturers and students. By utilizing two languages simultaneously, teachers can facilitate understanding, clarify complex concepts, and maintain smooth interactions without hindering comprehension of the lesson content. Therefore, code-mixing is an important linguistic phenomenon to study

because it reflects how speakers use their linguistic resources in academic contexts.

Scholars have classified code-mixing into several types based on where it occurs. The two main categories are intrasentential and intersentential code-mixing. Intrasentential code-mixing occurs within a single sentence, for example, when a word or phrase from another language is inserted into the sentence structure of the primary language. In contrast, intersentential code-mixing occurs between sentences, when a speaker switches languages at sentence boundaries or between utterances (Hidayatullah et al., 2022). These two forms differ from code-switching, which generally occurs at discourse or clause boundaries without any interjection within a syntactic structure (Chen, 2015). This distinction is important to understand so that empirical analysis can be conducted appropriately in classroom research.

In language learning practice, the use of code-mixing and code-switching is gaining increasing attention due to its pedagogical benefits. Various studies show that these strategies can be utilized to clarify instructions, emphasize important concepts, manage the classroom, and reduce psychological barriers to learning. For example, a study at Cokroaminoto University in Palopo found three forms of code-mixing employed by lecturers in teaching English: intrasentential, intralexical, and pronunciation adaptation. Of the three, intrasentential was the most dominant. The majority of students also positively assessed this practice because it facilitated communication and improved comprehension (Upa et al., 2022). Another study reported that code-mixing can aid vocabulary acquisition by reinforcing foreign terms with their first-language equivalents (Sabri et al., 2019). In fact, the combination of code-switching and code-mixing has been shown to maintain student focus and support their English language skills in the classroom (Shellayukti, 2020).

The relevance of using multilingual strategies increases when applied to fields that require in-depth understanding, such as health science education. In these situations, instructors are faced with complex technical terms and concepts, so code-mixing can be a means of bridging the gap in understanding. Research shows that instructors utilize code-mixing to clarify material, provide examples, and support the gradual development of language skills (Fitria & Syarif, 2021). During the Covid-19 pandemic, the implementation of this strategy has become increasingly prominent, especially in online learning. Code-mixing is used to prevent misunderstandings, clarify instructions, maintain interaction, and build good relationships between instructors and students (Pratama, 2022). Student perceptions also tend to be positive, as this practice is considered to improve vocabulary mastery, comprehension of material, and overall English language skills (Fatsah & Purnama, 2022).

The phenomenon of code-mixing is not only linguistic but also closely related to socio-cultural aspects. Language and culture are interconnected; language is not

only a means of communication but also a reflection of identity and social values (Liliweri, 2002; Syahputra et al., 2022). Human life is dominated by language, which is not only part of culture but also a factor shaping the development of culture itself (Pastika, 2005). In bilingual or multilingual societies, the use of multiple language variations is natural. Speakers' language choices in everyday conversation are always influenced by communication functions and specific social situations (Fishman, 1972). Therefore, code-mixing practices in language classes also reflect prevailing linguistic norms and customs within the community.

The diversity of languages used by speakers is closely related to differences in social status, age, gender, profession, and other factors (Cerina & Indrawati, 2021). The phenomena of code-switching and code-mixing are interesting to study from a sociolinguistic perspective because their use is influenced by social, situational, and communication needs (Mardikantoro, 2012). Consistent with Fasold (1984) and Hudson (1996), language variation within a speech community is influenced by social and situational factors. This also applies in the classroom, when lecturers and students adapt language to achieve effective learning goals.

The urgency of this research becomes clearer when linked to the real-world conditions in the Pharmacy Undergraduate Program at the Helvetia Health Institute, Medan. Initial observations indicate obstacles in learning English, including differences in grammar compared to Indonesian, limited student vocabulary, and difficulty constructing sentences with correct structure. Furthermore, psychological factors such as embarrassment due to pronunciation or grammatical errors, which are often the subject of ridicule, also hinder students' courage to speak. This situation results in low active participation in class. In this context, the implementation of code-mixing is considered capable of creating a more inclusive learning environment by providing space for students to gradually understand the material without excessive pressure.

