ATTITUDES AND MAINTENANCE EFFORTS OF INDONESIAN MECHANICAL ENGINEERING STUDENTS TOWARD ACQUIRED, LEARNED, AND USED LANGUAGES

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ABSTRAK

Penelitian ini mengkaji sikap bahasa dan upaya pemertahanan bahasa mahasiswa teknik mesin Indonesia terhadap tiga jenis bahasa: bahasa nasional (Bahasa Indonesia), bahasa global (Bahasa Inggris), dan bahasa warisan lokal. Studi ini mengeksplorasi bagaimana mahasiswa menilai dan mempertahankan repertoar multibahasa mereka dalam konteks pendidikan tinggi. Dengan menggunakan desain metode campuran sekuensial eksplanatori, data dikumpulkan melalui kuesioner (n = 43) dan wawancara semi-terstruktur pada mahasiswa di sebuah universitas swasta di Balikpapan. Hasil menunjukkan bahwa mahasiswa secara umum memiliki sikap positif terhadap ketiga jenis bahasa, meskipun dengan tingkat keterikatan emosional, instrumental, dan fungsional yang berbeda. Bahasa Indonesia menjadi bahasa yang paling dominan secara emosional dan fungsional, digunakan secara aktif dalam konteks akademik dan sosial. Pola ini mencerminkan model hierarkis dalam pemertahanan bahasa yang dibentuk oleh nilai pragmatis, kapital sosial, dan makna simbolik. Studi ini berkontribusi dalam memahami praktik multibahasa di bidang teknik, serta mendorong strategi pendidikan yang responsif terhadap pembelajaran Bahasa Inggris komunikatif, penggunaan akademik Bahasa Indonesia, dan revitalisasi bahasa daerah berbasis komunitas.

Kata Kunci : Sikap Bahasa, Pemertahanan Bahasa, Multibahasa, Pendidikan Teknik.

ABSTRACT

This study investigates the language attitudes and maintenance efforts of Indonesian mechanical engineering students toward three types of languages: the national language (Indonesian), the global language (English), and local/heritage languages. It explores how students evaluate and sustain their multilingual repertoire within the context of higher education. Employing an explanatory sequential mixed-methods design, data were collected through questionnaires (n = 43) and semi-structured interviews with students from a private university in Balikpapan. The findings reveal that students hold generally positive attitudes toward all three language types, although with different levels of emotional, instrumental, and functional engagement. Indonesian is the most emotionally and functionally dominant language, actively used in academic and social contexts. These patterns reflect a hierarchical model of language maintenance shaped by pragmatic utility, social capital, and symbolic value. This study contributes to understanding multilingual practices in technical disciplines and calls for responsive educational strategies to support communicative English learning, academic Indonesian usage, and community-based local language revitalization.

Keywords: Language Attitudes, Language Maintenance, Multilingualism, Engineering Education.

1. INTRODUCTION

In today's globalized world, multilingualism plays a crucial role in science, technology, and engineering fields, where international collaboration, academic mobility, and access to global knowledge are essential (Kirkpatrick, 2017). Indonesia, a linguistically diverse nation with over 700 local languages, offers a complex sociolinguistic landscape for exploring how language attitudes develop in higher education—particularly in disciplines that require technical precision and cross-cultural communication, such as mechanical engineering (Lauder, 2008).

Mechanical engineering students must navigate multiple linguistic domains: their local mother tongue, the national language (Bahasa Indonesia), and global languages such as English. These languages serve different functions and are acquired through different means. Drawing on Krashen's (1982) acquisition-learning hypothesis and expanded frameworks by Ellis (2015) and Lightbown & Spada (2020), this study categorizes languages into three types: acquired languages (naturally gained in early life), learned languages (formally taught in schools or universities), and used languages (applied in real-life academic or professional contexts). These distinctions are key to understanding the psychological and social attitudes students develop toward each language.

Attitudes toward language can be either positive or negative, influencing language maintenance, shift, or even language loss. As Binaningrum (2020) stated, language attitudes involve three dimensions: language loyalty, language pride, and awareness of standard norms. These attitudes shape not only how individuals value their linguistic heritage but also how they navigate language use in practical situations (Machmud & Hastuti,

2019). For example, some speakers take pride in their local language as a marker of identity, while others may avoid using it due to perceived lack of prestige.

