

Enhancing Speaking Skills Through Code-mixing and Code-switching in Madurese Context

Achmad Syarofi Al-furqon^{1*}, Jaftiyatur Rohaniyah², Beny Hamdani³

Abstract

Teaching English to students who don't get much exposure to English as a foreign language and still mostly speak their native language, such as Madurese, presents some difficulties and challenges. This study investigates the effectiveness of a teacher's intentional code-mixing and code-switching strategies in an English as a Foreign Language (EFL) on Madurese. Using quantitative research with the pre-experimental design (one group pretest and posttest), the research was conducted in the first semester of the Faculty of Sharia and Economic Islami of Universitas Annuqayah Guluk-Guluk Sumenep. Data were collected from score pre-and post-tests of the students through speaking proficiency. From one sample t-test, it showed that there is a significant mean difference between pre-test and post-test in speaking proficiency, and the students' speaking scores are statistically significantly different after the intervention. This finding suggests that the intervention of code-mixing and code-switching by the teacher had a significant positive effect on the students' speaking skills, indicating a large effect as calculated by Cohen's d. The strategic use of code-mixing and code-switching is a powerful pedagogical tool that provides both cognitive scaffolding and affective support. The improvement happens by adopting a nuanced teaching approach that leverages students' native language as a valuable resource to overcome linguistic and psychological barriers in EFL learning.

Keywords: code-mixing; code-switching; EFL speaking; teaching strategy; madurese

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¹Universitas Annuqayah Guluk Guluk Sumenep, Indonesia

²Universitas Islam Madura, Indonesia

³Universitas Islam Zainul Hasan Genggong Probolinggo, Indonesia

*Author Correspondent: rafi.aries@gmail.com

Introduction

Teaching English to students who are learning foreign language brings some difficulties, especially when students don't get much exposure and still mostly speak their native language (H. Akhtar et al., 2016). This is seen at Universitas Annuqayah Guluk-guluk Sumenep, where most students come from a strong Madurese language background. This phenomenon is characterized by a pronounced accent and limited knowledge of English. Therefore, vocabulary and speaking skills problems become the main obstacles in good communication (Jabeen et al., 2023). Teachers often naturally use code-switching and code-mixing in class, to help overcome these challenges (Harya, 2018; Moetia, 2018). These strategies help students understand better, make complicated ideas clearer, create a more comfortable and encouraging classroom atmosphere (Ezeh et al., 2022; Murtiningsih et al., 2022). The practice of mixing languages is a common thing in many EFL and ESL settings around the world, showing that it's a useful teaching method with some benefit (Al-Azzawi et al., 2018; Khatkhat et al., 2022).

If teachers don't use code-mixing and code-switching on purpose, students who are strong in their native language will keep facing big problems in communicating. This can make them feel more nervous when speaking and lower their confidence (Abdulloh, 2021; Moradi & Chen, 2022), because they struggle to link new English ideas with what they already know in Madurese. Without good teaching methods that help bridge this language gap, students may become less interested in class, not develop their vocabulary properly, and end up not being able to speak well

(H. Akhtar et al., 2016; Jabeen et al., 2023). So, if teachers only use the target language without thinking about students' language backgrounds, the teaching process won't work as well, and it will be hard to reach the goal of students who can communicate effectively.

This research is intended to address the need for more effective teaching approaches. Although code-switching and code-mixing strategies in English as a Foreign Language (EFL) classes are widely known (Ningsih et al., 2019; Pratama, 2022), not many understand the impact of using these techniques to improve students' language skills. This research is important because it also aims to help English teachers utilize these everyday language practices to improve students' engagement and speaking skills (Abdulloh, 2021). The use of code-mixing and code-switching strategies by teachers can help students, especially those who have a strong mother tongue.

