

COMPARATIVE STUDY OF LOCAL WISDOM COMPREHENSION IN SHORT STORIES BETWEEN COLLEGE STUDENTS AND AI CHATBOTS (CHATGPT AND GEMINI)

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ABSTRACT

Although AI has great potential, its application in culture and education still faces various obstacles. Teachers and universities should utilize ChatGPT to support student learning and promote problem-solving skills. This study aims to compare the understanding of local wisdom between university students and AI chatbots (ChatGPT and Gemini) in short stories and evaluate the effectiveness of AI as a learning tool in that context. This study involved 240 university students from diverse backgrounds and two AI systems, ChatGPT and Google Gemini, to compare the comprehension ability of local wisdom. Using a local wisdom value test and quantitative descriptive analysis, the study compared students' and AI's understanding and applied an independent t-test to examine differences by gender, university, and domicile. The findings demonstrated that AIs possessed a deeper and more thorough comprehension of local wisdom compared to university students, reflected in significantly higher mean scores and statistically significant differences. No notable differences were found in understanding local wisdom based on students' gender or domicile. However, a significant difference was observed between students from the two different universities. AI is a potent learning tool for local wisdom studies, highlighting the educational environment's role. In literature education, integrating AI offers a more efficient and accurate method for teaching complex cultural and literary values, enhancing students' text analysis and interpretation of symbolism and cultural context.

Keywords: *Artificial Intelligence, Digital Humanism, Education Technology, Local Wisdom, Students*

1. INTRODUCTION

Artificial intelligence (AI) technology has shown its potential to support various fields, including education and cultural research. Das Sollen, in this context, is the hope that technology can improve human understanding of various aspects of culture, including local wisdom. Local wisdom is an essential element in cultural heritage that reflects values, norms, and knowledge passed down from generation to generation [1]. However, teaching and understanding local wisdom often faces challenges in terms of effective delivery and reception, especially among younger generations who are more accustomed to digital technology than direct interaction with cultural traditions [2, 3].

Das Sein, or the current reality, shows that although AI has great potential, its application in

culture and education still faces various obstacles. Teachers and universities should utilize ChatGPT to support student learning and promote problem-solving skills [4]. Nevertheless, the increasing use of generative text AI tools for question answering has sparked concerns about their possible detrimental effects on student academic performance and the difficulties educators encounter in assessing student learning [5]. Comparative studies between student comprehension of local wisdom and AI are essential to gauge the extent to which AI can serve as an effective tool. This study fills that gap by evaluating how AIs and college students understand and analyze local wisdom through short stories. Thus, this study assesses AI's ability to understand culture and provides insight into how this

technology can be effectively integrated into cultural education.

This phenomenon invites several researchers to study Artificial Intelligence and its effectiveness on higher education students. Studies related to this have been conducted by several researchers [6–10]. Research by Malinka et al. [6] found that ChatGPT, as an advanced natural language processing system, has significant potential in university education, especially in the computer security specialization, with its ability to assist in exams, programming assignments, and term papers. However, it is also easily misused for cheating. In addition, research by Grájeda et al. [7] found that adopting AI tools in higher education, especially in private universities in Latin America, significantly positively impacted students' academic experience, improving understanding, creativity, and productivity. It emphasized the importance of AI mastery for educators and students as a pedagogical evolution.

Meanwhile, Silcheva et al. [8] found that the use of AI chatbots, such as ChatGPT and Midjourney, in English language teaching for university students was effective in improving language skills and the ability to generate creative statements and could serve as a native speaker simulator and command executor, with results showing significant positive dynamics. In addition, Htaw et al. [9] found that students at a Thai university found it helpful in argumentative writing with the support of Artist software using NLP and AI, with representation graphs improving their argumentation skills. However, opinions varied on the usefulness of ChatGPT during the process. Meanwhile, Komba [10] proved that ChatGPT is widely employed in educational environments, where it positively affects students' study habits, academic performance, and understanding of course content. Students appreciate the system's straightforwardness, personalized instructions, and the speed and accuracy of its responses, despite the occasional errors.