Previous studies have explored language attitudes among Indonesian EFL students more generally (Lamb, 2004). Others have examined specific ethnic or regional dynamics (Sarmadan & Samsuddin, 2017) or the impact of English in academic contexts (Yuwono & Harbon, 2010). However, there is limited research focused specifically on students in technical fields like mechanical engineering, where multilingual competence intersects directly with global professional standards and expectations.

This gap is especially relevant in industrial cities like Balikpapan, where students are exposed to multiple languages such as Javanese, Buginese, Banjar, and English alongside Bahasa Indonesia. In such a context, students' linguistic attitudes may influence their motivation to learn, their academic performance, and their future career paths (Dörnyei & Ryan, 2015; Gardner, 2010). Studies in other multilingual contexts (e.g., Dweik & Qawar, 2015; Dweik, Nofal, & Qawasmeh, 2014; Liu & Zhao, 2011) also show that attitudes toward each language are shaped by identity, utility, and broader sociocultural forces.

This study draws on Baker's (2011) model of language attitudes to examine how mechanical engineering students evaluate the languages they have acquired, learned, and used. The research seeks to understand their linguistic values and preferences, and how these may reflect broader themes of cultural identity, global readiness, and academic engagement.

Accordingly, this study addresses two research questions:
1) What are the attitudes of Indonesian mechanical engineering students toward

the languages they have acquired, learned, and used?

2) What efforts do they make to maintain those languages?

2. METHOD
Research Design
This study employed an explanatory sequential mixed-methods design (Creswell & Plano Clark, 2017). The quantitative phase was followed by a qualitative phase to provide deeper insights and explanations of the quantitative findings.

Participants
The participants in this study were 43 students enrolled in the Mechanical Engineering program at a private university in Balikpapan, with ages ranging from 20 to 50 years. Participation was entirely voluntary, and informed consent was obtained prior to data collection. The participants were assured that all information provided would remain confidential and used solely for academic purposes.

Instruments
To collect the data, this study employed a mixed-methods approach utilizing both an online questionnaire and semi-structured interviews.

1) Questionnaire:
The questionnaire was designed to gather data on participants' background information, language use, language attitudes, motivation for language learning, and efforts in language maintenance. The items were adapted from established instruments developed by Septianasari & Wahyuni (2020), Utami et al. (2020), Dweik et al. (2014), and Al-Tamimi & Shuib (2009), and then tailored to the aims of this research.

To ensure clarity and accessibility, especially for those with limited English proficiency, the questionnaire was administered in Bahasa Indonesia. It employed a four-point Likert scale format to minimize neutral responses and ambiguity. The scale ranged from "Strongly Disagree (1)" to "Strongly Agree (4)." The questionnaire was distributed via Google Form.

2) Semi-Structured Interview:
To obtain qualitative insights, semi-structured interviews were conducted via Zoom Meetings. This method was chosen for its flexibility and effectiveness in small-scale, exploratory research. The interviews explored participants' language use, attitudes toward different languages, and efforts to maintain these languages. Each interview lasted approximately 12 to 20 minutes. All interviews were audio-recorded with participants' consent and subsequently transcribed for analysis.

Data Collection Procedure
Participants were first invited to complete the online questionnaire. Upon completion, a subset of participants was invited to participate in follow-up interviews to provide more detailed explanations and contextual understanding of their responses. This sequential data collection allowed for triangulation between quantitative and qualitative data sources.

Data Analysis
Quantitative data from the questionnaire were analyzed using descriptive statistics, particularly frequency distributions and percentage calculations, to identify patterns and trends in language attitudes and usage. The responses were tabulated according to categories relevant to the research questions.

Qualitative data from the interviews were analyzed using thematic coding

(Braun & Clarke, 2006). Following the transcription process, the data were subjected to open, axial, and selective coding (Al-Tamimi & Shuib, 2009). This coding process enabled the identification of recurring themes and patterns related to language attitudes, usage, and maintenance strategies.

The results from both the quantitative and qualitative phases were then integrated and discussed to provide a comprehensive understanding of the participants' language attitudes in relation to the languages they have acquired, learned, and used throughout their academic and personal lives.

3. FINDINGS AND DISCUSSION

This section presents the findings of this study by addressing the two research questions. It integrates data from the questionnaire (quantitative) and interviews (qualitative), focusing on students' language attitudes and usage across acquired, learned, and used languages. To address the research questions, this section discusses students' attitudes toward Indonesian, English, and local languages, and examines what efforts they do for each language.

