

STRENGTHENING THE IDENTITY AND LANGUAGE OF INDONESIAN MIGRANT TEENS THROUGH SMARTPHONE USE

Hendrikus Male^{1*}, Dewi Kusumaningsih¹, Anggi Setia Lengkana², Dina Aliyah Nurshafa²,
Nukeu Vianka²

¹English Language Education Study Program, Faculty of Letters and Languages,
Universitas Kristen Indonesia
Jalan Mayjen Sutoyo, Cawang , Kec. Kramat Jati, Kota Jakarta Timur, DKI Jakarta - Indonesia
²Universitas Veteran Bangun Nusantara, Jawa Tengah - Indonesia
³Universitas Pendidikan Indonesia, Jawa Barat - Indonesia

*Corresponding Author: hendrikus.male@uki.ac.id

Article history:

Received: April 2026
Revised: April 2026
Accepted: April 2026

ABSTRACT The migration of Indonesian workers to various Southeast Asian countries has created diaspora communities with significant teen populations. These migrant teens face complex challenges in maintaining their cultural identity and Indonesian language in multicultural environments. This study aims to analyze how smartphones can be optimized as a tool to strengthen the identity and language of Indonesian migrant teens. Using a library research method with a sociolinguistic and diaspora identity approach, this study finds that smartphones have strategic potential as a medium for language maintenance, preventing language shift, and strengthening cultural identity. This study also proposes integrating a bilingual instruction approach into smartphone-based interventions as a more humane and effective strategy. The findings show that targeted smartphone-based interventions can be an effective solution to keep migrant teens connected to their Indonesian language and identity roots.

KEYWORDS: *Cultural Identity; Bilingual Instruction; Language Maintenance; Language Shift; Smartphone.*

1. INTRODUCTION

The movement of Indonesian workers to Southeast Asian countries such as Thailand, Malaysia, Singapore, and Hong Kong has led to the formation of large migrant communities. As a result, second- and third-generation migrant families are growing up in multicultural environments. These migrant teens face the complex challenge of adapting to the language, values, and culture of their host countries while maintaining connections to their Indonesian identity.

This situation is further complicated by structural issues originating from Indonesia itself. Unequal access to education and persistent poverty have driven many Indonesians to seek employment abroad, particularly in Malaysia. Consequently, their children often encounter barriers to accessing formal education, including unclear citizenship status and limited legal documentation (Awary et al., 2024). In response, the Indonesian government has established non-formal education initiatives, such as Sekolah Indonesia Kuala Lumpur (SIKL) and community learning centers (Sanggar Bimbingan), to provide alternative educational access. However, these efforts still face limitations in terms of resources, quality, and scalability, leaving many migrant children in vulnerable educational situations.

Within this context, Indonesian language and cultural identity face serious challenges. Research on language shift in migrant communities shows that second-generation migrants tend to shift from their mother tongue to the dominant language of their environment (Haryono & Hadiutomo, 2024). Similar patterns are observed in other contexts, such as the Minangkabau community in Bandung, where second-generation individuals experience language shift due to the dominance of a more widely used language and social pressures (Putri et al., 2020). For migrant teens abroad, this shift may occur even more rapidly due to stronger exposure to foreign languages in daily life.

At the same time, the digital era offers new opportunities. Smartphones have become inseparable from teenagers' daily lives, including those in migrant communities. High levels of smartphone access among migrant teens create significant potential for leveraging digital technology as a tool for language and identity maintenance. Previous studies suggest that digital platforms can function as a "bridge" connecting diaspora communities with their heritage language and culture (Lee, 2006; Little, 2018).

One pedagogical approach that has gained increasing attention in this context is bilingual instruction. Rather than requiring learners to abandon their mother tongue, this approach uses it as a resource to facilitate second language acquisition while preserving linguistic identity. Research supports its effectiveness; for example, Virk (2025) found that Indonesian migrant workers in Singapore learned more effectively when both their mother tongue and the host country's dominant language were used in instruction. As one participant noted, "When I use Bahasa first, I don't feel stupid. I feel like a person who can learn, not just a maid" (Virk, 2025). This highlights the important role of language in shaping not only comprehension but also learners' confidence and identity.

