Impact of Integration of GenAI-Synthesia with Cultural Content in Guided Reading Learning on Learners' Reading Skills and Reading Motivation

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Abstract. Most foreign learners struggle to learn to read in a second language. This is due to the differences in the characteristics of their first and second languages, necessitating appropriate scaffolding. This study examines the impact of GenAI-Synthesia integration with cultural content in guided reading learning to improve the reading skills of foreign learners. The research method used in this study is a quasi-experiment involving 180 foreign learner participants from several universities who are taking Indonesian language courses. The instruments and materials used were cultural reading texts, GenAI-Synthesia, and reading comprehension assessment instruments. The data analysis used is descriptive statistics, the chi-square test, and the independent sample t-test to examine the differences in intervention outcomes on the reading comprehension abilities of both groups. The results of the study indicate that the integration of GenAI-Synthesia with cultural content in guided reading learning can improve reading comprehension skills, reading motivation, and life skills of foreign learners in Indonesia. The increase in reading comprehension skills is seen in their ability to understand explicit and implicit information in the text. The increase in reading motivation is evident in their responses to learning activities, and life skills are seen in the application of cultural understanding in their daily lives. Qualitative findings also show that the integration of culture-based GenAI-synthesia in reading learning can enrich the cultural knowledge, encourage learners to participate actively, and motivate them to actualize cultural understanding in supporting life skills. Thus, the integration of GenAI-synthesia with cultural content can improve reading comprehension skills, reading motivation, and actualization of learners' life skills. This study implies that the integration of GenAI technology and cultural content in cognitive activities and practical activities in second language learning is very effective.

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1. Introduction

Reading literacy abilities are essential not only for children in formal schooling but also for adult students and foreign learners, particularly those learning a second language. With the rise in the use of Indonesian across various countries, the number of international students learning Indonesian is growing (Kamanzi et al., 2024; Taheri et al., 2020). The increase in international students in Indonesia necessitates diverse materials or techniques that align with the traits of learners of Indonesian as a second language (Hadianto et al., 2021; Ratri et al., 2025).

There remains limited empirical evidence from research examining Indonesian language proficiency as a second language among foreign learners, also referred to as Indonesian for non-native speakers. A foundational skill for acquiring a second language is reading comprehension (Bai et al., 2025; Zhu et al., 2024). Adult reading skills differ from those of children. Adult literacy skills are characterized as social practices. Reading education for adults not only equips them with reading skills but also provides them with the knowledge they need to participate in community life actively (Cheung et al., 2024; Hadianto et al., 2022).

From a social practice perspective, reading literacy skills are viewed as social activities that individuals engage in based on their ability to achieve goals. Furthermore, reading literacy skills enable individuals to engage in social situations and give them meaning and value (Fjørtoft et al., 2024; Kamanzi et al., 2024). This perspective presents a challenge for academics to integrate reading literacy with the cultural aspects needed by international students in navigating their global lives. This perspective on social practices offers new insights into the importance of basic literacy through reading activities that help international students adapt to the environment of native-speaking communities (Sun, 2023; Taheri et al., 2020).

According to this explanation, a method to enhance the reading literacy abilities of foreign learners while providing them with social practice skills in a native-speaking community is to create teaching resources that incorporate local cultural perspectives. These reading instructional resources incorporate diverse local cultures in Indonesia that are essential for international students (Boit et al., 2025; Zhu et al., 2024). The incorporation of local culture and life skills in Indonesia can enhance foreign learners' reading abilities and understanding of native speaker culture. Numerous prior studies indicate that understanding the culture of the target language also influences the literacy level of second language learners, such as reading abilities (Bai et al., 2025; D. Liu, 2024).

Most earlier research has shown the importance of instructional resources emphasizing language abilities (Cheung et al., 2024; Kosaka, 2025). Moreover, the utilization of teaching materials frequently lacks additional scaffolding, which hampers the effectiveness of these materials. Research is required on instructional resources that incorporate local culture and are supported by Gen-AI and

multimedia, given these conditions (Engeness & Gamlem, 2025; Knellesen et al., 2024). In the realm of acquiring Indonesian as a second language, adult foreign learners typically possess limited understanding of Indonesian cultural insights. Teaching materials enriched with cultural insights, supported by GenAI technology and multimedia, will serve as a practical foundation for enhancing the Indonesian reading skills of foreign learners (N. Liu, 2025; Solati et al., 2024). Multiple prior studies demonstrate that reading proficiency in English can be improved by engaging with texts centered on social issues and challenges (Alazemi, 2024; N. Liu, 2025).