The findings of this study indicate that Indonesian holds the most dominant position both emotionally and functionally in students' lives. It is actively used in academic and social contexts and is perceived as a symbol of national identity, evoking strong feelings of pride and emotional attachment. English is also highly valued, primarily for its instrumental role in education and global career opportunities, although students' confidence in using it varies. In contrast, local languages are appreciated as cultural heritage and markers of ethnic identity, but students' engagement with them is limited to private and familial settings, reflecting a symbolic rather than functional role. Overall, the results suggest a clear hierarchy in language maintenance: Indonesian is preserved for national integration and everyday use, English for global mobility and advancement, and local languages for cultural and emotional ties.

1) **Attitudes Toward Acquired, Learned, and Used Languages**
a. **Attitudes Toward Indonesian: Functional Dominance and National Identity**

The findings indicate that students demonstrate overwhelmingly positive attitudes toward Indonesian, reflecting its central role in their daily communication and national identity. As shown in Table 1, all participants either agreed or strongly agreed with all eight attitudinal statements regarding the Indonesian language, suggesting a strong affective and instrumental alignment with it.

Table 1. Students' Attitudes Toward Indonesian

No	Statement	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Mean Score
1	Indonesian is important as a symbol of self-identity.	0	0	25.6	74.4	3.6
2	Indonesian can be used in all fields.	0	4.7	39.5	55.8	3.5
3	I am very good at Indonesian.	0	4.7	37.2	58.1	3.5
4	Instructions in Indonesian are	0	4.7	30.2	65.1	3.

	easy to read and understand.					6
5	I am proud to use Indonesian.	0	0	20.9	79.1	3.8
6	I enjoy all activities that use Indonesian.	0	4.7	25.6	69.8	3.7
7	I feel comfortable using Indonesian to express my feelings and desires.	0	2.3	39.5	58.1	3.6
8	I use Indonesian to facilitate social interaction.	2.3	7	32.6	58.1	3.5

The most highly endorsed item is pride in using Indonesian (Item 5), with 79.1% of students strongly agreeing. This suggests that Indonesian is not only functionally dominant but also deeply tied to students' sense of cultural and national identity.

Additionally, the mean scores across items remain consistently high (3.5–3.8), reinforcing the idea that Indonesian is perceived as a prestigious, inclusive, and accessible language.

Interview responses echoed this sentiment:

"I am proud to speak Indonesian because it reflects our identity." (P5)

"Indonesian helps me in all areas—academic, social, and even emotional expression." (P3)

The data indicate that Indonesian functions as the primary language across all domains, particularly in academic and interpersonal communication. The positive attitudes observed—reflected in high agreement levels for items like "I am proud to use Indonesian" and "Indonesian helps social interactions"—demonstrate both instrumental and integrative dimensions. Students see Indonesian not only as a practical tool for academic success but also as a marker of national identity and emotional expression.

These findings are consistent with previous research emphasizing the integrative role of national languages in multilingual societies. For example, Al-Tamimi and Shuib (2009) highlight how a national language can serve as a unifying symbol amid linguistic diversity. Similarly, Dardjowidjojo (2000) and Lauder (2008) underscore the central role of Bahasa Indonesia in uniting diverse ethnic communities across the Indonesian archipelago. Moreover, the results clearly reflect Baker's (2011) tripartite model of language attitudes—comprising affective, cognitive, and behavioral components. Students express positive feelings toward Indonesian (affective), acknowledge its practical value in academic and social contexts (cognitive), and demonstrate consistent use of the language across both formal and informal domains (behavioral). In summary, Indonesian occupies a central and prestigious position in students' linguistic repertoire. It is not only the default medium for academic and social interaction but also a source of national pride and identity, reinforcing its maintenance across domains.

b. Attitudes Toward English: Global Value and Instrumental Motivation

The data reveal that students exhibit strong instrumental motivation and positive attitudes toward English, primarily because of its perceived value in academic and professional advancement. As shown in Table 2, students agreed or strongly agreed with all eight attitudinal items, especially regarding English as a global necessity.

Table 2. Students' Attitudes Toward English

No	Statement	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Mean Score
1	Learning English is important in the era of globalization.	0	2.3	23.3	74.4	3.7
2	I am interested in learning English.	0	2.3	44.2	53.5	3.5
3	I am satisfied with my English mastery and grades.	2.3	14	48.8	34.9	3.2
4	I have more knowledge while studying English.	2.3	11.6	41.9	44.2	3.3
5	I am proud to use English.	0	4.7	62.8	32.6	3.3
6	I enjoy English-language activities.	0	14	48.8	37.2	3.2
7	I want to practice with classmates who speak English fluently.	0	7	51.2	41.9	3.3
8	I am more confident after learning English.	0	16.3	44.2	39.5	3.2

The item with the strongest agreement (Item 1) confirms that students see English as essential in the globalized world (mean = 3.7). Most participants also take pride in using English (Item 5, mean = 3.3) and express interest in improving their proficiency (Item 2, mean = 3.5). These findings reinforce English's instrumental role in career preparation, education, and international communication.

