

The Influence of English in Scientific Articles of Indonesian Language and Literature Education Programs: A Corpus-Based Study

Icuk Prayogi

Email: icukprayogi@upgris.ac.id
Universitas PGRI Semarang

ARTICLE INFO

Article history

Received: 30 May 2024

Revised: 15 August 2024

Accepted: 3 September 2024

Keywords

English influence

Corpus analysis

Language education

Adaptation

Borrowing

ABSTRACT

This corpus-based study investigates the influence of English in scientific articles produced within Indonesian language and literature education programs. Although Bahasa Indonesia functions as the official medium of academic instruction and publication in this context, English continues to play a significant role in shaping the linguistic landscape of scholarly writing. The research aims to identify and classify the types of English influence present in academic texts written in Indonesian, highlighting their frequency and function. Data were drawn from six randomly selected scientific articles and analyzed using *AntConc* software. The analysis revealed a total of 1,152 English-influenced lexical items across 27,349 tokens, comprising 271 distinct forms. These forms were categorized into six types of influence: adaptation, borrowing, calque (literal translation), neologism, translation, and retention (words kept in English and italicized). Among these, adaptation was the most prevalent type, accounting for 78.23% of all English-influenced items, followed by borrowing and calque. While neologisms and retained English terms occurred less frequently, they still illustrate authors' engagement with global academic discourse. The findings demonstrate that English significantly influences the lexis of scientific writing in Indonesian, particularly in areas where localized terminology may still be lacking. These results suggest a need for further policy development concerning terminology standardization and language use in academic contexts. This study contributes to ongoing discussions about language contact, bilingual academic writing, and the role of English in non-English-medium higher education systems, especially in linguistically diverse settings such as Indonesia.

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Introduction

Although not officially used as a medium of instruction in Indonesia's national education system, English plays a central role in the development and dissemination of scientific knowledge (Alrajafi, 2021). As the language most widely used in international academic publishing, English dominates scholarly communication across disciplines. The Indonesian Language Development and Fostering Agency reinforces this reality through the national language policy slogan: *foreign*

languages are important, national language is primary, local languages must be preserved (Amelia et al., 2024; Makmur, 2024; Sundary & Fauzah, 2024). This framework positions English as a foreign language that must be mastered—not for daily communication, but as a strategic tool to improve the global competitiveness of Indonesian graduates and researchers.

In practice, this positioning has led to an increasing presence of English in academic environments, particularly in higher education. Students and scholars across disciplines are expected to engage with international literature, adopt global research standards, and contribute to scholarly conversations beyond national borders. As a result, English has become a key influence on academic writing practices in Indonesia, even within disciplines that are linguistically grounded in the national language, such as Indonesian language and literature education.

Despite being centered on the study and teaching of the Indonesian language, academic programs in this field are not exempt from the pressures of internationalization. English-derived terms and expressions have entered the lexicon of academic texts, especially in technical, methodological, and theoretical domains (Sadaf, et al., 2025; Zeng & Yang, 2024). These linguistic imports are often used to articulate complex ideas, streamline explanations, or align with international academic norms. This trend illustrates the dual role of English in Indonesian academia: both as a practical necessity and as a symbol of scholarly legitimacy.

However, this influence is not without its complications. The increasing incorporation of English into Indonesian-language academic writing has raised concerns about clarity, accessibility, and the erosion of linguistic authenticity. When English terms are inserted without sufficient contextualization or translation, they may disrupt the flow of Indonesian discourse or alienate readers who are unfamiliar with the foreign terminology. Furthermore, overreliance on English can hinder the development of standardized Indonesian equivalents, slowing the growth of a robust, localized academic vocabulary (Sabrina et al., 2021).

These tensions between linguistic globalization and national identity highlight the need for a more systematic understanding of how English influences Indonesian academic writing. While previous studies have explored English language use in broader educational contexts, (Noor & Aslam, 2025; Razmjoo Moghadam & Barani, 2025; Sadaf, et al., 2025), few have focused specifically on its impact within Indonesian language and literature education—an area presumed to be insulated from foreign linguistic influence. Yet, as this study demonstrates, even this domain reveals signs of English's pervasive reach.