Furthermore, additional research shows that pairing reading instruction techniques with appropriate teaching resources can enhance the reading abilities of international students (Firestone et al., 2025; Toyokawa et al., 2023). Along with instruction, the reading skills of second language learners can be improved using digital educational resources. Various elements can affect the success of individuals learning a second language, such as the resemblance of the target language to the first language, the learner's understanding of the target culture, and how frequently the target language is utilized (Bećirović et al., 2025; Shafiee Rad, 2025).

The current study differs from previous research in several ways, such as the incorporation of local culture into Indonesian reading teaching materials, the use of GenAI scaffolding and multimedia in these materials, and the focus on developing reading comprehension and inferential skills for foreign learners. The findings of this research are expected to contribute to the integration of technology and cultural content in the development of second language teaching curricula and to improving the quality of the second language learning process. In light of this clarification, this research outlines several issues, specifically as follows.
a) How does the integration of GenAI-Synthesia with cultural content in guided reading learning affect foreign learners' reading comprehension?
b) How does the integration of GenAI-Synthesia with cultural content in guided reading learning affect foreign learners' reading motivation?
c) How does the integration of GenAI-Synthesia with cultural content in guided reading learning impact the perceptions of foreign learners?

2. Literature Review
2.1 Reading literacy as a social practice
The capacity of people to express themselves through both verbal and non-verbal means, including reading and writing, significantly impacts their lives in specific settings. Reading literacy serves as the primary basis for enabling individuals to adjust to community life, including international students residing in native-speaking contexts (Azevedo et al., 2025; Ismail et al., 2023). International students with strong reading abilities and familiarity with native speakers will facilitate their effective interaction with native speakers. With the growing number of learners of the Indonesian language studying in Indonesia, teaching the language should not only focus on developing reading skills but also impart knowledge of Indonesian culture, enabling effective communication and participation in social practices (Leon Guerrero et al., 2024; Ng et al., 2023). Reading literacy skills as a

social practice rely heavily on the social environment. This condition situates reading literacy skills not only in their significance but also within life's social practices. Literacy practices related to reading exist in different aspects of life, both domestically and within the community (Anggia & Habók, 2023; Ma, 2025). Two factors play a role in the enhancement of reading literacy skills: namely, practices and events. Literacy events refer to activities closely associated with reading tasks, such as people reading ingredient lists and food packaging descriptions. Literacy practice refers to how a person engages with literacy events via different actions that primarily rely on the social context (Gilbert et al., 2024; Simonsen, 2025).

In adult learning, especially in second language learning, reading literacy as a social practice helps them improve life skills in a native speaker environment (Azevedo et al., 2025). Essential reading literacy skills that should be combined with social practices are crucial, as adult learners, particularly those from abroad, will engage in social practices of native speakers that demand adequate literacy skills. Enhancing reading literacy abilities via cultural awareness of social customs can be achieved through multiple approaches. Prior research examined communication literacy abilities in adult digital strategy in the Irish area (Leon Guerrero et al., 2024; Ninama et al., 2024).

2.2 The use of culture and technology as an approach in teaching reading literacy

Different definitions of culture exist, encompassing beliefs, actions, and habits practiced by a community. Culture represents the identity of a community through its everyday activities. Thus, it can be stated that culture is connected to individuals' behaviors in their lives (Cochrane et al., 2022). Moreover, culture is linked to sociocultural understanding. Adult reading literacy skills also serve as a symbolic system that can alter how learners express themselves. Thus, reading literacy abilities enable adult learners to engage with the sociocultural landscape. This idea highlights that the cultural understanding of second language learners also influences their proficiency in the target language (Quinn et al., 2025; Ratri et al., 2025). In second language reading instruction, culture and text are interconnected, forming a unit frequently utilized as a means for developing reading skills.

Earlier research has shown that using teaching materials focused on cultural content greatly enhances students' motivation and success in reading. Moreover, materials featuring local superheroes from different countries can improve students' engagement during reading activities (Fjørtoft et al., 2024; Kamanzi et al., 2024). Furthermore, scholars advocate that academic literacy and critical consciousness can likewise be incorporated into widely known cultural texts for reading instruction.