Interview data supported these results. Many participants mentioned career-related reasons for improving English:

"That is what I want to develop the most for now—English, because as we know, English is universal." (P2)

English is seen as an important global language, especially for career and academic growth. While most students value English, fewer feel fully confident using it. This reflects the need for more communicative practice. These attitudes are consistent with Rahimi et al. (2008), who emphasized the motivational role of positive language attitudes in second language learning.

English is viewed by students as an essential language for accessing global knowledge, participating in international discourse, and advancing career prospects—particularly relevant for mechanical engineering students. This is evident in the high percentage (74.4%) who strongly agree that "learning English is important in the era of globalization." This aligns with the concept of English as linguistic capital (Rahimi, Riazi & Saif, 2008), suggesting that students' positive language attitudes are rooted in pragmatic and future-oriented goals.

However, while students intellectually and professionally value English, their affective and behavioral engagement remains somewhat limited. Interview data reveal a noticeable gap between students' recognition of the

importance of English and their confidence in using it.

"*English is very important for future work, especially if I want to continue my studies abroad.*" (P20)
"*I enjoy learning English, but I still hesitate when speaking.*" (P9)
"*When I search for engineering journals, they're usually in English.*" (P11)

English is widely perceived as essential for accessing academic materials and pursuing global opportunities. These responses indicate a strong instrumental motivation (Gardner, 2010), yet also suggest that students' self-efficacy and communicative competence (Dörnyei & Ryan, 2015) may still require further development—potentially through more immersive or communicative learning experiences.

This tension echoes findings by Yuwono and Harbon (2010), who argue that while English in Indonesia is often regarded as a symbol of modernity and success, it continues to be approached with a degree of hesitation and anxiety, particularly among university students.

c. Attitudes Toward Local Languages: Cultural Identity and Limited Engagement

As shown in Table 3, students express emotional attachment and cultural pride toward local languages. However, their engagement remains limited, indicating that these languages hold symbolic value more than functional use in daily communication.

Table 3. Students' Attitudes Toward Local Language

No	Statement	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Mean Score
1	Local language is a symbol of self-identity.	0	7	39.5	53.5	3.5
2	Local language is unique and beautiful.	0	2.3	30.2	67.4	3.7
3	Local language is a cultural/historical heritage.	0	2.3	20.9	76.7	3.7
4	Local language should be taught in schools.	2.3	9.3	41.9	46.5	2.6
5	I am proud to use local language.	0	7	41.9	51.2	3.4
6	I enjoy local language activities.	0	16.3	44.2	39.5	2.7
7	I am interested in learning local language.	0	11.6	55.8	32.6	3.2
8	I will teach local language to my children.	0	11.6	48.8	39.5	3.3

Students demonstrated the strongest agreement regarding the cultural and historical significance of local languages, with 76.7% strongly agreeing with the statement that they are a "cultural and historical heritage that must be preserved" (Item 3). However, responses to items related to enjoyment, teaching, and institutional support (Items 4, 6, and 8) reveal a gap between positive attitudes and actual engagement or commitment to use.

This contrast was further illustrated in interview data:

"I think local language is important, but I don't really develop it… As long as I understand and can reply, that's enough for me." (P1)
"I'm proud to speak Bugis because it's part of my identity as a Bugis person." (P4)
"With my parents, I still use Banjarese. It feels more respectful and intimate." (P15)
"I understand Javanese, but I rarely use it now. All my friends speak Indonesian." (P12)

While participants expressed emotional and cultural pride in their local languages—particularly as markers of ethnic identity and family intimacy—their actual usage tends to be confined to private or familial settings. Local languages are largely absent from academic, institutional, and public domains.

This pattern suggests a symbolic rather than functional appreciation of local languages. Students value these languages as part of their heritage, but do not consider them essential for daily life or upward mobility—unlike Indonesian or English. This phenomenon aligns with Phyak, (2015) and De Korne (2017) concept of *symbolic capital*, where local languages are culturally esteemed yet lack domain relevance and institutional support.