Based on this background, this research focuses on answering the main question: How is code-mixing implemented in English learning in the Pharmacy Undergraduate Program at the Helvetia Health Institute, Medan, and to what extent does this practice impact learning effectiveness and student comprehension? Specifically, this study aims to answer the following five questions: (1) What forms of code-mixing are implemented in English learning in the Pharmacy Undergraduate Program at the Helvetia Health Institute, Medan, in 2024? (2) What types of code-mixing are most frequently used by lecturers and students? (3) How do students perceive this practice? (4) Can code-mixing improve their understanding of the course material? and (5) How does it affect students' vocabulary mastery and English language skills?

To answer these questions, this study used a qualitative descriptive approach, deemed appropriate for documenting natural language phenomena in the classroom. Data were collected through direct observation and recordings of conversations during the learning process, accompanied by field notes describing

the context in which code-mixing was used. Data analysis was conducted in three stages: data reduction, data presentation, and conclusion drawing. These stages enabled researchers to gain an in-depth understanding of the patterns, functions, and students' perceptions of code-mixing in the learning process.

A literature review shows that previous research on code-mixing in educational settings has been conducted, albeit with varying results. For example, Dewi's (2020) study found that excessive use of code-mixing in Indonesian language learning can lead to interference. Conversely, studies by Upa et al. (2022) and Theresya et al. (2021) emphasized the positive role of code-mixing in facilitating communication and supporting the English language learning process. Another study by Pratama (2022) also showed that this strategy is effective in online learning for avoiding misunderstandings. Therefore, this study seeks to complement previous findings by focusing on the context of English language learning in higher education in the health sector, specifically the Pharmacy Study Program.

This research is expected to contribute to the development of effective English language teaching strategies that are relevant to the needs of students in the health sector. By understanding the patterns, types, and perceptions of code-mixing, the results can provide a basis for instructors to optimize multilingual strategies in English teaching. This way, students will not only be helped to understand complex medical terminology but also encouraged to develop the English language skills needed in the workplace and global environment.

2. RESEARCH METHOD

This study uses a descriptive qualitative approach because its primary objective is to describe in detail, contextually, and interpretively how code-mixing is utilized in English language learning in the Bachelor of Pharmacy Study Program at the Helvetia Health Institute, Medan. Qualitative research emphasizes data in the form of words, utterances, actions, and meanings rather than statistical figures making it highly suitable for examining classroom communication processes and pedagogical strategies (Murdiyanto, 2020). Conceptually, Strauss and Corbin (in various works on qualitative research methodology) emphasize that qualitative research can be applied to understand social life, cultural practices, behavior, organizational dynamics, and even interaction patterns within specific groups; this framework is relevant when researchers wish to explore real-life language practices in the classroom. The choice of this approach is also based on the researcher's position as a lecturer in the course, allowing for direct involvement (participant-observer) in observing teaching strategies aimed at fostering students' confidence in speaking and interacting using English in both academic and everyday campus contexts.

The research location was determined at the Helvetia Health Institute, Medan, located on Jl. Kapten Sumarsono, Medan, North Sumatra. The focus of the analysis unit was English language learning activities for undergraduate students in the Pharmacy study program. The location was chosen purposively: first, this study program requires mastery of scientific and health terminology in English; second, the observed classes exhibited significant code-mixing practices in lecturer-student interactions; and third, the researcher had full access to the learning process as she was a lecturer in the program. The field research was designed to last approximately nine months during the 2024 academic year (the exact duration of the data preparation, collection, and analysis phases is documented in the attached research schedule). This extended duration was intended to allow the researcher to capture variations in language practices across lecture sessions, including changes in code-mixing patterns related to material, evaluations, and classroom dynamics.

The primary source of research data was authentic utterances that emerged during oral interactions between the lecturer (researcher) and second-semester English students. Data units included full utterances, dialogue fragments, spontaneous responses, questions and answers to material, assignment instructions, clarification of terms, classroom humor, and any insertions of English-Indonesian elements (or other languages, if present) that indicated code-mixing. In addition to oral data, notes on situational context—for example, lecture topics, teaching media used, the difficulty level of the pharmacy material, and students' nonverbal responses—were also recorded to aid interpretation of code-mixing functions. The data were naturalistic because speakers were not directed to produce specific language forms; code-mixing patterns were allowed to flow as is routine classroom practice. Thus, this study captured language use that was contextual, dynamic, and directly related to the communication needs of pharmacy learning.