Furthermore, technology has become a crucial scaffolding in second language learning, as exemplified by GenAI technology. The GenAI used in the current research is Synthesia. GenAI-Synthesia is a powerful online software that can generate a variety of AI videos with amazing features like AI avatars, a text-to-video generator, an AI script generator, and more. Synthesia is an excellent video generator that simplifies the video creation process (Kosaka, 2025; Ratri et al.,

2025). Simply provide a transcript, and you can use this platform to generate videos. What sets Synthesia apart is its innovative use of realistic AI avatars. Furthermore, they can not only read transcripts but also make natural-looking body gestures. Moreover, you can customize the AI avatar's voice to your preference. If you're not satisfied with the available voices, you can even clone your own. The previous study examined the incorporation of GenAI into the language curriculum for middle-aged learners. The study's findings revealed that students were capable of enhancing their writing abilities (Sun, 2023; Taheri et al., 2020). These results indicate that incorporating GenAI in reading instruction can deliver thorough material teaching by facilitating an authentic learning experience.

Earlier research has consistently demonstrated that GenAI can be incorporated into teaching a second language, particularly in reading abilities (Boit et al., 2025; Zhu et al., 2024). Moreover, GenAI technology can enhance the quality of the educational experience, making it more significant, as it not only aids learners in achieving their goals but also deepens their understanding (Bai et al., 2025; D. Liu, 2024). Instructing adults in reading literacy shouldn't be confined to formal teaching; it should also incorporate strategies tailored to the specific needs of adult learners.

3. Methodology
3.1 Design and participants
This research employed a quasi-experimental approach to explore the incorporation of GenAI-Synthesia with cultural materials in guided reading instruction to enhance the reading proficiency and life skills of international students. The instructional design implemented was the incorporation of local Central Javanese culture into reading materials for international students to enhance literacy abilities and social awareness. Participants were international students from different nations enrolled in Indonesian language courses at multiple universities, such as Sebelas Maret State University, Muhammadiyah University of Surakarta, and Purworejo University.

The selection of universities to participate in the research was based on the number of international students, the availability of Indonesian language classes specifically for international students, and the university's reputation, which was categorized as good. A total of 180 foreign learners participated in this study, hailing from diverse countries including Australia, Japan, the US, Korea, Canada, France, and many others. All foreign learners involved in the study were at an intermediate or B2 level in a second language learning class and had an upper-middle socioeconomic level.

The sampling technique used was random selection of foreign learner participants at an intermediate level. The sample was also grouped using the same method because they had similar reading ability levels. Participants were split into two groups; the experimental group utilized culturally relevant teaching materials along with GenAI-Synthesia technology and multimedia support, whereas the control group was given traditional teaching material interventions delivered

conventionally. International students attending Indonesian language classes at the campus had different motivations, including education, employment, and leisure. The learners' age span was between 24 and 50 years, and the gender distribution was 45% male and 55% female. Every participant in the study was a foreign learner who willingly sought extra classes as part of the research.

3.2 Research procedure

Before the intervention, all participating students were assessed for their reading comprehension to ensure they had equal reading ability. A pretest was conducted after dividing the students into two groups: an experimental group and a control group. After the pretest, all students received the intervention in each of the experimental and control groups. The next stage is the intervention stage. The teaching intervention focused on reading skills was conducted with 11 units of material incorporating insights from Central Java's local culture. Every unit was performed for 3 teaching hours, with sessions taking place four times a week.

Every learning unit was split into two phases. In the initial segment, the instructor presented the culture woven into the text using GenAI-Synthesia and various multimedia tools. During this stage, the instructor guided international students to comprehend discourse through the lens of local cultural knowledge. During this stage, the instructor and student worked together to develop a thorough grasp of the text utilizing culturally relevant educational resources. In the next stage, students have the chance to delve into the culture they have studied using GenAI and various multimedia resources.

Both students and educators utilize the GenAI-Synthesia framework to explore further details about the local culture they are examining, with YouTube videos employed to gain a better understanding of the culture. Following the exploration phase, students have the chance to produce items or experience the local culture. Educators supply different resources as required. In every teaching unit, students engage in reading comprehension activities that focus on both textual and inferential understanding.