The decline in active usage, particularly among younger generations in urbanized areas like Balikpapan, indicates an ongoing language shift toward Indonesian. Nevertheless, some participants expressed an intention to transmit their local languages to their children, suggesting a latent desire for preservation, albeit without strong structural reinforcement (e.g., through local language education policies).

2) Students' Efforts in Maintaining Languages They Acquired, Learned, and Use

This sub-section presents the questionnaire and interview findings related to the students' motivation and efforts in maintaining the languages they have acquired, learned, and used. The results show that students demonstrate both awareness and intention in preserving their linguistic repertoire. Indonesian is maintained for daily communication and national identity, English for academic and career advancement, and local languages for cultural connection. These efforts reflect a mix of intrinsic and instrumental motivations, supported by both formal learning and informal strategies such as media use and interpersonal interaction.

a. Motivation to Learn Languages

The following table summarizes motivation of students to learn their languages.

Table 4. Motivation to Learn Languages

No	Statement	Indonesian	English	Local Language	Others
1	Language that makes it easy to find work	32.6%	67.4%	0%	0%
2	Language that supports education to a higher level	32.6%	67.4%	0%	0%
3	Language that makes it easy to do all activities	93%	7%	0%	0%
4	Language that is useful for self-development	39.5%	58.1%	2.3%	0%
5	Language that enhances prestige	23.3%	74.4%	2.3%	0%
6	Language that unites community and	79.1%	9.3%	11.6%	0%

7	Language that makes socializing easy	81.4%	14%	2.3%	2.3%

Based on the data presented in Table 4, English is perceived by students as the most valuable language for future-oriented goals. A substantial portion of the participants view English as instrumental for employment (67.4%), higher education (67.4%), self-development (58.1%), and prestige (74.4%). This pattern reflects the instrumental motivation described by Gardner and Lambert (1972), where learners are motivated to learn a language not because of cultural affinity, but because of the perceived economic or educational benefits. English, in this context, is associated with upward mobility and global relevance. This orientation is clearly articulated by.

Participant 2:
"*That is what I want to develop the most for now — English, because as we know, English is universal.*" (P2)

This response supports the view that English is widely regarded as a language of global prestige, serving as a vehicle for academic and economic advancement (Guerrero, 2010) and offering access to international networks (Taguchi, 2014).

In contrast, Indonesian is seen as the most practical language for everyday communication, with 93% of participants selecting it as the language that facilitates daily activities. This finding indicates a strong integrative motivation (Gardner, 2010), where learners use a language because they identify with its speakers and use it as part of their daily social function. Indonesian, as the national language, plays a crucial role in fostering unity and participation in national life—supporting what Anderson as cited in Sweet (1984) describes as a "language of imagined community" in nation-building.

Meanwhile, local languages receive the least motivation for learning or active development, despite their cultural and identity value. Only a small percentage of participants associate local languages with self-development or academic advantage. However, interview responses suggest that students still recognize the symbolic and cultural importance of these languages.

Participant 1 expressed:
"*Even though I'm not fluent, when people speak in local language, I understand. It's important because when I go somewhere and hear people talk, I want to know what they're saying. But I don't actively improve it; it's enough to understand and respond.*" (P1)

This reflects a pattern where speakers value a language emotionally but make limited efforts to use or revitalize it. Similar cases are found in Paraguay's Guarani (Von Streber, 2017) and among Korean immigrants in New Zealand (Park, 2021). The maintenance of local languages tends to depend more on cultural identity and oral transmission within families than on formal education or institutional support.

Therefore, the findings highlight a hierarchical perception of language value: English is cultivated for global and professional purposes; Indonesian is maintained for national and social integration; and local languages are respected for their cultural heritage, yet often neglected in terms of active development. This multilingual dynamic reflects the students' negotiation between global demands, national identity, and local belonging.

b. Students' Efforts in Maintaining Languages

The following table summarizes the concrete efforts made by students to maintain their languages.