The research informants were second-semester Class B Pharmacy undergraduate students at the Helvetia Health Institute in Medan, who were taking an English course during the academic year of the study. This class was selected based on three considerations: (1) its representation of typical beginning pharmacy students who are still developing their English vocabulary and structure; (2) the intensity of oral interaction was high because the course emphasized discussions of health terms and communication exercises; and (3) the researcher's accessibility to ethical and administrative requirements as the class instructor. All students in the class who agreed to participate were treated as participants; participation was voluntary, with informed consent provided regarding the study's purpose, recording procedures, data confidentiality, and the use of pseudonyms for publication. The lecturer-researcher plays a dual role: as a learning facilitator and as a data collector, but the separation of reflective notes and raw data is maintained to minimize interpretive bias.

The data collection technique combined three main procedures: observation, recording, and note-taking. (1) Participatory observation was conducted during the lecture to document the context in which code-mixing occurred: when it occurred, what material was triggered, who directed it, and how the class responded. (2) Audio recording (and, where possible, video) was used to obtain accurate speech data so that intrasentential, intersentential, and intralexical forms could be repeatedly reanalyzed. Each recording session was coded by date, topic, and meeting number. (3) Field notes included spontaneous annotations, situational explanations, and selective transcription after the lecture. The researcher's reflective notes were kept separate from the raw data records to distinguish objective observations from initial interpretations. Supporting documents—such as lesson plans, teaching materials, and assignment sheets—were collected when relevant to explore the relationship between the learning design and the occurrence of code-mixing.

Data analysis followed the interactive model of Miles, Huberman, and Saldaña, which includes data reduction, data display, and drawing and verifying conclusions. This model aligns with the qualitative analytical framework also recommended in the national literature (see e.g., Murdiyanto, 2020). The data reduction stage includes selecting speech segments containing code-mixing, assigning initial codes (e.g., INTRA-S, INTER-S, INTRA-LX), and categorizing pedagogical functions (term clarification, concept emphasis, humor, instruction reinforcement, etc.). In the data display stage, the researcher constructs a matrix linking the type of code-mixing, the context of the material, the triggers of the utterances, and the students' responses; representative transcript excerpts are presented to facilitate pattern interpretation. The conclusion-drawing stage is carried out in stages through rereading the data, triangulating between recordings, notes, and reflections, limited member checking with several students, and collegial discussions between lecturers to increase the credibility of the findings.

3. RESULT AND ANALYSIS

The research results show that students face three main obstacles in learning English: pronunciation, vocabulary mastery, and understanding of language structure (grammar). These obstacles affect their confidence in speaking English in class. To overcome these obstacles, lecturers strive to facilitate learning by involving students in practical activities such as reading, writing, speaking, and listening, as well as educational games that encourage active participation. The main goal is to create a comfortable and communicative learning environment, so that students become more confident in using English in everyday conversations.

In this lesson, students are encouraged to recall basic material such as parts of speech, simple tenses, and sentence structures learned in high school.

Reinforcement of the material is carried out gradually by adding more conversational elements to encourage two-way interaction. Active interaction is key to improving communication skills, but differences in students' language backgrounds require lecturers to develop specific strategies, one of which is through the application of code-mixing. The use of code-mixing acts as a bridge to explain difficult concepts and maintain the continuity of dialogue.

Based on observations, the form of code-mixing that emerged was dominated by the insertion of Indonesian words and phrases into English conversations. For example, when a lecturer greets students with "Good morning," they respond, "Good morning, Ma'am." The use of "Ma'am" in this context constitutes insertion-type code-mixing. Another example occurs when a lecturer combines sentences, as in "Okay, so, today we're going to learn about Parts of Speech. Do you still remember about part one?" This utterance demonstrates alternation-type code-mixing because there are alternating language shifts within a single sentence.