Table 1 presents each phase of teaching reading, utilizing local, culturally relevant materials alongside the assistance of GenAI and multimedia technology. The final stage is the posttest stage to assess reading comprehension, motivation, and interview skills. The activities of participants in the experimental and control groups are presented in Table 1. The only difference lies in the use of GenAI-Synthesia technology in the experimental group, while the control group did not use it.

Table 1: GenAI-Synthesia integration design and cultural content in guided reading learning

Phase	Task	
	Participants	Tutor
Conditioning	Learners are conditioned by the development of schemata according to the topic of the discourse.	Learners respond to the teacher and share experiences related to the topic of the text.
Presentation of culture-based texts	Learners are guided to reveal aspects of culture and life skills that are the topic of the text.	The teacher delivers discourse on cultural aspects and life skills.
Creation of meaning of culture-based texts	Learners share cultural experiences, reveal the meaning of culture and life skills according to the topic of the text.	The teacher facilitates learners to explore cultural knowledge through GenAI and multimedia, formulate responses to problems, and enable the creation of cultural meaning and life skills.
Guidance process for elaborating reading results	Learners are guided to read with local cultural content and explore it with GenAI-Synthesia and multimedia.	Teachers present cultural material through GenAI-Synthesia in video format, enhanced by cultural storytelling from voice synthesis. This exploratory presentation is accompanied by reading activities with cultural content. Teachers use an adult learning approach and provide guidance to individuals and groups.
Evaluation of reading skills	Learners answer questions asked, listen to answers and comments from other participants and complete questions in written form.	The teacher asks at least two questions to each individual according to the topic.
Appreciation	Learners ask questions if they do not understand and collect learning outcomes from tutors.	The teacher gives awards to participants.

3.3 Instrument

3.3.1 Instrument for assessing reading comprehension

This research employed two tools: a reading assessment instrument that evaluates textual reading skills and inferential reading. The second tool comprises a series of questions utilized in interviews to assess international students' views on local cultural reading instructional materials. The researcher selected six themes connected to the lesson units that had been explored. The artistic content themes chosen as reading teaching materials are culinary, traditional crafts, customs, traditional musical instruments, folklore, and daily practices. Please provide the text you would like me to paraphrase. Each text included 20 multiple-choice questions. The questions employed assessed the skills of textual understanding and critical reading among international students. All tools were evaluated

through empirical testing on 50 foreign learners to determine their validity and reliability. The researcher applied Pearson's product-moment correlation analysis to determine validity and employed the split-half method to evaluate its reliability. This method relies on a straightforward evaluation of the extent of linear correlation among the questions. According to the analysis results, the mean Pearson correlation coefficient across all questions was 0.83. Additionally, the split-half technique was utilized to assess the reliability of the tool to examine the instrument's consistency. The analysis results indicated an instrument reliability of 0.78. According to the findings from the validity and reliability assessments, this tool satisfies the standards for application in research. This tool is utilized during the pretest and posttest stages to show the reading skills of foreign learners in Indonesian.

3.3.2 Instrument for assessing learners' perceptions of the intervention
The next instrument used interview questions to obtain perceptions about the impact of teaching reading using local culture-based teaching materials, assisted by GenAI-Synthesia and multimedia, on improving the life skills of foreign learners in Indonesia. 10 questions were used through semi-structured interviews given to 20 foreign learners as representatives. The validity of this instrument was tested using an empirical test on the same group of participants to measure construct validity. The test results showed reliability that met the criteria with a Cronbach's alpha value of 0.95. Based on this value, the instrument can be used in research. All of these instruments were used in the pre-test and post-test phases. Each interview was conducted for 30 minutes after the learner finished his class. Interviews were conducted using Indonesian so that foreign learners could also use their target language actively.

3.3.3 Assessment of foreign learners' reading motivation
Students' reading motivation was measured using the reading motivation questionnaire (MRQ) by Wigfield and Guthrie (1995). This measurement already has strong psychometric properties and is widely known. This measurement is also able to assess motivational constructs effectively. The validity of this instrument was tested using an empirical test on the same group of participants to measure construct validity. The test results showed reliability that met the criteria with a Cronbach's alpha value of 0.92. Based on this value, the instrument can be used in research. All of these instruments were used in the pre-test and post-test phases.