Given these challenges and opportunities, there is a need for an adaptive and accessible learning model that integrates technology with appropriate pedagogical strategies. Therefore, this article seeks to answer the following question: How can smartphones be used strategically to

strengthen the identity and language of Indonesian migrant teens by integrating bilingual instruction principles as the main pedagogical framework?

Literature Review

1. Cultural Identity in the Diaspora Context

Cultural identity is how a person understands themselves based on the values, language, traditions, and symbols of their original group. Hall (1996), in his work on cultural identity and diaspora, states that identity is not a fixed and unchanging thing. Instead, it is constantly negotiated and transformed over time. In the diaspora context, cultural identity exists in an "in-between" position - not fully attached to the original culture, but not fully absorbed into the new culture either.

In Southeast Asia, issues of cultural identity and political representation are major concerns. Kahn's study (1998) on identity in Indonesia, Malaysia, Singapore, and Thailand revealed that people in this region care deeply about cultural identity, especially when facing the pressures of globalization and migration. For Indonesian migrant communities, questions like "who am I?" and "where do I come from?" become more complex as they must navigate different cultural influences.

2.2 Language as a Pillar of National Identity

The Indonesian language holds a very special position in forming national identity. Since the Youth Pledge of 1928, Indonesian has become a symbol of unity and shared identity amidst the diversity of ethnic groups and local languages. Alisjahbana (1976), in his work on language planning in Indonesia, stated that Indonesian is not just a communication tool. It is also the glue of national identity that unites thousands of islands and hundreds of ethnic groups.

In the diaspora context, Indonesian functions as an in-group marker that distinguishes "us" (Indonesian people) from "them" (other nations). Using Indonesian among migrants becomes a symbol of affiliation and loyalty to the homeland. On the other hand, losing the ability to speak Indonesian in the migrant generation can weaken emotional and cultural ties with Indonesia.

2.3 Bilingual Instruction: Theoretical Foundations and Practice

Bilingual instruction is a teaching approach that uses two languages as the medium of instruction. This approach does not see the mother tongue as a problem. Instead, it sees it as a valuable resource that can help learners acquire the second language.

García (2009), in her book *Bilingual Education in the 21st Century*, introduced the concept of translanguaging. This is a way of speaking where bilingual people use their entire language resources in an integrated way. Unlike traditional views that see bilingualism as two separate language systems, translanguaging sees it as one integrated system. This approach is very relevant

for Indonesian migrant teens who live in bilingual or multilingual environments.

Baker (2011) identified several models of bilingual instruction:

- a) Transitional Bilingual Education: Uses the mother tongue temporarily, then switches completely to the dominant language.
- b) Maintenance Bilingual Education: Aims to maintain the mother tongue while teaching the second language.
- c) Dual Language Immersion: Teaches academic content in two languages in a balanced way.
- d) Heritage Language Programs: Designed specifically to maintain heritage languages among diaspora communities.

For Indonesian migrant teens, the Maintenance Bilingual Education and Heritage Language Program models are most relevant because both emphasize maintaining Indonesian as a heritage language.

Cummins (2000) introduced the Threshold Hypothesis, which states that proficiency in the mother tongue provides the cognitive foundation needed to learn the second language. Teens who have strong Indonesian skills will learn the host country's language more easily. On the other hand, if both languages are poorly mastered, this can negatively affect cognitive and academic development.

2.4 Language Shift in Migrant Communities

Language shift is a process where a community gradually leaves their original language and switches to another language seen as more dominant or advantageous. Haryono & Hadiutomo's research (2024) on language shift in second-generation migrants from East Nusa Tenggara in Gresik identified two forms of language shift: partial shift and permanent shift. Factors contributing to language shift include social factors, demographic factors, attitudes and values, and political policies.

Holmes & Wilson (2022), in *An Introduction to Sociolinguistics*, explain that language shift usually takes three generations. The first generation is still fluent in the original language. The second generation becomes bilingual but tends to be more proficient in the dominant language. The third generation almost completely loses the ability to speak the original language. In this context, bilingual instruction can be a strategic intervention to "slow down" or even "reverse" the language shift process by keeping Indonesian alive in the second and third generations.

2.5 Smartphones and Bilingual Instruction: Integrating Technology and Pedagogy

Research on using digital technology for heritage language maintenance has grown

significantly. Lee (2006) found that electronic literacy practices, like managing blogs in Korean, gave Korean diaspora teens authentic opportunities to use their heritage language and develop social networks with other Korean speakers. Male (2025) found that bilingual instruction positively influences students' comprehension, participation, and confidence by allowing the use of both L1 and L2. However, challenges such as cognitive load and varying proficiency levels were also identified.