The main factors triggering code-mixing are students' limited vocabulary, fear of making mistakes, and the lecturer's need to explain the material quickly and clearly. Code-mixing is used as a pedagogical strategy to maintain student understanding and enhance interaction. These findings align with previous research that suggests that code-mixing practices in English teaching are effective in reducing learning anxiety, increasing self-confidence, and strengthening comprehension (Fitamala Sari, 2022; Upa et al., 2022).

Overall, the implementation of code-mixing in English classes in the Bachelor of Pharmacy Study Program has a positive impact on student comprehension and confidence in speaking. However, lecturers still need to guide the use of code-mixing proportionally to avoid detracting from the primary purpose of English learning. Suggested further strategies include providing focused practice on vocabulary and pronunciation, gradually reducing the use of Indonesian, and providing supportive feedback to enable students to continuously improve their English skills.

4. CONCLUSION

The Pharmacy Undergraduate Program at the Helvetia Health Institute in Medan plays a crucial role in facilitating student understanding and fostering communication skills. Code-mixing occurs in the form of inserting words and phrases, as well as alternating language changes (alternatives), which generally occur due to limited vocabulary, pronunciation difficulties, and the need for rapid explanations. This strategy has been proven to facilitate two-way interaction, foster a more communicative classroom atmosphere, and support students' achievement of basic English language skills. However, its use needs to be guided and maintained to maintain proportion.

Lecturers are advised to utilize code-mixing as a learning bridge wisely and gradually reduce its use to help students become more accustomed to using English. Students are encouraged to be more active in conversational practice, enrich their vocabulary, and overcome their fear of making mistakes. Furthermore, institutions should support this by providing interactive learning resources and supporting activities such as English Clubs to enhance speaking, listening, reading, and writing skills in a balanced manner.

References

Aliphana, S. (2022). The key drivers of sustainable practices in SMEs. In No Question: Sustainability is Everyone's Business: IV BBS International Sustainability Student Conference Proceedings (pp. 166–176). Budapest Business School.

Moursellas, A., Malesios, C., Skouloudis, A., Evangelinos, K., & Dey, P. K. (2024). Perceived enablers and barriers impacting sustainability of small-and-medium sized enterprises: A quantitative analysis in four European countries. Environmental Quality Management, 33(3), 433–448.

Malik, S. Y., Cao, Y., Mughal, Y. H., Kundi, G. M., Mughal, M. H., & Ramayah, T. (2020). Pathways towards sustainability in organizations: Empirical evidence on the role of green human resource management practices and green intellectual capital. Sustainability (Switzerland), 12(8).

Wang, C. H., & Juo, W. J. (2021). An environmental policy of green intellectual capital: Green innovation strategy for performance sustainability. Business Strategy and the Environment, 30(7), 3241–3254.

Ganlin, P., Qamruzzaman, M. D., Mehta, A. M., Naqvi, F. N., & Karim, S. (2021). Innovative finance, technological adaptation and SMEs sustainability: The mediating role of government support during COVID-19 pandemic. Sustainability (Switzerland), 13(16).

Oduro, S. (2024). Eco-innovation and SMEs' sustainable performance: A meta-analysis. European Journal of Innovation Management, 27(9), 248–279. https://doi.org/10.1108/EJIM-11-2023-0961

Shehzad, M. U., Zhang, J., Dost, M., Ahmad, M. S., & Alam, S. (2023). Linking green intellectual capital, ambidextrous green innovation and firms green performance: Evidence from Pakistani manufacturing firms. Journal of Intellectual Capital, 24(4), 974–1001. https://doi.org/10.1108/JIC-02-2022-0032

Adam, N. A., & Alarifi, G. (2021). Innovation practices for survival of small and medium enterprises (SMEs) in the COVID-19 times: The role of external support. Journal of Innovation and Entrepreneurship, 10(1).

Quaye, D. (2019). Marketing innovation and sustainable competitive advantage of manufacturing SMEs in Ghana. Management Decision, 57(7), 1535–1553. https://api.elsevier.com/content/abstract/scopus_id/85055969211