3.4 Data analysis
Data regarding reading comprehension abilities, reading motivation, and students' views on instructional materials enhancing their life skills were assessed both quantitatively and qualitatively. The data analysis employed in this research involves descriptive statistics that display frequencies and percentages to provide an overall view of participant distribution across different aspects. Additionally, inferential statistical analysis is employed to examine differences among variables within each group. The chi-square test was performed to investigate the connection between variables and their impact on reading comprehension abilities. Moreover, an independent sample t-test at a significance level of 0.05 was employed to examine the differences in intervention outcomes on the reading

comprehension abilities of both groups. Moreover, tests on intervention effects and data interpretation were performed after the analysis. Qualitative data analysis was conducted based on the themes of increasing Indonesian cultural knowledge, active learner participation, and improving life skills. The qualitative data analysis focused on uncovering international learners' perspectives on the benefits of GenAI-based reading instruction and the cultural content within these categories.

3.5 Ethical considerations of research

All participants in this study participated of their own free will and without any coercion. Participants have filled out a consent form to participate in this study voluntarily. All data used in this study is anonymous and used only for research purposes. This study has received permission from several universities where foreign learners who participated in studying Indonesian, Sebelas Maret State University, Sebelas Maret State University, Muhammadiyah University of Surakarta, and Purworejo University. In addition, the Ethics Committee of Jakarta State University has approved this study.

4. Result

The results of the study are divided into several parts according to the formulation of the problem, the impact of intervention on reading comprehension skills, reading motivation, and foreign learners' perceptions of culturally insightful teaching materials in improving life skills.

4.1 The Impact of Genai-Synthesia Integration with Cultural Content in Guided Reading Learning on Reading Ability

An independent sample t-test was conducted to assess the impact of integrating GenAI-Synthesia and multimedia in guided reading learning on reading comprehension skills. However, before the analysis was carried out, a normality test was carried out first using the one-sample Kolmogorov–Smirnov (K-S) test. The results of the normality test are presented in Table 2. Based on the normality test, the data were normally distributed, allowing for further data analysis.

Table 2: Normality test using the Kolmogorov–Smirnov sample test

		Group	Pretest of reading	Posttest of reading
Normal parametersa	Mean	1.648	5.356	9.574
	SD	0.625	1.842	6.846
Most extreme differences	Absolute	0.453	0.184	0.192
	Positive	0.465	0.184	0.192
	Negative	− 0.453	− 0.121	− 0.118
Kolmogorov–Smirnov Z		4.563	1.163	1.462
Asymp. Sig. (2-tailed)		0.000	0.163	0.093

Additionally, a descriptive analysis was performed on both groups to identify the differences in the effects of the intervention on each group. Table 3 displays the outcomes of the descriptive analysis. According to the analysis results, during the pretest phase, the experimental group exhibited an average score of 5.675, with a standard deviation of 1.852. In contrast, the control group displayed an average

score of 5.546, with a standard deviation of 1.753. The pretest results indicated that there was no noteworthy difference between the two groups. Moreover, based on the findings from the homogeneity test utilizing the Levene test, the values of both groups in the pretest phase demonstrated identical values since the significance level was greater than ($p > 0.05$). In the posttest condition, the reading comprehension group within the experimental group exhibited a superior outcome with an average of 12.468, SD = 6.658, compared to the control group, which had an average value of 6.562, SD = 1.846.

Table 3: Results of descriptive analysis of the impact of intervention on reading comprehension levels

	Group	N	M	SD	Std. error mean
Pretest of reading	Experiment	90	5.675	1.852	0.460
	Control	90	5.546	1.753	0.481
Posttest of reading	Experiment	90	12.468	6.658	0.846
	Control	90	6.562	1.846	0.462

A t-test was performed to examine the differences in reading comprehension skills of international students in the two groups shown in Table 4. The analysis results indicated that reading comprehension skills in the pretest phase demonstrated similar proficiency with a value (F = 0.190, df = 251, $p > 0.05$, Mean Difference = 0.961). According to the t-test results, the experimental group exhibited a greater improvement in reading ability compared to the control group, with a value of (F = 25.172, df = 251, $p < 0.05$, MD = 7.463). Moreover, the effect size indicated a value of 0.84. According to Cohen's eta standards, the effect size falls within the large effect classification.