Table 5. Students' Efforts in Maintaining Languages

No	Type of Effort	Mean (Indonesian)	Mean (English)	Mean (Local Language)	Most Prominent in Language
1	Using the language with people from the same cultural background	3.6	3.2	3.4	Indonesian (60.5% strongly agree)
2	Reading and writing in the language	3.6	3.4	3.2	Indonesian (62.8% strongly agree)
3	Watching TV programs or films in the language	3.4	3.5	3.2	English (53.5% strongly agree)
4	Listening to and singing songs in the language	3.4	3.4	3.2	English (48.8% strongly agree)
5	Feeling proud of the language	3.7	3.2	3.4	Indonesian (72.1% strongly agree)

Based on the table, Indonesian emerges as the most actively maintained language among the three. This is evident from the consistently high mean scores across all categories of effort, particularly in personal pride (mean = 3.7; 72.1% strongly agree) and literacy activities such as reading and writing (mean = 3.6; 62.8%). These findings indicate that students not only use Indonesian functionally, but also associate it with a strong sense of national identity and emotional attachment. As Spolsky (2009) asserts, language loyalty is deeply tied to identity and symbolic value, especially when a language is promoted as part of national ideology and unity. In this case, Indonesian functions not just as a tool of communication but also as a symbol of shared national belonging. This emotional investment in the national language highlights its role as a powerful marker of ethnic, national, and cultural identity (Edwards, 2009; Jaspal, 2009).

In contrast, English is maintained primarily through media exposure and formal education, with relatively high mean scores in watching TV or films (mean = 3.5) and reading/writing (mean = 3.4). These results support the view that English serves an instrumental function in the students' linguistic repertoire — a language learned and maintained for academic achievement, professional advancement, and global communication. This finding is further supported by Retnowaty (2022), whose study of Indonesian mechanical engineering students revealed a strong emphasis on instrumental motivation for English learning, particularly for employment and educational purposes. Her research affirmed that learners' positive attitudes and future-oriented goals were central to their language maintenance strategies in English for Specific Purposes (ESP) contexts. Moreover, the dominance of English in global media and education reinforces this trend, aligning with Phillipson's concept of linguistic imperialism, where English spreads globally due to its association with power, knowledge, and economic opportunity (Basu, 2013).

Meanwhile, local languages are maintained mostly through interpersonal

interaction, particularly with family members and within the home domain. Although the average scores across categories are somewhat lower, the effort to use local languages in direct conversation (mean = 3.4) suggests that these languages still hold cultural and relational importance. However, students' engagement with local languages appears to be passive or receptive rather than proactive. This reflects terms "language shift," where minority or heritage languages are gradually reduced to limited, often informal functions in familial contexts (Mufwene, 2020). Students tend to preserve comprehension and basic use to fulfill social roles in family and community, without necessarily investing in full fluency or literacy.

This pattern illustrates a clear hierarchy in language maintenance, reflecting both social function and perceived value. Indonesian is prioritized both emotionally and nationally, as it is sustained through symbolic attachment and practical daily use. English, on the other hand, is cultivated strategically due to its global prestige and utilitarian function, especially in education and career advancement. Meanwhile, local languages are largely preserved for cultural and familial connection but tend to be marginalized in formal, academic, or institutional domains.

These findings align with broader trends in multilingual societies, where language choices are shaped by identity, opportunity, and domain of use (Spolsky, 2009; Hornberger, 2003). The students' efforts reflect a complex negotiation between global aspirations, national affiliation, and local rootedness.

In addition to the structured questionnaire, interviews revealed more personalized and digital-based strategies that students use to maintain their languages. These strategies reflect a growing trend toward autonomous and media-supported learning, particularly for English and Indonesian.

Students reported using various digital and informal strategies to maintain their language skills, particularly in English. One student shared, *"Sometimes I use Duolingo when I have free time"* (P3), indicating that mobile apps are part of their self-directed learning routine. Watching English-language YouTube videos is another common method, especially for enhancing vocabulary and pronunciation. As P3 explained, *"I often use YouTube to learn English pronunciation, especially from native speakers."*

To support vocabulary development, students frequently turn to online tools. One respondent said, *"If I find a difficult word, I look it up in Google Translate or an online dictionary"* (P3).

Efforts to strengthen Indonesian, particularly in academic or formal contexts, include watching news broadcasts. According to P4, *"I prefer watching the news on TV or YouTube to learn more formal language."* Reading books in multiple languages was also mentioned as a helpful strategy: *"I also read books to expand my vocabulary — not just in Indonesian, but also in English and sometimes in local language"* (P4).

Interpersonal communication is especially vital for maintaining local languages. As P5 explained, *"I rarely use local language unless I'm at home, usually when talking to my parents or grandmother."* For English, students also benefit from real-life interactions in professional settings: *"I often use it at*

work because some of my colleagues don't speak Indonesian" (P6).