Little (2018) explored the use of games and apps among heritage language families. She found that family collaboration in playing games or using apps helped children overcome barriers to technology access while also strengthening their connection to the heritage language.

Specifically, integrating bilingual instruction with smartphones can be achieved through:

1. **Dual-Language Apps:** Content is presented side by side in Indonesian and the target language.
2. **Code-Switching Support:** Features that allow users to switch between languages without losing the learning context.
3. **Translanguaging Spaces:** Forums or discussion spaces where teens feel free to mix Indonesian and foreign languages.
4. **Scaffolding in L1:** Difficult concepts are explained in Indonesian first before being introduced in the target language.

2. METHOD

This study uses a library research method with a qualitative approach. The research steps include:

Source Collection: Sources reviewed include textbooks on cultural identity, diaspora, and bilingual education; international journals on sociolinguistics, language maintenance, and bilingual instruction; research reports on migration and language identity; and academic articles on using smartphones for language learning.

Source Analysis: Sources were analyzed using a thematic approach to find patterns about the relationship between smartphones, cultural identity, language maintenance, and bilingual instruction.

Data Synthesis: Data was analyzed to build a conceptual framework for how smartphones and bilingual instruction can be integrated to strengthen the identity and language of Indonesian migrant teens.

3. RESULT AND DISCUSSION

3.1 Why is Bilingual Instruction Important for Indonesian Migrant Teens?

Indonesian migrant teens are in a unique linguistic position. On one hand, they need to master the host country's language to succeed in school, interact with peers, and access public services. On the other hand, they also need to maintain Indonesian as an identity marker and a tool for communicating with family. Teaching approaches that focus only on the target language (for example, only teaching Thai or Malay) often ignore the value and function of Indonesian. This can make migrant teens feel that Indonesian is "useless" or "less important" than the dominant language. As a result, they consciously or unconsciously leave Indonesian behind.

Bilingual instruction offers a more humane and effective alternative. By using Indonesian as the language of instruction to explain concepts in the target language, migrant teens do not feel "stupid" or "left behind." Instead, they feel that Indonesian is an asset, not a barrier. As one participant in Virk's study (2025) said: "When I use Bahasa first, I don't feel stupid."

3.2 Smartphone-Based Bilingual Instruction Model for Migrant Teens

Based on the synthesis of theory and research findings, here is the proposed bilingual instruction model:

Table 1. Smartphone-Based Bilingual Instruction Model for Indonesian Migrant Teens

Component	Description	Smartphone Implementation Example
Dual-Language Content	Material is presented in two languages side by side	YouTube videos with bilingual subtitles (Indonesian and target language)
Gradual Transition	Indonesian use is gradually reduced as proficiency increases	App with "Beginner" mode (90% Indonesian, 10% target), "Intermediate" (50%-50%), "Advanced" (10% Indonesian, 90% target)
Code-Switching Friendly	Spaces where mixing languages is not considered a mistake	Discussion forums without restrictions on using Indonesian
Heritage Language Reinforcement	Specific activities to strengthen Indonesian language skills	Quizzes on Indonesian proverbs, crossword puzzles, and short story writing challenges

Cultural Embeddedness	Language is taught within meaningful cultural contexts	Content about Lebaran traditions, traditional ceremonies, or Indonesian food presented bilingually
-----------------------	--	--

The *Smartphone-Based Bilingual Instruction Model* for Indonesian migrant teens is designed to integrate mobile technology into bilingual learning in a flexible and accessible way. The model emphasizes the use of *dual-language content*, where learning materials are presented side by side in Indonesian and the target language, allowing learners to easily compare and understand meaning.

It also incorporates a *gradual transition* approach, in which the use of Indonesian is progressively reduced as learners' proficiency in the target language improves. This helps learners adapt more naturally without feeling overwhelmed.

Another key feature is its *code-switching friendly* environment, where mixing languages is not treated as an error but as a natural part of the learning process. This creates a more inclusive and supportive learning atmosphere, encouraging students to participate more confidently.

The model further includes *heritage language reinforcement*, which focuses on maintaining and strengthening Indonesian language skills. Activities such as quizzes, word games, and creative writing tasks are used to keep learners actively engaged with their native language.