Table 4: Independent sample test of the impact of intervention on reading comprehension ability levels

		Levene's test for equality of variances		t-test for equality of means							
		F	Sig	t	df	Sig.	Mean Difference	Std. error difference	95% Confidence interval of the difference		
									Lower	Upper	
Reading pretest	Equal variances assumed	0.190	0.862	− 0.172	179	0.973	− 0.0825	0.642	− 1.153	0.976	
	Equal variances not assumed			− 0.172	49.654	0.962	− 0.0825	0.642	− 1.153	0.976	
Reading posttest	Equal variances assumed	25.172	0.346	7.463	179	0.000	7.542	0.983	6.463	9.362	
	Equal variances not assumed			7.463	33.357	0.000	7.542	0.983	6.463	9.362	

4.2 Impact of GenAI-Synthesia Integration with Cultural Content in Guided Reading Learning on Reading Motivation

The chi-square test was employed to evaluate how the integration of GenAI-Synthesia and multimedia in guided reading affects the reading motivation of foreign learners. The results of the test are shown in Table 5. According to the test findings, it was discovered that during the pretest phase, fewer than 50% of foreign learners exhibited high reading motivation. In the posttest phase, learners from the experimental group exhibited a significant boost in motivation. The rise in reading motivation among foreign learners exceeded fifty percent.

Table 6 shows the findings from the analysis of reading motivation among foreign learners of the Indonesian language during the pretest phase, while Tables 7 and 8 present the results from the posttest phase. According to the analysis results, international students demonstrating reading motivation had a notable increase with a value (df = 1, p <0.05). Moreover, instructing international students in Indonesian reading greatly impacts reading motivation, yielding a Cramer's V value of 0.520.

Table 5: Cross-table of reading motivation levels in the pretest phase

		Motivation time		Total
		Motivated	Unmotivated	
Group	Experiment	10	80	90
	Control	12	78	90

Table 6: Results of the chi-square test of reading motivation at the pretest stage

	Value	df	Asymp. sig.	Exact sig.	Exact sig.
Chi-squared Pearson	0.150	1	0.736		
Continuity correction	0.002	1	1.003		
Probability ratio	0.151	1	0.732		
Fisher's precise test				1.000	0.532
Linear-by-linear correlation	0.148	1	0.830		
N	180				

Table 7: Cross-table of the impact of intervention on reading motivation in the post-test phase.

		Motivation time		Total
		Motivated	Unmotivated	
Group	Experiment	90	0	90
	Control	8	72	90

Table 8: Results of the chi-square test of the effect of intervention on reading motivation in the post-test phase

	Value	df	Asymp. sig.	Exact sig.	Exact sig.
Chi-squared Pearson	15.542	1	0.000		
Continuity correction	13.536	1	0.003		
Probability ratio	16.421	1	0.000		
Fisher's precise test				0.003	0.000
Linear-by-linear correlation	15.456	1	0.000		
N	180				

4.3 Foreign Learners' Perspectives on the Integration of GenAI-Synthesia and Multimedia in Guided Reading Learning

To reveal the perspectives of foreign learners, researchers divided them into three categories based on their evaluation of reading instruction for Indonesian language learners for foreign speakers. These categories are the benefits of teaching materials for knowledge, sharing understanding among learners, and improving life skills.

4.3.1 Teaching materials enrich Indonesian language knowledge

According to the interview findings, international students claimed that Indonesian reading instruction that incorporates local cultural elements along with GenAI and multimedia support can enhance their understanding of Indonesian culture. International students perceive reading materials and

practices in their education as closely related to their everyday experiences in Indonesia. Furthermore, the materials studied can provide new perspectives on cultures that enhance their life skills in Indonesia, such as culinary arts, crafts, and vocational lessons, for instance, strengthening the economic value of local handicraft products. This passage offers fresh insights for international students on creating local goods that can be marketed in both rural and urban areas. The following are the responses or perspectives of international students after they participate in an intervention on culturally oriented teaching resources:

> *"The experience of acquiring reading skills holds significant importance in enhancing my reading abilities and understanding of Indonesian culture. Along with developing reading skills in Indonesian, I acquire new knowledge, particularly in enhancing my life skills in Indonesia, such as culinary arts, crafts, and transport, which are essential for daily living. One aspect of culinary education, for instance, is preparing meals by using natural resources, like cassava. This theme enables me to recognize the culinary aspects that possess economic worth. This understanding can also provide details concerning everyday tasks."*