The current research has the novelty of focusing on a comparative study of the comprehension of local wisdom in short stories between university students and AI chatbots (ChatGPT and Gemini), which has yet to be addressed in previous research. In addition, this study incorporates statistical analysis to examine differences in comprehension based on gender, university, and domicile variables, providing in-depth insight into the factors that influence cultural comprehension in higher education. This study aims to compare the understanding of local wisdom between university

students and AI chatbots (ChatGPT and Gemini) in short stories and evaluate the effectiveness of AI as a learning tool in that context.

Based on the literature critique and hypothesis, this study addresses the following research questions:

RQ1: Do male and female students significantly differ in their comprehension of local wisdom in short stories?

RQ2: Is there a significant difference in local wisdom comprehension between students from Makassar State University and University of West Sulawesi?

RQ3: Do urban and rural students exhibit significantly different levels of local wisdom comprehension?

RQ4: Do AI chatbots (ChatGPT and Gemini) exhibit higher comprehension of local wisdom in short stories compared to university students?

The following hypotheses were tested to achieve the research objectives.

H1a: Male and female students have significantly different local wisdom comprehension.

H1b: Makassar State University and University of West Sulawesi students have significantly different local wisdom comprehension.

H1c: Urban and rural students have significantly different local wisdom comprehension.

H2: ChatGPT and Gemini's local wisdom comprehension is higher than that of university students.

This research contributes to three main aspects. First, it offers a deeper understanding of the potential of AI in supporting cultural education, particularly in local wisdom comprehension. Second, by comparing the understanding of local wisdom between university students and AI, this study provides empirical evidence of the effectiveness of AI as a learning tool. Third, the results of this study can serve as a basis for the development of more innovative curricula and teaching methods that integrate AI technology to improve cultural understanding among university students. These findings have practical implications for educators and policymakers, as they can use them to develop strategies for a broader and more effective integration of technology in education and cultural preservation.

2. LITERATURE REVIEW

2.1 Literary Anthropology

Literary anthropology is a branch of science that combines literary studies with anthropology, focusing on how literary texts reflect and shape human cultural understanding. It examines literary works as cultural artifacts that contain insights into a society's values, beliefs, and practices [11, 12]. Particular attention is paid to the role played by meaning systems, expressed through language, symbolism, social organization, and culture, and contributes to the development and amelioration of conflict [13]. By examining short stories, novels, poetry, and drama from an anthropological perspective, researchers can uncover how literary narratives enrich our understanding of cultural identity, social relations, and power dynamics in various historical and geographical contexts.

In addition, this approach enables in-depth analysis of symbolic and mythological representations in literary works, which often contain elements of local wisdom and oral traditions. Authors use language and narrative to describe and criticize social reality [14, 15]. This study also opens up opportunities to explore the role of literature in preserving traditional cultures and knowledge and in giving voice to the experiences and perspectives of marginalized groups. Thus, literary anthropology not only enriches the analysis of literary texts but also deepens our understanding of the complexity of human culture.

2.2 Digital Humanism

Digital humanism is an approach that integrates humanistic principles with the development of digital technology, focusing on how technology can be used to improve the quality of human life. Digital humanism emerged from severe concerns about the way digitalization is evolving and its impact on society and people [16–18]. This approach emphasizes the importance of maintaining human values, such as justice, ethics, and well-being, in developing and applying digital technologies [19, 20]. In Taiwan, digital humanities emphasize the creation of tools and techniques and their practical application in literature and history. Additionally, it focuses on the indigenous culture of Taiwan, which shapes the distinctive characteristics of the nation's digital humanities research [21]. Technology is seen as a neutral tool and an entity that must be organized and directed to achieve more significant humanitarian goals [17, 22, 23]. It includes using technology to expand access to

education, improve healthcare, and strengthen democratic participation, considering any technological innovation's social and ethical impacts.