Although many studies have descriptively documented the types and functions of code-switching and code-mixing in English as a Foreign Language (EFL) classroom interactions (Asrifan & Syahrir, 2021; Novianti & Said, 2021; Salsabil, 2022; Syam et al., 2018), there is still a significant lack of research. The literature tends to focus on observations of naturally occurring phenomena (Gratien et al., 2023; Wartinah & Wattimury, 2018) rather than the effectiveness of deliberate and systematic pedagogical strategies implemented by teachers to directly improve students' speaking outcomes in specific and homogeneous contexts such as Annuqayah University. Furthermore, the theoretical gap arises due to the absence of a robust theoretical framework that explicitly outlines the mechanisms by which teachers' code-mixing and code-switching strategies facilitate speaking skill development, particularly in reducing psychological barriers such as speaking anxiety and reduced self-confidence (Moradi & Chen, 2022). While sociolinguistic theory provides a foundation (Anastassiou, 2017; Riadil & Dilts, 2022), a comprehensive framework mapping the relationship between teachers' code-mixing or code-switching strategies and increases in students' fluency, accuracy, or complexity of speech has not been established.

The novelty of this research lies in its shift from a descriptive to an interventional approach. Using pre-experimental design methodology—this study will systematically investigate the impact of a teacher's deliberate code-mixing and code-switching strategies on students' speaking ability (Jamshed & Shakir, 2025; Khan et al., 2025). This approach provides a new perspective on how teachers can strategically leverage their bilingual skills to address speaking barriers in target learner groups. This unique research contribution also includes the potential for developing a practical framework or set of guidelines on when and how code-mixing and code-switching are most effectively used by teachers, moving beyond the scope of responses to become a planned pedagogical tool.

This study aims to identify and analyze the effectiveness of code mixing and code switching strategies applied by teachers in improving the speaking skills of students at Annuqayah Guluk-guluk University, Sumenep, who have a strong mother tongue background. This study aims to analyze the impact of these strategies on students' speaking performance.

Method

This study employed a quantitative approach using a pre-experimental design, specifically the one-group pre-test and post-test design. This design was intended to examine the effect of the teacher's strategic use of code-mixing and code-switching on students' speaking performance. The quantitative approach was selected to enable objective measurement of differences in students' speaking abilities before and after the intervention through pre-test and post-test results. Therefore, any changes in performance could be systematically identified and statistically analyzed to determine the effectiveness of the instructional strategies implemented.

The participants of this study were students enrolled in the "English I" course in the Islamic Banking Study Program, Faculty of Sharia and Islamic Economics, Universitas Annuqayah, Guluk-Guluk, Sumenep. This group was selected due to its relevant linguistic and socio-economic

characteristics, including a strong Madurese language background, limited exposure to English, and a specific academic context aligned with the research focus. A total sampling technique was applied, involving all 28 students in the class. The research instrument used to collect data was a speaking proficiency test administered in the form of a pre-test and post-test to measure students' speaking ability before and after the treatment. The assessment was conducted using a standardized rubric covering key components of speaking, namely fluency, accuracy, pronunciation, and vocabulary.

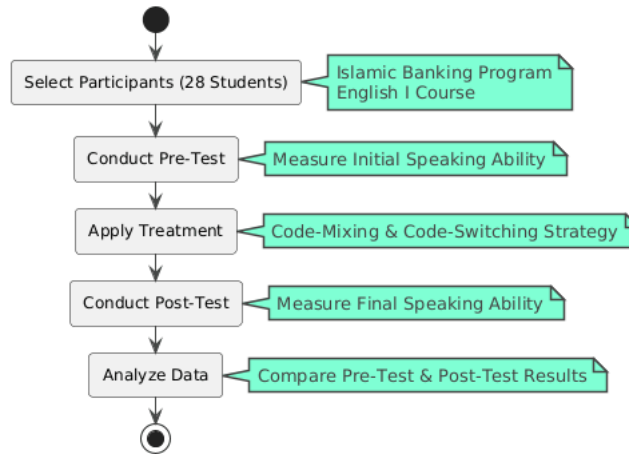


Figure 1. Research Design: Pre-Experimental Study

Results and Discussion

1. Participant Characteristics

All participants (N=28) were first-semester male students aged 18-19. All reported Madurese as their first language (L1) and Indonesian as their second language (L2) with good command. English was their foreign language (L3) with limited exposure, primarily in informal contexts.