Finally, the model highlights *cultural embeddedness*, meaning that language learning is connected to meaningful cultural contexts. By incorporating elements of Indonesian culture into the learning materials, students not only develop language skills but also maintain their cultural identity.

Overall, this model leverages the accessibility and versatility of smartphones to create an adaptive, engaging, and culturally relevant bilingual learning experience for Indonesian migrant teens.

3.3 Implementing Bilingual Instruction through Smartphone Features

Here are concrete ideas for implementing bilingual instruction through smartphones:

Idea 1: "Language Bridge" App

This app is designed specifically for Indonesian migrant teens. Every piece of content (video, text, quiz) is presented in two modes: "Indonesian First" or "Side-by-Side Bilingual." Users can choose the mode that fits their preferences and proficiency level. The app also has voice recognition to practice pronunciation in the target language, with feedback given first in Indonesian.

Idea 2: Smart Translation Feature on Social Media

Social media like Instagram, TikTok, and WhatsApp can be integrated with a smart translator. This tool does not just translate text but also gives cultural explanations. For example, when a migrant

teen receives a message in Thai, the feature translates it to Indonesian and explains: "This expression is usually used when thanking someone older. In Thai culture, there are different language levels to show respect."

Idea 3: Bilingual Language Buddy Groups

A "Language Buddy" program that pairs Indonesian migrant teens with teens in Indonesia or with other migrants. The rule is simple: in one session, participants must use Indonesian for the first 15 minutes, then the target language for the next 15 minutes. This switching trains linguistic flexibility and prevents one language from dominating.

Idea 4: Gamified Bilingual Quizzes

Interactive quizzes with points and levels. Each question is presented in two languages. Example: "What is the Thai word for 'thank you'?" (with a hint in Indonesian: "This word sounds like 'khob khun' - try to remember!"). Bonus points are given if users can answer questions about Indonesian culture: "Name three foods from your home region in Indonesian!"

3.4 Challenges and Solutions in Applying Bilingual Instruction

Tabel 2. Challenges and Solutions in Applying Bilingual Instruction

Challenge	Smartphone-Based Solution
Lack of exposure to Indonesian	Daily notifications with Indonesian idioms or proverbs; content recommendations based on user preferences
Shame about using Indonesian due to accent or limited vocabulary	Voice practice feature with private feedback; supportive virtual community without judgment
Target language dominates daily life	Scheduled reminders for "Indonesian Time" (e.g., every Sunday night, using only Indonesian in family groups)
Limited quality bilingual content	Training programs for young Indonesian content creators to produce bilingual content; content creation competitions for migrant teens
Different proficiency levels among users	Personalization mode in the app; initial placement test to determine the appropriate level

The application of bilingual instruction for Indonesian migrant teens presents several significant challenges; however, these can be effectively addressed through smartphone-based solutions. One

major challenge is the lack of exposure to the Indonesian language. This can be mitigated by providing daily notifications featuring Indonesian idioms or proverbs, as well as personalized content recommendations that encourage consistent engagement with the language.

Another challenge is the feeling of shame or lack of confidence in using Indonesian, often due to accents or limited vocabulary. To address this, smartphone applications can offer voice practice features with private feedback, allowing users to practice safely without fear of judgment. In addition, supportive virtual communities can foster a more encouraging environment for language use.

The dominance of the target language in everyday life is also a key issue. This can be balanced by implementing scheduled reminders for "Indonesian Time," where users are encouraged to use only Indonesian during specific periods, such as in family or community interactions.

Furthermore, the limited availability of high-quality bilingual content poses a challenge. This can be addressed through training programs for young Indonesian content creators to produce engaging bilingual materials, as well as organizing content creation competitions for migrant teens to actively participate in generating relevant content.

Finally, differences in proficiency levels among users require more personalized learning approaches. Smartphone applications can incorporate personalization features and initial placement tests to ensure that learners receive content that matches their individual abilities.

Overall, by leveraging smartphone technology, these challenges can be transformed into opportunities to create a more adaptive, inclusive, and effective bilingual learning environment.