In addition, this approach also encourages interdisciplinary dialogue between the fields of technology and social sciences to ensure that technological developments are aligned with human needs and aspirations. It involves collaboration between engineers, scientists, and humanists to develop technological solutions that respect and promote human values [24–26]. For example, in the design of artificial intelligence, the principles of digital humanism can ensure that algorithms are designed with fairness and non-discrimination in mind [3]. Thus, this approach aims to create a digital ecosystem that is not only technically advanced but also contributes to social progress and human well-being.

2.3 AI Effectivity in Literature Education

The effectiveness of AI in literary education has shown significant potential in enriching the learning process. Artificial intelligence chatbots have recently made a global splash by promising to transform the education system in many ways [1, 27, 28]. Since ChatGPT was released to the public in November 2022, generative AI devices for creating human-like content, such as audio, code, images, text, simulations, 3D objects, and video, have attracted significant attention [2]. These technologies are capable of analyzing literary texts with great speed and precision, providing deep and detailed insights into narrative structures, themes, and literary devices. The swift growth of learning analytics and Artificial Intelligence in Education (AIED) provides innovative scalable and data-intensive solutions, yet it also brings up significant issues regarding data privacy and user autonomy [29]. AI can use machine learning algorithms to identify linguistic and symbolic patterns that human readers may miss. It allows students to gain a more holistic understanding of literary works, speed up the analysis process, and encourage more critical and diverse discussions in the classroom [30].

Moreover, the potential of AI to enhance students' literary analysis skills is a key educational benefit. This technology can be personalized to meet students' individual needs, offering learning guidance that is tailored to their unique abilities and interests. While there is a wave of enthusiasm towards the role of Artificial Intelligence (AI) in reshaping education, critical voices urge a more restrained approach [31, 32]. By providing quick

and precise feedback, AI helps to effectively improve students' literary analysis skills. The implementation of this technology in literature curricula also opens up opportunities for wider exploration of texts, allowing access to literary works that may have been traditionally difficult to reach [33]. Overall, the integration of AI in literature education not only improves learning efficiency but also deepens students' appreciation of the beauty and complexity of literary works.

3. METHODS

3.1 Participants

The study involved 240 participating students from various ages, domiciles, universities, and ethnic backgrounds. The students were selected to represent the diversity of Indonesia's student population, with a balanced distribution between genders, and included both urban and rural students. In addition, participants came from several universities to ensure variation in the curriculum and teaching methods they received. Diverse ethnic backgrounds were also represented to explore the influence of culture on the understanding of local wisdom. In addition to human participants, the study also used two AI chatbots, ChatGPT, and Google Gemini, to compare the comprehension of local wisdom between university students and AI technology.

Table 1: Demographics Data of Human Participants (Students).

Demographics	n	Percentage	Cumulative
Gender			
Male	41	17.08%	17.8%
Female	199	82.92%	100.00%
Age			
< 19 years old	55	22.92%	22.92%
19 - 21 years old	145	60.42%	83.33%
22 - 24 years old	24	10.00%	93.33%
25 - 27 years old	10	4.17%	97.50%
> 27 years old	6	2.50%	100.00%
Domicile			
Urban	80	33.33%	33.33%
Rural	160	66.67%	100.00%
University			
State University of Makassar	165	68.75%	68.75%
University of West Sulawesi	75	31.25%	100.00%

Ethnic			
Balinese	2	0.83%	0.83%
Bimanesese	2	0.83%	1.67%
Buginese	66	27.50%	29.17%
Butonese	1	0.42%	29.58%
Javanese	6	2.50%	32.08%
Kailinese	1	0.42%	32.50%
Makassarese	74	30.83%	63.33%
Mamasanesese	3	1.25%	64.58%
Mandarese	66	27.50%	92.08%
Mongondow	1	0.42%	92.50%
Pattae	2	0.83%	93.33%
Selayarese	1	0.42%	93.75%
Torajan	12	5.00%	99.58%
Ulumanda	1	0.42%	100.00%

Table 2: Involved AI and Language Models.