This research seeks to describe and analyze the extent of English's influence in scientific articles produced by Indonesian language and literature education programs. By classifying the types and frequencies of English-influenced expressions found in a selected corpus, the study aims to provide insight into the nature of linguistic borrowing and adaptation in a context where Bahasa

Indonesia is the primary medium. In doing so, it contributes to broader discussions on academic language policy, the standardization of terminology, and the challenges of maintaining linguistic integrity in an increasingly globalized academic landscape.

A. Literature Review

The influence of English on non-English academic writing has been widely studied in various multilingual contexts. Phillipson (1992) introduced the concept of "linguistic imperialism" to describe how English has become dominant in global academia, often at the expense of local languages. In Indonesia, while English is officially treated as a foreign language, its de facto status as the language of science, technology, and global discourse positions it as a critical component of higher education (Zein, 2011; Lauder, 2008). This duality—being foreign yet functionally essential—creates tension between the goals of linguistic nationalism and the demands of internationalization.

Several studies have documented the ways in which English terms permeate Indonesian academic texts. Djajasudarma (2014) found that academic writing in Indonesian often includes direct lexical borrowing, particularly in disciplines such as science, engineering, and education. In language-focused programs, such borrowing is frequently accompanied by calques and adapted terminology, reflecting both the need for precision and the desire for linguistic localization. Nababan (1991) also highlighted how the adoption of English terms can occur without clear standardization, leading to inconsistencies and ambiguity in academic texts.

In the field of Indonesian language and literature education, research on this phenomenon is still limited. However, Setiawan and Musyahda (2019) identified a noticeable trend in the use of English loanwords and hybrid forms in theses and dissertations, particularly in chapters discussing methodology and theoretical frameworks. These insertions are often unaccompanied by Indonesian translations or explanations, indicating a presumption of shared knowledge among academic readers or a lack of suitable equivalents. This finding aligns with Tadjuddin's (2020) observation that technical terminology in academic writing is often retained in English due to the perceived inadequacy of existing Indonesian terms.

From a corpus linguistics perspective, the integration of English into Indonesian academic writing can be systematically studied through frequency and distribution analysis. Tools such as *AntConc* allow researchers to identify patterns of usage, revealing how English terms are adopted, adapted, or retained in their original form. Previous corpus-based studies in Indonesian education contexts have largely focused on English language teaching materials (Wulandari, 2022), while investigations into Indonesian academic writing in non-English programs remain underexplored.

This study seeks to address that gap by focusing specifically on scientific articles in the field of Indonesian language and literature education. It builds upon existing literature by applying a

corpus-based method to quantify and classify the influence of English, offering a data-driven account of how English shapes academic expression in a context where Indonesian is expected to dominate. The study contributes to ongoing discussions on academic language planning, terminology development, and the evolving role of English in Indonesian scholarly culture.

Method

This study employs a corpus-based qualitative approach to investigate the influence of English on scientific articles written in the context of Indonesian language and literature education. Corpus linguistics provides a systematic way to observe linguistic patterns by analyzing real-world text data (Csomay & Crawford, 2024), making it suitable for identifying and categorizing instances of English influence in Indonesian academic writing. The main goal is to describe the forms, frequencies, and patterns of English-influenced lexical items and how they are integrated into texts that are otherwise written entirely in Bahasa Indonesia.

A. Data Collection

The corpus was compiled from six randomly selected academic articles published in the field of Indonesian language and literature education. The articles were sourced from publicly accessible digital repositories and online academic journals. Each article was selected based on three main criteria: (1) it was written in Bahasa Indonesia, (2) it focused on language, literature, or education within the Indonesian language program, and (3) it was published within the last five years. The rationale for random selection was to avoid bias in subject matter while maintaining relevance to the discipline under study. The final corpus consisted of 27,349 word tokens, with a total of 271 unique English-influenced forms identified across the texts. All texts were converted to plain text (.txt) format to facilitate analysis using *AntConc* software (Anthony, 2024), a widely used tool for concordance and corpus analysis.

B. Data Analysis

The analysis began with the generation of a wordlist using *AntConc*, which sorted all lexical items based on frequency. Researchers then manually examined the list to identify words and phrases suspected to be influenced by English. Each potential item was verified against monolingual Indonesian dictionaries and cross-referenced with English equivalents to confirm its foreign origin.

Identified terms were then categorized into six types of influence.