4.3.2 Different understandings between foreign learners

Many students provided favorable feedback on the reading learning process influenced by local culture in Indonesia. Throughout the intervention, students were motivated to engage actively in discovering different local cultures in Indonesia through reading. Non-native learners were urged to exchange insights with fellow students using GenAI-Synthesia technology and multimedia tools. In this research on reading instruction, students need to engage actively with the cultural materials they encounter, such as exploring cultural products using GenAI and multimedia resources. Learners communicate their insights to others while acquiring knowledge about various cultural items. This educational journey enables students to gain a deeper understanding of local culture. This is evident in various statements from interviews with learners of the Indonesian language:

> *"Collaborating in teams to actively participate in presenting local culture demands mutual comprehension. Exchanging knowledge with fellow learners is essential for the smooth functioning of group learning, such as when presenting compost fertilizer made from traditional materials that can benefit fruit production in Indonesia. Students require the same comprehension of the methods for creating and utilizing it. This session allowed me to seek assistance from other learners when I struggled to grasp the culture."*

4.3.3 Learning materials motivate foreign learners to improve life skills

Alongside enhancing reading comprehension abilities, locally relevant learning resources supported by GenAI and multimedia can also inspire foreign learners in Indonesia to develop their life skills. This occurs as these cognitive and practical tasks encourage learners to enhance the essential life skills required in their lives. Utilizing learning materials rooted in local culture broadens learners' perspectives on the diverse cultures they encounter while residing in Indonesia. For instance, the environmental department in Central Java presents numerous public spaces,

while the transportation department showcases different modes of transport in the region. Insights into different cultures are gained through reading, which not only enhances reading abilities but also develops essential life skills like navigating transportation according to type and purpose, and recognizing the environment, both crucial for fulfilling the needs of learners. Moreover, the culinary training unit also imparts skills in creating culinary items by using available ingredients. Below are some segments from interviews:'

> ''I acquired valuable insights that enhanced my skills in cooking Indonesian cuisine. For instance, preparing liwet rice and snacks like chips derived from cassava. I was unaware of the processing beforehand. Following this reading class activity, I gained awareness of different kinds of food items that I can prepare. I'm confident that this cultural understanding influences my life skills in Indonesia.'''

In addition, learners also think that teaching reading with local culture-based teaching materials helps learners to be more creative and get to know the target language culture of Indonesia. This will be very useful for learners in mastering Indonesian through a native speaker culture approach. The introduction of various products and activities originating from local culture indirectly motivates learners to gain value from learning Indonesian as a second language.

5. Discussion

This research targets two goals: analyzing how well local cultural integration in reading instruction materials, combined with GenAI-Synthesia and multimedia, enhances the reading abilities and life skills of international students in Indonesia. The study's results show that using local culture-focused teaching resources, along with GenAI-Synthesia and multimedia, can significantly enhance the reading abilities of Indonesian learners among foreign learners. Enhancement in students' reading comprehension abilities is evident in their proficiency in answering questions that assess both literal and inferential understanding and those that evaluate critical analysis skills.

Learners' comprehension is also apparent in their capacity to apply or generate products from one of the cultures being examined. This discovery is supported by numerous earlier studies on second language acquisition, indicating that Canadian learners find English reading more effective when using culture-oriented resources (Chan et al., 2025; Cheung et al., 2024). Another discovery supports the present study, specifically that the writing approach in second language acquisition, focusing on subjects linked to learners' everyday experiences, is seen as more effective in stimulating students' cognitive skills and fostering creativity (Kosaka, 2025; Cheung et al., 2024).

The subsequent discovery is that teaching materials grounded in local culture for Indonesian reading lessons can enhance the reading motivation of foreign learners. The rise in reading motivation among foreign learners is apparent in the enthusiastic involvement of students in reading activities and their favorable reactions during the reading learning process. This result is supported by earlier research that discovered second language learners exhibit greater motivation

when engaging with materials from native speaker cultures. The enthusiasm of international students also rises with the implementation of GenAI-Synthesia technology and multimedia for cultural exploration. Furthermore, the exploration phase in different comprehension and hands-on practice sessions is connected to local culture. This research is supported by earlier studies indicating that second language learners' motivation to learn Korean rises when they actively participate in the learning process (Knellesen et al., 2024; Lau et al., 2025). The firsthand encounter of international students with culture enhanced by GenAI-Synthesia and multimedia significantly boosts reading motivation. This is supported by findings from earlier research that show the incorporation of technology in second language acquisition can enhance learning results (Chen, 2025; Engeness & Gamlem, 2025).