AI	Language Model	Developer
ChatGPT	GPT-4	OpenAI
Google Gemini	Gemini	Google DeepMind

3.2 Assessments and Measures

The instrument used in this study is a local wisdom value test consisting of 32 questions arranged based on the values in the short story. The foundation used in preparing this instrument is Geertz's concept of cultural interpretation (1975), which includes four main aspects: thick description, cultural textual, symbolism, and cultural interpretation. The short stories used as materials in this test are "A Simple Ngaben" by Sugianto (2024), "Going Home Without a Hometown" by Ahmad (2024), "The Sea Took My Love" by Piran (2022), and "Fish of Bejoe River" by Rahman (2020).

Students' data was collected by distributing test instruments through Google Forms. Meanwhile, data collection from the AI Chatbot (ChatGPT and Gemini) was carried out by instructing both AIs to read the short story text and test questions that had been compiled. After both groups, students, and AIs, completed the test, the comprehension score of local wisdom values in short stories was calculated based on the following formula:

Table 3: Score measurement for Local Wisdom Comprehension.

Variable	Score Measurement
Local_Wisdom	$\frac{\sum_{i=1}^{32} Q_i}{32} \times 100$
Thick_Description	$\frac{\sum Q_{Thick_Description}}{7} \times 100$
Culture_Textual	$\frac{\sum Q_{Culture_textual}}{11} \times 100$
Symbolism	$\frac{\sum Q_{Symbolism}}{7} \times 100$
Cultural Interpretation	$\frac{\sum Q_{Cultural_Interpretation}}{7} \times 100$

3.3 Data Diagnostics

A series of assumption tests were conducted to determine the statistical tools used, namely the homogeneity test and the normality test of data distribution. Table 4 shows the homogeneity test results for independent t-test analysis based on gender, university, and domicile grouping variables. Based on Levene's test, it is found that the gender variable has an F value of 4.42 with df1 of 1 and df2 of 238 and a p-value of 0.037, which indicates that there is a significant difference in variance based on gender. Since the data is not homogeneous, the statistical test used is Welch's t-test. In contrast, the university and domicile variables show insignificant results with p values of 0.262 and 0.499, respectively, indicating that the data variance between university and domicile groups is homogeneous. Therefore, the statistic used for these two variables is Student's t.

Table 4: Homogeneity Test for Independent Sample T-Test Analysis.

Grouping variable	Statistics (Levene's)			
	F	df	df2	p
Gender	4.42	1	238	0.037
University	1.26	1	238	0.262
Domicile	0.458	1	238	0.499

Figure 1 displays a Q-Q plot to test the normality of the Local_Wisdom data distribution based on the gender (a), domicile (b), and university (c) grouping variables. This Q-Q plot shows that the standardized residuals mostly follow the diagonal line, indicating that the data tends to be close to a normal distribution. However, there are some deviations in the upper and lower tails, especially in the gender and university groups, indicating the presence of some outliers. Nonetheless, the overall distribution of the data can be considered normal enough to proceed with further statistical analysis.

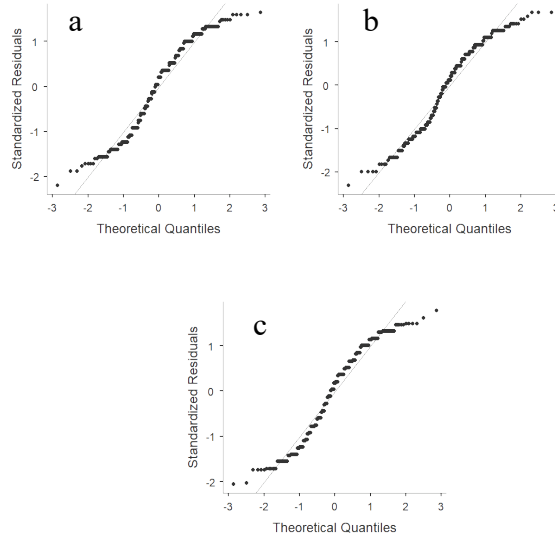


Figure 1: Q-Q plot normality test of Local_Wisdom data distribution based on grouping variables of gender (a), domicile (b), and university (c)

3.4 Analytic strategy

The data analysis technique used in this study used quantitative descriptive analysis to compare the understanding of local wisdom values between students and AIs. Meanwhile, an independent t-test was applied to compare the understanding of local wisdom between various groupings of students, including gender, university, and domicile. The statistical tests used included Student's t-test for homogeneous data and Welch's t-test for inhomogeneous data, based on Levene's homogeneity test results. In addition, Yuen's test was used to conduct robustness tests. This robust method incorporates data trimming to reduce the influence of outliers and provide more accurate estimates in analyzing data with non-normal distributions. These techniques were used to ensure the validity of the results and provide a comprehensive picture of the differences in local wisdom understanding between groups.