2. Speaking Ability Test Results

Table 1. Descriptive Statistics of Pre-test and Post-test Speaking Ability (N=28)

Variables	Mean	SD	Min	Max	Skewness	Kurtosis
Pre-test	58,10	3,87	50	65	-0,23	-0,45
Post-test	78,76	7,33	65	92	0,34	-0,12

The distribution of scores showed substantial improvement across all ability ranges. The larger standard deviation at post-test (7.33 vs. 3.87) indicates increased variability, which can be interpreted as clearer differentiation of abilities after the intervention.

Table 2. Paired Samples t-test results

Variable	Mean Dif- ference	SD Differ- ence	t	df	p-value	95% CI
Pre-post	20,66	3,52	80,92	27	<0,001	[19,28; 22,04]

The t-test results showed a highly statistically significant difference between pre-test and post-test scores ($t(27) = 80.92$; $p < 0.001$). The 95% confidence interval, which excludes the zero value, strengthens the conclusion that there was a significant improvement.

Table 3. Effect Size (Cohen's d)

Variable	Cohen's d	95% CI	Interpretation
Pre-post	15,03	[13,45; 16,61]	Very Large

The effect size of 15.03 is very high, indicating that the intervention had a significant impact on improving students' speaking skills. This value far exceeds the threshold for a large effect according to Cohen (1988), who recommends $d = 0.8$ as an indicator of a large effect.

3. Analysis of Speaking Skill Components

Further analysis of the speaking skill components revealed a distinct pattern of improvement:

Component	Pre-test Mean	Post-test Mean	Improvement
Fluency	2,1	3,8	1,7 (81%)
Vocabulary	2,3	3,9	1,6 (70%)
Grammar	2,0	3,5	1,5 (75%)
Pronunciation	2,2	3,6	1,4 (64%)

The highest improvement occurred in the fluency component, which can be attributed to the reduction of speaking anxiety through bilingual strategies that create a more comfortable environment for speaking practice.

The findings of this study demonstrate a substantial and statistically significant improvement in students' speaking proficiency following the implementation of intentional code-mixing and code-switching strategies, with a very large effect size (Cohen's $d = 15.03$). This result aligns with the sociolinguistic perspective advanced by Akhtar et al (2016) and Harya (2018), who argue that code-mixing and code-switching constitute natural and functional elements of classroom communication that serve important pedagogical purposes. Similarly, Murtiningsih et al (2022) found that teachers' strategic use of code-switching in EFL classrooms facilitates comprehension and enhances student engagement. The consistency between these previous studies and the current findings suggests that the teacher's use of students' first language extends beyond mere responsiveness to immediate communicative needs; rather, it functions as a deliberate pedagogical tool designed to address specific learner requirements in a homogeneous linguistic context. This supports the theoretical proposition that bilingual instructional strategies can be systematically employed to scaffold learning rather than being relegated to spontaneous, unplanned occurrences.

The cognitive scaffolding function of code-mixing and code-switching observed in this study is corroborated by Ansar (2017) and Ezeh et al (2022), who demonstrated that the use of students' native language serves as a medium for explaining complex concepts and unfamiliar vocabulary that might remain incomprehensible if presented exclusively in the target language. This finding is consistent with Vygotsky's sociocultural theory, which posits that the first language acts as a cognitive scaffold upon which new knowledge in a second language can be constructed (Khoiruzzadi & Prasetya, 2021). Furthermore, the reduction of cognitive load achieved through strategic L1 use, as evidenced in the present study, supports Sweller's cognitive load theory (Jiang et al., 2021). By alleviating the dual burden of processing linguistically complex information in a foreign language simultaneously, students can allocate greater cognitive resources to productive language use. This mechanism explains the pronounced improvement in fluency observed in the post-test results, as students were able to focus on communicative competence rather than struggling with basic comprehension.

The affective dimension of the intervention, particularly its role in reducing speaking anxiety and fostering a supportive learning environment, finds strong support in the literature.