1. Adaptation – English words that had been phonologically or morphologically modified to fit Indonesian language patterns (e.g., *implementasi*, *kompetensi*).
2. Borrowing – Direct use of English words without modification (e.g., *feedback*, *assessment*).
3. Calque – Literal translations of English phrases into Indonesian (e.g., *rencana pelajaran* from *lesson plan*).

4. Translation – Use of translated equivalents in contexts where the source term is clearly derived from English.
5. Neologism – Newly coined Indonesian terms influenced by English morphology or semantics.
6. Retention – English terms left in their original form, often italicized to mark foreignness (e.g., *lesson plan*, *framework*).

Each term was recorded along with its frequency and context of use. The total frequency of English-influenced items was then compared against the total number of tokens in the corpus to calculate the proportion of influence. These quantitative findings were supplemented with qualitative analysis of sentence context to assess how the terms functioned within each article.

Discussion

A. Findings

The analysis of six academic articles in the field of Indonesian language and literature education revealed significant lexical influence from English. Out of a total of 27,349 word tokens, 1,152 instances of English-influenced words and phrases were identified, representing approximately 4.21% of the total corpus. These 1,152 tokens consisted of 271 unique word forms, which were categorized into six main types of influence: adaptation, borrowing, calque, translation, neologism, and retention.

1. Adaptation

Adaptation was by far the most dominant category, accounting for 212 unique forms and a total of 902 occurrences, or 3.30% of the total tokens. This category includes English words that have been adapted phonologically or morphologically to conform to Indonesian language norms. Examples include *implementasi* (implementation), *evaluasi* (evaluation), *konstruktif* (constructive), and *kompetensi* (competence). These terms are widely used in academic discourse and are often integrated seamlessly into the structure of Indonesian sentences. The high frequency of adaptation suggests that these terms have become naturalized in the academic lexicon, fulfilling communicative needs where equivalent Indonesian terms may be lacking or considered less precise.

2. Borrowing

The second most frequent type of influence was borrowing, with 19 unique forms appearing 76 times in total, or 0.28% of the corpus. Borrowed terms are English words used directly in their original form, without any modification. Common examples include *feedback*, *assessment*, and *lesson plan*. These words are typically inserted into Indonesian sentences and are not italicized or translated, indicating that they are treated as standard academic terminology by the authors. This

pattern shows a tendency among writers to preserve technical or discipline-specific vocabulary in English, possibly to ensure clarity and alignment with global academic standards.

3. Calque (Literal Translation)

Calque refers to direct, word-for-word translations of English phrases into Indonesian. It accounted for 19 unique forms with 81 instances (0.296% of the corpus). Examples include *kerangka kerja* (framework), *rencana pelajaran* (lesson plan), and *umpan balik* (feedback). While similar in meaning to borrowed terms, calques attempt to localize foreign expressions using Indonesian words. The frequency of calques, slightly higher than borrowing, indicates an effort among authors to maintain linguistic integrity while still importing conceptual frameworks from English.

4. Translation

Translation occurred relatively infrequently, with only 4 unique forms and 22 total instances (0.08%). This category includes fully translated equivalents of English terms used in place of their original form. The limited presence of translated terms suggests a reluctance or lack of consistency in localizing English terminology in academic writing. In some cases, translated words may appear alongside or in clarification of borrowed terms, but this practice was not widespread in the corpus.

5. Neologism

Neologisms—newly coined terms inspired by English morphology or semantics—accounted for 4 unique forms and 17 total instances (0.06%). These words are typically innovative blends or reinterpretations of English and Indonesian elements. While rare, their presence suggests a degree of linguistic creativity and an ongoing process of lexical expansion in academic Indonesian. However, the limited frequency also indicates that such forms have yet to gain widespread acceptance.

6. Retention (Italicized English)

The final category, retention, includes English terms that were preserved in their original form and marked with italicization to signal their foreignness. There were 17 unique forms with 54 occurrences (0.197%). Examples include *framework*, *lesson plan*, and *output*. The use of italics suggests a cautious approach by authors—choosing to retain English terms either because suitable Indonesian equivalents do not exist or to maintain technical accuracy. Italicization serves both a stylistic and functional role, signaling both emphasis and origin.