4. RESULTS

4.1 Descriptive Statistics

Table 5 shows the descriptive statistics for the overall Local_Wisdom variable. Of the 242 observations with no missing data, the mean value of Local_Wisdom is 48.5, with a 95% confidence interval ranging from 46.0 to 51.0. The standard error (SE) of the mean is 1.28, while the standard deviation (SD) describing the spread of the data is 19.8. The minimum value recorded was 6.25, and the maximum was 93.8, indicating a wide range in the data distribution.

Table 5: Descriptive Statistics

Measures of data centering and dispersion	Local_Wisdom (overall)
N	242
Missing	0
Mean [CI (95%)]	48.5 [46.0, 51.0]
SE	1.28
SD	19.8
Minimum	6.25
Maximum	93.8
Skewness (Std. error skewness)	-0.206 (0.156)
Kurtosis (Std. error kurtosis)	-1.14 (0.312)

Note. The CI of the mean assumes sample means follow a t-distribution with N - 1 degrees of freedom

Further analysis of the data distribution shows that the Local_Wisdom distribution has a skewness of -0.206 with a standard error of 0.156, indicating a slight skew to the left. The distribution's kurtosis is -1.14 with a standard error of 0.312, indicating

that it is flatter than the normal (platykurtic) distribution. The mean confidence interval (CI) is assumed to follow a t-distribution with N - 1 degrees of freedom. It provides a comprehensive picture of this study's trend and variation of the Local_Wisdom data.

4.2 Comparison between Students (H1a-c)

Table 6 presents the results of comparing local wisdom understanding between students using an independent t-test and the robustness test with Yuen's test. Three hypotheses were tested: H1a regarding differences in understanding based on gender, H1b regarding differences in understanding between two universities, and H1c regarding differences in understanding based on domicile. Each hypothesis was tested using t statistics, degrees of freedom (df), p values, and mean differences and standard deviations between groups. Yuen's test is a robust method incorporating data trimming to reduce the influence of outliers and provide more accurate estimates in analyzing data with non-normal distributions.

Table 6: Comparison of local wisdom comprehension between students using independent sample t-test

Statistics	Main test (independent sample t-test)			Robustness test (Yuen's test)		
	Gender (H1a)	University (H1b)	Domicile (H1c)	Gender	University	Domicile
t-value	1.44 (Welch's t)	2.99 (Student's t)	-0.976 (Student's t)	1.19	3.01	1.09
df	52.7	238	238	30.1	86.4	91.7
p-value	0.155	0.003	0.330	0.245	0.003	0.280
Mean (group 1 group 2)	49.1 43.8	50.7 42.7	46.4 49.1	-	-	-
SD (group 1 group 2)	19.0 22.2	19.8 18.1	20.1 19.3	-	-	-
Trimmed mean (group 1 group 2)	-	-	-	50.3 43.8	52.8 42.3	46.8 50.8
Winsorized mean (group 1 group 2)	-	-	-	49.6 43.8	51.7 41.6	47.5 49.9
Mean difference	5.36	8.03	-2.62	6.59	10.6	-4.00
SE difference	3.71	2.68	2.68	-	-	-
Effect size	0.260 (Cohen's d)	0.417 (Cohen's d)	-0.134 (Cohen's d)	0.177 (ξ)	0.285 (ξ)	0.120 (ξ)

Note. H1a μ Female \neq μ Male; H1b μ Makassar State University \neq μ University of West Sulawesi; H1c μ Urban \neq μ Rural

The verification of H1a, examining the difference in comprehension of local wisdom between male and female students, revealed a t value of 1.44 (Welch's t) with a df of 52.7 and a p-value of 0.155. The Welch's t-test was selected as it effectively addresses variance inequality between groups and delivers more reliable outcomes when the

homoskedasticity assumption is breached. These results indicate no statistically significant difference between the understanding of local wisdom based on gender. A robustness check using Yuen's test confirmed this finding, yielding a t value of 1.19 and a p value of 0.245. The effect size, as measured

by Cohen's d , was 0.260, and by ξ , it was 0.177, both suggesting a small effect.