3.5 Impact of Bilingual Instruction on Identity and Language

Applying bilingual instruction through smartphones is expected to have positive impacts on two main areas:

- a) **Language Maintenance:** By constantly receiving meaningful exposure to Indonesian, migrant teens can maintain their Indonesian language skills. The language shift process can be slowed or even reversed, especially if the intervention starts at an early age.
- b) **Identity Reinforcement:** When migrant teens realize that Indonesian is not a "burden" but a "bridge" to learning other languages, their pride in their Indonesian identity will increase. They do not need to choose between being "Indonesian" or "citizen of the host country" - they can be both at the same time (bicultural identity).

4. CONCLUSION

This library research shows that smartphones have great potential as a tool to strengthen the identity and language of Indonesian migrant teens. Specifically, integrating a bilingual instruction

approach into smartphone-based interventions offers a more humane, effective, and sustainable strategy.

From a linguistic perspective, several main conclusions can be drawn:

First, smartphones can function as an effective language maintenance tool by providing constant language exposure and a safe practice space. Access to digital content in Indonesian, learning apps, social media, and family communication helps migrant teens stay connected to their linguistic roots.

Second, bilingual instruction implemented through smartphones allows migrant teens to learn the target language without having to leave Indonesian behind. This approach is not only more humane (because it does not make them feel "stupid") but also more cognitively effective because it uses the language knowledge they already have (prior linguistic knowledge).

Third, targeted digital interventions can slow down or even prevent language shift in young migrants. By creating a virtual Indonesian-speaking environment amidst the dominance of the host country's language, smartphones act as a balancing factor that keeps Indonesian alive.

Fourth, strengthening national identity cannot be separated from strengthening the Indonesian language. Language is the most basic marker of a nation's identity. When migrant teens lose the ability to speak Indonesian, they also risk losing their sense of belonging and connection to Indonesia. Bilingual instruction, which values both languages equally, contributes to forming a healthy bicultural identity - the ability to function in two cultures without losing one's roots.

By maximizing the technology that is already familiar in teens' lives, smartphone-based empowerment programs that integrate bilingual instruction can be an effective strategy to maintain Indonesian identity and language in the midst of global mobility

Implications and Recommendations

a. For the English Education Study Program at UKI

1. **Course Development:** The findings can be used to develop courses like Sociolinguistics, Cross-Cultural Communication, Technology-Enhanced Language Learning, and Bilingual Education. Add special modules on heritage language maintenance and translanguaging pedagogy.
2. **Further Research:** The study program can encourage students to conduct field research on the effectiveness of smartphone-based bilingual instruction in Indonesian migrant communities in neighboring countries.
3. **International Collaboration:** Establish partnerships with universities in Thailand, Malaysia, or Hong Kong for joint research on the linguistic identity of the Indonesian diaspora.

b. For Community Service Programs

1. **Design Bilingual Modules:** Community Service Programs can design bilingual digital modules (Indonesian-target language) about Indonesian language, culture, and national values in short videos, interactive quizzes, digital comics, or mobile apps.
2. **Develop Code-Switching Friendly Features:** The app should have features that are friendly to code-switching - not punishing users who mix Indonesian with foreign languages, but using this as a learning tool.
3. **Language Buddy Program:** Implement a "Language Buddy" program pairing migrant teens with teens in Indonesia via video call. The rule: 15 minutes Indonesian, 15 minutes target language, alternating.
5. **Bilingual Content Competition:** Hold a content creation competition (vlogs, podcasts, writing) in bilingual format for migrant teens. Winners receive internship or scholarship opportunities.

c. For Community Development

1. **Bilingual Virtual Community:** Build a virtual community (WhatsApp, Instagram, Telegram, Discord) for Indonesian migrant teens in different countries. In this community, using two languages (Indonesian and the local language) is not only allowed but encouraged.
2. **Bilingual Storytelling Sessions:** Hold regular bilingual storytelling sessions, for example every Saturday night via Zoom. Indonesian folktales are told in Indonesian, then discussed in the target language.
3. **Bilingual Cultural Calendar:** Create a digital calendar with important holidays from both Indonesia and the host country, complete with bilingual explanations of the traditions and their meanings.

d. For Cross-Institutional Collaboration

1. **Indonesian Embassies and Indonesian Schools:** Indonesian Embassies and Indonesian community schools abroad can use the bilingual digital content as supplementary teaching material.
2. **Virtual Exchange Programs:** Develop virtual exchange programs between schools in Indonesia and schools in migrant destination countries. Indonesian students learn foreign languages, migrant students learn Indonesian - mutual benefit.
3. **Bilingual Teacher Training:** Provide training for volunteer teachers or migrant parents on how to implement bilingual instruction at home using smartphones.