During the reading practice activity, every learner engages in discussing their individual experiences linked to cultural content within groups. This task enhances learners' comprehension of a culture. Incorporating local culture into reading education helps students acquire socio-cultural values that can improve their reading literacy skills. These elements form the foundation for the efficacy of reading literacy instruction grounded in culture, supported by GenAI and multimedia. The subsequent discovery stems from a microanalysis of reading literacy tasks, indicating a transition in meaning from acquiring information literally to engaging practically and critically. The two logical reasons pertain to the nature of the text employed and the mental processes involved in reading acquisition for foreign learners. Texts that offer diverse material on local culture, along with issues demanding a critical grasp of information.

Furthermore, teachers and international students work together to construct meaning within a cultural framework (Bećirović et al., 2025; Shafiee Rad, 2025). This impacts learners' skills in essential information. This conclusion is supported by earlier research that indicated that reading tasks in learning English as a second language are more successful when students engage directly with the text's content (Alazemi, 2024; N. Liu, 2025). The subsequent discovery is that instructing reading abilities through texts and local cultural practices enhances knowledge, facilitates shared understanding, and serves to motivate foreign learners in Indonesia to improve their life skills. This reading instruction can offer international students the socio-cultural values of native speakers, as it promotes the development of Indonesian identity.

Indonesian reading texts based on local culture and supported by GenAI-Synthesia technology and multimedia provide knowledge and life skills for international students in Indonesia, such as skills in making cuisine, choosing and using transportation, utilizing various necessary facilities, and others. This discovery indicates that incorporating local cultural discussions and practices can assist adult foreign learners in addressing cultural literacy challenges and adapting to life in a native-speaking country (Azevedo et al., 2025; Ismail et al., 2023). This conclusion is supported by earlier research on second language learners, who may enhance their understanding and effectiveness regarding the country of the native speakers (Leon Guerrero et al., 2024; Ng et al., 2023). This

approach to learning is commonly adopted by numerous second language learners when they intend to reside in a country where the language is spoken natively (Anggia & Habók, 2023; Ninama et al., 2024).

6. Conclusion, Implications, and Recommendations

The combination of GenAI-Synthesia and multimedia in guided reading education can enhance reading abilities, reading motivation, and life skills among international students in Indonesia. Researchers emphasize the significance of combining cognitive and hands-on activities to improve reading abilities in second language acquisition. The enhancement of reading skills in foreign learners is reflected in better textual and inferential comprehension. In contrast, the boost in students' reading motivation is evident in their proactive engagement and responses during the reading learning experience.

Additionally, the enhancement of life skills is apparent in the motivation and capability of international students to thrive and adjust to the culture of native Indonesian speakers. This research implies that incorporating local culture as a social practice may enhance the reading abilities of adult learners and those learning a second language. Furthermore, teaching materials rooted in culture, along with support from GenAI-Synthesia and multimedia, can be incorporated into the framework of cognitive and hands-on teaching to enhance reading abilities in second language acquisition. This research has various limitations, such as the local culture being incorporated, which is still confined to teaching units, indicating a need for expansion.

Moreover, second language instruction emphasizes reading literacy skills alone, while those researching reading skills concentrate solely on textual and inferential capabilities; the psychological dimension of reading examined pertains only to motivation, and the pool of foreign learners sampled remains restricted. Based on these limitations, this study recommends several suggestions, including cultural units need to be added to teaching, especially those related to life and profession, reading skills need to be expanded to high-level reading skills, the psychological aspect of reading needs to be developed to reading resilience and reading anxiety, similar research can be conducted in other languages and the sample of foreign learners needs to be increased.

The researchers also recommend that curriculum designers and providers of Indonesian language learning for non-native speakers integrate second language teaching materials with the culture of native speakers. Furthermore, teachers need to design appropriate technological scaffolding.

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8. References

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