These findings show that students maintain their multilingual abilities through a blended and context-sensitive approach, combining digital media, independent learning, and everyday communication. This reflects what Hornberger (2003) describes as the continua of biliteracy, where language learning and maintenance occur across formal and informal, digital and interpersonal, as well as individual and social dimensions.

4. CONCLUSIONS

This study examined the language use, attitudes, and maintenance efforts of Indonesian mechanical engineering students toward Indonesian, English, and local languages. The findings reveal generally positive attitudes across all three languages, reflecting affective, cognitive, and behavioral dimensions. Students recognize each language's unique value: Indonesian for national identity and daily communication, English for academic and professional advancement, and local languages for cultural belonging.

Indonesian is both emotionally and functionally dominant, actively maintained through literacy and civic life. English is maintained primarily through digital media and formal education, driven by instrumental motivation. Local languages, while symbolically important, receive minimal active support and rely mostly on family-based transmission.

Students also adopt self-directed maintenance strategies—such as using Duolingo, YouTube, and bilingual reading—indicating a shift toward autonomous and hybrid learning. These behaviors highlight the need for educators and policymakers to design responsive curricula that integrate digital literacy,

support multilingual competence, and revitalize local languages through community engagement.

While this study offers valuable insights, it is limited by sample size and scope. Future research should involve more diverse participants and explore longitudinal developments in language attitudes and maintenance. Ultimately, supporting students' multilingual practices strengthens not only individual language proficiency but also the broader goals of inclusive, sustainable language education.

5. REFERENCES

Al-Tamimi, A., & Shuib, M. (2009). Motivation And Attitudes Towards Learning English: A Study Of Petroleum Engineering Undergraduates At Hadhramout University Of Sciences And Technology. GEMA Online Journal Of Language Studies, 9(2), 29–55.

Baker, C. (2011). *Foundations Of Bilingual Education And Bilingualism* (5th Ed.). Multilingual Matters.

Basu, B. L. (2013). The Global Spread Of English, "Linguistic Imperialism", And The "Politics" Of English Language Teaching: A Reassessment Of The Role Of English In The World Today. *Spectrum*, *8*, 185-198.

Binaningrum, B. (2020). Kebanggaan Berbahasa (Linguistic Pride) Pada Masyarakat. *Ushuluna: Jurnal Ilmu Ushuluddin*, *1*(1), 108-127.

Braun, V., & Clarke, V. (2006). Using Thematic Analysis In Psychology. *Qualitative Research In Psychology*, 3(2), 77-101.

Creswell, J. W., & Plano Clark, V. L. (2017). *Designing And Conducting Mixed Methods Research* (3rd Ed.). Sage Publications.

Dardjowidjojo, S. (2000). English Teaching In Indonesia. *EA Journal*, 18(1), 22-30.

De Korne, H. (2017). "A Treasure" And "A Legacy": Individual And Communal (Re)Valuing Of Isthmus Zapotec In Multilingual Mexico. In L. Duchêne, K. Horner, & M. Heller (Eds.), *Language, Education And Neoliberalism* (Pp. 89–107). Multilingual Matters. Https://Doi.Org/10.21832/97817830 98699-005

Dörnyei, Z., & Ryan, S. (2015). *The Psychology Of The Language Learner Revisited*. Routledge.

Dweik, B. S., Nofal, M. Y., & Qawasmeh, R. S. (2014). Language Use And Language Attitudes Among The Muslim Arabs Of Vancouver/Canada: A Sociolinguistic Study. *International Journal Of Linguistics And Communication*, 2(2), 75-99.

Dweik, Bader & Qawar, Hanadi. (2015). Language Choice And Language Attitudes In A Multilingual Arab Canadian Community: Quebec–Canada: A Sociolinguistic Study. British Journal Of English Linguistics. 3. 1-12.

Edwards, J. (2009). *Language And Identity: An Introduction*. Cambridge University Press.

Ellis, R. (2015). *Understanding Second Language Acquisition* (2nd Ed.). Oxford University Press.

Gardner, R. C. (2010). *Motivation And Second Language Acquisition: The Socio-Educational Model*. Peter Lang.

Gardner, R. C., & Lambert, W. E. (1972). Attitudes And Motivation In Second-Language Learning.

Guerrero, C. H. (2010). Is English The Key To Access The A Wonders Of The Modern World? A Critical Discourse Analysis. *Signo Y Pensamiento*, *29*(57), 294-313.

Hornberger, N. H. (2003). Continua Of Biliteracy. *Bilingual Education And Bilingualism*, 3-34.