e. Recommendations for Further Research

1. Experimental Research: Field research with an experimental design is needed to measure the effectiveness of smartphone-based bilingual instruction interventions on Indonesian language retention and cultural identity strengthening.
2. Longitudinal Research: Longitudinal research (3-5 years) is needed to understand the dynamics of language shift across generations and the long-term impact of digital interventions.
3. Comparative Study: Compare the effectiveness of different bilingual instruction models (transitional, maintenance, dual language) in the context of the Indonesian diaspora.
5. Instrument Development: Develop measurement tools for cultural identity and language proficiency specific to the context of Indonesian migrant teens.

ACKNOWLEDGEMENT

I am deeply grateful for all the parties whose contribution has made this international community service activity possible. This study did not receive specific grants from funding agencies in the public sector, commercial, or non-profit section.

CONFLICT OF INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this article. No financial, commercial, legal, or professional relationship exists between the authors and any organization or individuals that could have influenced the research or the writing of this manuscript. All activities were conducted independently with the sole purpose of advancing knowledge and empowering Indonesian migrant communities.

REFERENCES

- Alisjahbana, S. T. (1976). *Language planning for modernization: The case of Indonesian and Malaysian*. Mouton.
- Arum, N. E. (2024). "Only this time in English": Local language learning investment of multilingual migrant engineers. *Apples: Journal of Applied Language Studies*, 18(1), 45–66.
- Awary, N., Aji, T. S., Wasil, M., Fisabilillah, L. W. P., Hanifa, N., Hutabarat, R. E., & Restikasari, W. (2024). Community services for the children of migrant laborers through informal education to support SDGs in Hulu Kelang Selangor learning places. *International Journal of Community Service*, 4(2), 140–144. <https://ijcsnet.id/index.php/go/article/view/274>
- Baker, C. (2011). *Foundations of Bilingual Education and Bilingualism* (5th ed.). Bristol, UK: Multilingual Matters.
- Cummins, J. (2000). *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Multilingual Matters.

- García, O. (2009). *Bilingual education in the 21st century: A global perspective*. Wiley-Blackwell.
- Hall, S. (1996). *Cultural identity and diaspora*. In P. Mongia (Ed.), *Contemporary postcolonial theory: A reader* (pp. 110-121). Routledge. <https://doi.org/10.4324/9781003135593-8>
- Haryono, A. H., & Hadiutomo, D. A. (2024). Pergeseran bahasa pada masyarakat generasi kedua dari Nusa Tenggara Timur di Driyorejo. *Jurnal Pendidikan Bahasa dan Sastra*. SEBASA, 7(2), 472–486.
- Holmes, J., & Wilson, N. (2022). *An introduction to Sociolinguistics* (6th ed.). Routledge. <https://doi.org/10.4324/9780367821852>
- Kahn, J. S. (1998). *Southeast Asian identities: Culture and the politics of representation in Indonesia, Malaysia, Singapore, and Thailand*. St. Martin's Press.
- Lee, J. S. (2006). Exploring the relationship between electronic literacy and heritage language maintenance. *Language Learning & Technology*, 10(2), 93–113.
- Little, S. (2018). ‘Is there an app for that?’ Exploring games and apps among heritage language families. *Journal of Multilingual Development*, 39(1), 45–62. <https://doi.org/10.1080/01434632.2018.1502776>
- Male, H. (2025). Exploring students' attitudes towards bilingual classroom instruction. *English Scholarships Beyond Borders*, 11(1), 86–101. <https://www.englishscholarsbeyondborders.org/wp-content/uploads/2025/07/6.-Hendrikus-Male.pdf>
- Putri, E. W., Dallyono, R., & Imperiani, E. D. A. (2020, January). *Investigating language shift among Minangnese second generations in North Bandung*. In *Proceedings of the 4th International Conference on Language, Literature, Culture, and Education (ICOLLITE 2020)*. <https://doi.org/10.2991/assehr.k.201215.032>
- Virk, A. (2025). *Beyond Babel: Translanguaging in digital literacy education for Indonesian migrant domestic workers in Singapore*. SSRN. <https://doi.org/10.2139/ssrn.5259213>