For H1b, which examined the difference in comprehension between students of Makassar State University and West Sulawesi University, the primary results indicated a t value of 2.99 (Student's t) with a df of 238 and a p -value of 0.003, indicating a statistically significant difference between the two groups. A robustness test with Yuen's test supported this finding with a t -value of 3.01 and a p of 0.003. The effect size value of Cohen's d was 0.417, and ξ was 0.285, indicating a moderate effect.

The proof of H1c, which tested the difference in understanding of local wisdom between students from urban and rural areas, showed a t value of -0.976 (Student's t) with df 238 and a p -value of 0.330, indicating no statistically significant difference. A robustness test with Yuen's test supported this result with a t value of 1.09 and p 0.280. The effect size value of Cohen's d was -0.134, and ξ was 0.120, indicating a small effect. It suggests that the difference in domicile does not significantly affect the understanding of local wisdom.

4.3 Comparison between Students and AI (H2)

Table 7 and Figure 1 illustrate the comparison of understanding of local wisdom between students and AIs. This study aims to evaluate whether AIs better understand local wisdom than students. The indicators used include aspects of local wisdom such as cultural interpretation, thick description, cultural text, and symbolism. This analysis is essential to understand how AI can replace or complement human understanding in the context of local wisdom.

Table 7: Comparison of Local Wisdom Comprehension Between Students and AI

Group	Mean	SD	SE
Students	48.2	19.59	1.26
AI	87.5	8.84	6.25

The proof of hypothesis H2 that the understanding of local wisdom by AIs (μ AI) is higher than that of students (μ Students) is supported by the data presented in Table 5. The average score of understanding local wisdom by AI is 87.5, with a standard deviation (SD) of 8.84 and a standard error (SE) of 6.25. In contrast, students had an average understanding score of 48.2, with an SD of 19.59 and an SE of 1.26. This significant

difference suggests that AIs better understand local wisdom than students.

Figure 2, which displays a radar diagram, further reinforces these findings by showing differences in understanding local wisdom between AIs and students. AI scores higher in every indicator, including cultural interpretation, thick description, cultural text, and symbolism. It demonstrates AI's superiority in capturing and analyzing complex aspects of local wisdom that may be difficult for university students to understand.

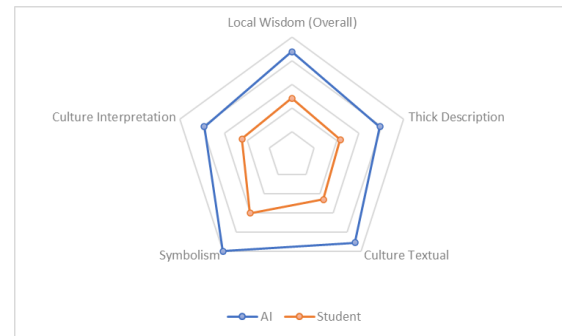


Figure 2: Local wisdom comprehension score between students and AI

Overall, the data from Table 5 and Figure 1 consistently show that AIs have a deeper and more comprehensive understanding of local wisdom than university students. These findings support hypothesis H2 and demonstrate the potential of AI as an effective tool in the study of local wisdom. AI's superiority in these aspects also opens up opportunities for further development in integrating AI technology in education and cultural research.