Jaspal, R. (2009). Language And Social Identity: A Psychosocial Approach. *Psych-Talk*, *64*, 17-20.

Kirkpatrick, A. (2017). The Development Of English As A Lingua Franca In ASEAN. In *The Routledge Handbook Of English As A Lingua Franca* (Pp. 138-150). Routledge.

Krashen, S. D. (1982). *Principles And Practice In Second Language Acquisition*. Pergamon Press.

Lamb, M. (2004). Integrative Motivation In A Globalizing World. *System*, 32(1), 3-19. Https://Doi.Org/10.1016/J.System.2 003.04.002

Lauder, A. (2008). The Status And Function Of English In Indonesia: A Review Of Key Factors. *Makara Human Behavior Studies In Asia*, 12(1), 9-20. Https://Doi.Org/10.7454/Mssh.V12i 1.128

Lightbown, P. M., & Spada, N. (2020). *How Languages Are Learned* (5th Ed.). Oxford University Press.

Liu, M., & Zhao, S. (2011). Current Language Attitudes Of Mainland Chinese University Students. *Journal Of Language Teaching And Research*, *2*(5), 963.

Machmud, P. A., & Hastuti, E. (2019). Language Attitude Of Tegal Javanese Dialect Maintenance On Food Stall Sellers In Depok , Indonesia. *European Journal Of Literature, Language And Linguistics Studies*, 3(3), 100–107. Https://Doi.Org/10.5281/Zenodo.35 27668

Mufwene, S. S. (2020). *Language Shift*. In J. W. Stanlaw (Ed.), *The International Encyclopedia Of Linguistic Anthropology* (Pp. 1–9). Wiley. Https://Doi.Org/10.1002/9781118786093.Iela0357

Park, M. Y. (2021). Heritage Language Use In The Workplace: 1.5-Generation Korean Immigrants In New Zealand. *International Multilingual Research Journal*, *15*(4), 332-345.

Phyak, P. (2015). Language Ideologies And Local Languages As The Medium-Of-Instruction Policy: A Critical Ethnography Of A Multilingual School In Nepal. In *Language Planning For Medium Of Instruction In Asia* (Pp. 127-143). Routledge.

Rahimi, M., Riazi, A., & Saif, S. (2008). An Investigation Into The Factors Affecting The Use Of Language Learning Strategies By Persian EFL Learners. *Canadian Journal Of Applied Linguistics*, *11*(2), 31-60.

Retnowaty, R. (2022). Motivations And Attitudes Of Indonesian Mechanical Engineering Students Regarding English Learning. *Eralingua: Jurnal Pendidikan Bahasa Asing Dan Sastra, 6*(1).

Sarmadan, S., & Samsuddin, S. (2017). Tolakinese Language Attitude Toward Tolaki-Dialect Of Mekongga In Kolaka District. *Journal Of Indonesian Language Education And Literary*, *2*(2, Dec.), 163-169.

Septianasari, L., & Wahyuni, I. (2020). The Trajectory Of English Foreign Language (EFL) Students' Language Attitude In Maintaining Local Wisdom Using Snowball Sampling Technique Method.

Journal Of Physics: Conference Series, 1477(4). Https://Doi.Org/10.1088/1742-6596/1477/4/042004

Spolsky, B. (2009). *Language Management*. Cambridge University Press.

Sweet, S. S. (1984). Imagined Communities: Reflections On The Origin And Spread Of Nationalism. *Telos*, *1984*(60), 227-231.

Taguchi, N. (2014). English-Medium Education In The Global Society: Introduction To The Special Issue. *International Review Of Applied Linguistics In Language Teaching*, *52*(2), 89-98.

Utami, E. A. R., Ratnadewi, D., & Yunianti, S. (2020). The Language Attitude Of Islamic Boarding School Students Toward English. Journal Of Education And Learning (Edulearn), Vol 14, No 2: May 2020, 168

Von Streber, G. (2018). Paraguay And The Complexities Of A Bilingual Nation: The Contradiction Of The Guarani Language As A National Symbol And Its Condition Of Diglossia/Paraguay Y Las Complejidades De Una Nación Bilingüe: La Contradicción Del Idioma Guaraní Como Símbolo Nacion. *Encuentros*, *16*(01).

Yuwono, G. I., & Harbon, L. (2010). English Teacher Professionalism And Professional Development: Some Common Issues In Indonesia. *Asian EFL Journal*, 12(3), 145-163.