Table 1. Frequency and Percentage of English Influence in Indonesian

Type of Influence	Unique Forms	Frequency	% of Total Tokens	% of Total English Influence
Adaptation	212	902	3.30%	78.23%
Borrowing	19	76	0.28%	7.01%
Calque (Literal Translation)	19	81	0.296%	7.01%
Translation	4	22	0.08%	1.47%
Neologism	4	17	0.06%	–
Retention (Italicized)	17	54	0.197%	6.27%
Total	271	1,152	4.21%	100%

These findings demonstrate that even in academic domains that promote the use and preservation of the national language, English exerts considerable influence. The predominance of adapted and borrowed forms suggests an ongoing process of integration rather than resistance, while the presence of calques and retention reflects different strategies used by writers to navigate between linguistic accuracy and accessibility. Together, the findings offer insight into the hybrid linguistic landscape of academic writing in Indonesia.

B. Discussion

The findings of this study highlight the substantial and varied influence of English on scientific articles written within the field of Indonesian language and literature education. Despite the national emphasis on using Bahasa Indonesia as the primary academic language, the data show that English continues to shape academic discourse in significant ways. The dominance of adapted forms (78.23% of all English-influenced tokens) suggests that many English terms have been naturalized into Indonesian scholarly writing, to the extent that they are no longer perceived as foreign. This aligns with previous research (e.g., [Lauder, 2008](#); [Djajasudarma, 2014](#)), which emphasizes the increasingly normalized presence of English-derived terminology in Indonesian academic texts.

This normalization, however, presents a paradox. On one hand, it demonstrates the flexibility and openness of the Indonesian language in absorbing foreign terms to meet the demands of modern academic communication. On the other hand, it raises concerns about linguistic dependency and the potential erosion of Indonesia's expressive capacity in scholarly contexts. The relatively low frequency of neologisms and translations indicates limited efforts to coin original or localized terms, possibly due to a perceived lack of authoritative bodies or standard practices for term creation within the academic community. This may reflect a systemic gap in terminology development, where Indonesian equivalents are either unavailable, underused, or considered less

precise than their English counterparts.

The use of borrowing and retention (in italicized form) further underscores a reliance on English for certain key academic concepts, particularly in methodology and theory. Authors may intentionally retain English terms to ensure clarity and precision, especially when communicating ideas that are originally framed in English literature. However, this strategy also implies an assumption that readers are familiar with English or that untranslated terms carry more academic weight. This phenomenon mirrors what Phillipson (1992) described as a form of linguistic imperialism, where English retains authority even in environments where it is officially a foreign language.

Interestingly, the presence of calques suggests an effort by some writers to domesticate English expressions through literal translation. Although less frequent than adaptation or borrowing, these calques represent an attempt to localize global knowledge using the Indonesian lexicon. Still, their coexistence with borrowed and retained English terms points to inconsistencies in usage, possibly due to a lack of consensus on proper equivalents or the absence of standardized translation guidelines in the academic field.

These patterns of English influence have broader implications for language policy and academic identity in Indonesia. While the government advocates for the use of Bahasa Indonesia in science and higher education, actual writing practices reveal a tension between national language ideology and the pragmatic need to engage with international discourse. As a result, Indonesian academic writing—especially in language and literature education—is increasingly shaped by a form of *bilingual hybridity*, where English and Indonesian coexist, sometimes harmoniously, other times awkwardly.

To address this tension, there is a need for more structured terminology planning and linguistic standardization in academic writing. Language policymakers and academic institutions should collaborate to develop authoritative glossaries, promote the consistent use of Indonesian equivalents, and encourage the creative formation of new terms that reflect local linguistic identity while remaining intelligible within global contexts. Furthermore, educators and scholars in Indonesian language programs can play a key role by modeling balanced writing practices—demonstrating how to incorporate global academic terms without compromising the integrity and richness of the national language.

Conclusion

This study has demonstrated that English significantly influences academic writing in the field of Indonesian language and literature education, despite Bahasa Indonesia being the primary language of instruction. Through corpus analysis of six scientific articles, it was found that 4.21% of the total word tokens were influenced by English, with the majority appearing in adapted forms.