5. DISCUSSION

The findings showed that hypothesis H1a, which tested for differences in understanding of local wisdom based on gender, was not met as the p -value was > 0.05 . In contrast, hypothesis H1b, which tested for differences in understanding between the two universities, was met with a p -value < 0.05 , indicating a significant difference. Hypothesis H1c, which tested for differences in understanding based on domicile, was also not met as the p -value was > 0.05 . It could be because factors such as educational background and learning environment can have a greater impact on the understanding of local wisdom than gender or domicile. In addition, different university curricula and teaching methods may be more influential in shaping students' understanding of local wisdom. This finding is in line with Grájeda et al. [7], who found that the adoption of AI tools in higher education, especially in private universities in Latin

America, had a significant positive impact on students' academic experience, increasing understanding, creativity, and productivity, and emphasized the importance of AI mastery for educators and students as a pedagogical evolution. Meanwhile, Silcheva et al. [8] found that the use of AI chatbots, such as ChatGPT and Midjourney, in English language teaching for university students is efficacious in improving language skills and the ability to generate creative statements and can serve as a native speaker simulator and command executor, with results showing significant positive dynamics. Special emphasis is placed on the significance of meaning systems, which are conveyed through language, symbolism, social structures, and culture, and their contribution to the emergence and resolution of conflict [13]. Authors use language and narrative to describe and criticize social reality [14].

The research findings show that hypothesis H2, i.e., the understanding of local wisdom by AIs is higher than that of students, is fulfilled. The average score of understanding local wisdom by AIs was 87.5, significantly higher than that of students with an average score of 48.2, indicating a significant difference. AIs had higher scores in understanding local wisdom, including cultural interpretation, thick description, cultural texts, and symbolism. AI can process and analyze large amounts of data with high speed and accuracy, using sophisticated algorithms to understand cultural context. In addition, AI is not influenced by biases or limitations of prior knowledge that students may have. This finding resonates with Komba [10], who proved that ChatGPT is frequently employed in educational settings, where it positively affects students' study habits, academic performance, and understanding of course material. Students value the system for its simplicity, personalized instructions, and the quick and accurate responses, even though occasional errors may occur. Digital humanism arises from severe concerns about the way digitalization is evolving and its impact on society and people [16–18]. This approach emphasizes the importance of maintaining human values, such as justice, ethics, and well-being, in developing and applying digital technologies [19, 20]. The swift advancement of learning analytics and Artificial Intelligence in Education (AIED) introduces scalable and data-heavy systems, but it also brings forth concerns about data privacy and user autonomy [29]. AI can use machine learning algorithms to identify linguistic and symbolic patterns that human readers may miss.

6. CONCLUSION

AIs demonstrated a more in-depth and comprehensive understanding of local wisdom than university students, with significantly higher average scores and statistically significant differences. There were no significant differences in the understanding of local wisdom based on student gender or domicile, but there were significant differences between the understanding of students from two different universities. It confirms the potential of AI as an effective learning and research tool in the study of local wisdom while underscoring the importance of the educational environment in shaping students' understanding. In the context of literature education, the integration of AI technology can offer a new, more efficient, and accurate approach to understanding and teaching complex cultural and literary values, helping students to go deeper into the analysis of literary texts as well as the interpretation of symbolism and cultural context in literary works.

This research carries significant implications for literary and cultural education, particularly in the realm of AI technology as a learning tool. The discovery that AI possesses a more profound and comprehensive understanding of local wisdom than university students suggests a promising future for the quality of literary education. By providing a more detailed and objective analysis, AI can significantly enhance the learning experience. The value of this research lies in its empirical evidence supporting the integration of AI technology in literature and culture curricula. This not only aids students in better understanding literary works but also in learning cultural values more effectively. As a result, this research paves the way for the development of innovative and high-tech teaching methods, which can enrich students' learning experience in literature and culture.

Future research could delve into the potential of AI to teach various aspects of literature and culture in a more interactive and personalized manner. Intriguing themes for further study include the impact of AI on enhancing students' critical analysis skills of literary texts, comparing the effectiveness of various AI platforms in teaching literature, and the long-term influence of AI on students' understanding and appreciation of local wisdom. Moreover, research can explore how AI can collaborate with lecturers to create more dynamic and adaptive learning materials, and evaluate how the integration of these technologies can aid in the preservation and dissemination of cultural values to the younger generation.

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