Novianti & Said (2021) and Abdulloh (2021) contend that students demonstrate heightened engagement and participation when they possess thorough comprehension of subject matter, which consequently diminishes their fear of making errors. This study extends these findings by quantitatively demonstrating the impact of such strategies on measurable speaking outcomes. Similarly, Qiu (2022) and Salbaş & Ekmekçi (2025) establish that language use patterns in the classroom can cultivate a welcoming and encouraging atmosphere, thereby increasing students' openness to new information. The validation of students' linguistic identity through the strategic incorporation of Madurese language in this study resonates with Akhtar et al (2020) and Hussain et al (2025) who argue that acknowledging and utilizing students' first language validates their cultural heritage and strengthens their sense of self. This identity-affirming function transforms the teacher-student dynamic from a unidirectional transmission of knowledge to a collaborative partnership grounded in mutual respect.

However, the present findings appear to contrast with the perspectives of proponents of monolingual approaches to language teaching, such as those advocated in early communicative language teaching methodologies that emphasize exclusive use of the target language. Proponents of this view, including some interpretations of Oller & Krashen (1988) Input Hypothesis, would argue that any use of the first language reduces the quantity of comprehensible input in the target language and potentially interferes with acquisition. Additionally, Rengur et al (2025) and Laut & Estremera (2025) caution against over-reliance on code-switching, suggesting that it may create dependency and inhibit the development of autonomous target language processing skills. The very large effect size observed in this study challenges these concerns by demonstrating that strategic, rather than excessive, use of code-mixing and code-switching (maintaining 60-70% target language use) can actually accelerate rather than impede speaking development. This suggests that the critical factor is not the absolute exclusion of L1, but rather the intentional, principled, and balanced integration of bilingual strategies that serve specific pedagogical functions.

The functional applications of code-mixing documented in this study—particularly the use of brief phrases and instructions in students' native language to direct activities, issue directives, and provide immediate feedback—are consistent with the findings of Salsabil (2022) and Syam et al (2018). These researchers observed that such practices ensure all students, regardless of their current English proficiency level, can follow directions with ease and efficiency, thereby maximizing the time available for meaningful speaking practice. This study contributes to this body of literature by providing empirical evidence of the quantitative impact of these functional uses on speaking proficiency outcomes. Furthermore, the findings support Wartinah & Wattimury (2018) and Gratien et al (2023), who reported that code-switching and code-mixing improve speaking abilities by reducing mental stress and allowing students to concentrate on active speaking practice rather than continuous struggle with comprehension. The synthesis of these converging findings from diverse EFL contexts suggests that the strategic use of code-mixing and code-switching represents a universally applicable pedagogical principle, albeit one requiring careful adaptation to specific local linguistic and cultural contexts such as the Madurese setting investigated in this research.

Conclusion

This study has successfully demonstrated that the strategic and intentional implementation of code-mixing and code-switching strategies by teachers significantly enhances EFL students' speaking proficiency in a homogeneous linguistic context characterized by strong Madurese language background. The quantitative findings reveal a statistically significant improvement from pre-test ($M = 58.10$, $SD = 3.87$) to post-test ($M = 78.76$, $SD = 7.33$), with a very large effect size (Cohen's $d = 15.03$), indicating that the intervention had a substantial positive impact on students' speaking abilities. These results substantiate the theoretical proposition that students' first language functions as a valuable cognitive scaffold and affective support mechanism, effectively reducing speaking anxiety, lowering cognitive load, and creating an inclusive classroom environment that validates learners' linguistic identities. The strategic use of

Madurese and Indonesian languages alongside English enabled students to bridge the gap between their prior knowledge and new target language concepts, thereby facilitating more effective communicative competence development.

The pedagogical implications of these findings are profound, suggesting that code-mixing and code-switching should be reconceptualized from remedial or spontaneous practices to deliberate, planned instructional strategies in EFL contexts with limited English exposure. Teachers are encouraged to adopt a nuanced, context-responsive approach that leverages students' native languages as pedagogical resources rather than viewing them as obstacles to target language acquisition. Future research should extend these findings through experimental designs with control groups, longitudinal studies to examine sustained effects, and investigations into optimal proportions of L1 and target language use across different proficiency levels and learning objectives. Ultimately, this study contributes to the evolving paradigm of bilingual pedagogy that honors linguistic diversity while fostering effective English language learning in under-resourced EFL environments.

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