Adaptation emerged as the most dominant strategy, followed by borrowing, calque (literal translation), retention (italicized forms), neologism, and translation. These findings suggest that English not only supports the expression of complex academic concepts but has also become embedded in the linguistic habits of scholars, particularly when addressing theoretical and methodological content. While the study provides important insights into the lexical influence of English, it is not without limitations. The relatively small and specialized corpus—limited to six articles from a single academic discipline—may not capture the full extent of English influence across broader academic writing in Indonesia. Additionally, the categorization of lexical influence types involved some degree of interpretation, particularly in distinguishing between adaptation and neologism, which may vary depending on context and linguistic background. Future research could expand on this study by analyzing a larger and more diverse corpus, including different types of academic texts (e.g., theses, textbooks, conference papers) from multiple disciplines and institutions. Furthermore, studies involving interviews or surveys with writers could offer deeper insights into the motivations and attitudes behind their linguistic choices.

References

- Alrajafi, G. (2021). The use of English in Indonesia: Status and Influence. *SIGEH ELT: Journal of Literature and Linguistics*, 1(1), 1–10. <https://doi.org/10.36269/sigeh.v1i1.355>
- Anthony, L. (2024). *AntConc* (Version 4.3.1) [English]. Waseda University.
- Csomay, E., & Crawford, W. J. (2024). *Doing Corpus Linguistics* (2nd ed.). Routledge. <https://doi.org/10.4324/9781003363309>
- Amelia, D., Putri, Y.R., & Daulay, I. S. (2024). Analisis Perkembangan Bahasa Indonesia di Era Digital: Tantangan dan Peluang. *Fonologi: Jurnal Ilmuan Bahasa dan Sastra Inggris*, 2(4), 249–257. <https://doi.org/10.61132/fonologi.v2i4.1235>
- Djajasudarma, F. (2014). *Wacana dan pragmatik*. Refika Aditama.
- Lauder, A. F. (2008). The status and function of English in Indonesia: A review of key factors. *Makara, Sosial Humaniora*, 12(1), 9–20.
- Makmur, M. A. (2024). Perkembangan Bahasa Indonesia dalam Era Digital: Peluang dan Tantangan. *Jurnal Pendidikan Mosikolah*, 4(1), 80–86.
- Nababan, P. W. J. (1991). *Sosiolinguistik: Suatu pengantar*. Gramedia Pus
- Noor, A., & Aslam, R. (2025). *EXPLORING THE IMPACTS OF ENGLISH LANGUAGE DOMINANCE ON THE LINGUISTIC STANDING OF URDU AND PUNJABI LANGUAGES*.
- Phillipson, R. (1992). *Linguistic imperialism*. Oxford University Press.
- Razmjoo Moghadam, S., & Barani, G. (2025). The impact of linguistic vs. Cultural imperialism on language learning. *Frontiers in Psychology*, 15, 1438849. <https://doi.org/10.3389/fpsyg.2024.1438849>

- Sabrina, A., Iskandarsyah Siregar, Salsabila, & Sosrohadi, S. (2021). Lingual Dominance and Symbolic Power in the Discourse of Using the PeduliLindungi Application as a Digital Payment Tool. *International Journal of Linguistics Studies*, 1(2), 52–59. <https://doi.org/10.32996/ijls.2021.1.2.8>
- Setiawan, R., & Musyahda, L. (2019). The phenomenon of borrowed English words in Indonesian academic theses. *Language Circle: Journal of Language and Literature*, 14(1), 45–52.
- Sadaf, S., Gul, S., Bibi, S., & Khan, S. (2025). LANGUAGE AS CAPITAL: THE ECONOMIC AND CULTURAL POWER OF ENGLISH. *Journal of Applied Linguistics TESOL*, 8(1), 185–203.
- Sundry, L., & Fauzah, F. (2024). Studi Analisis Perkembangan Bahasa Indonesia di Era Digital. *Innovative: Journal Of Social Science Research*, 4(3), 11295–11303. <https://doi.org/10.31004/innovative.v4i3.11633>
- Tadjuddin, D. (2020). The use of English in Indonesian higher education: The students' perspectives. *Journal of English Teaching, Applied Linguistics and Literatures (JETALL)*, 3(2), 39–52.
- Wulandari, A. (2022). English loanwords in Indonesian textbooks: A corpus-based analysis. *Journal of Language and Linguistic Studies*, 18(2), 654–670.
- Zein, S. (2011). Constructing and negotiating the cultural identity of young Indonesian learners of English. *Journal of Multilingual and Multicultural Development*, 32(5), 479–493.
- Zeng, J., & Yang, J. (2024). English language hegemony: Retrospect and prospect. *Humanities and Social Sciences Communications*, 11(1), 317. <https://doi.org/10.1057/s41599-024-02821-z>