

Culturally Infused AI Storytelling to Enhance German Speaking Proficiency: Evidence from a Mixed-Methods Study in Indonesian Higher Education

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ABSTRACT

This study examines the effectiveness of Culturally Infused AI Storytelling in enhancing the German language competency of university students in Indonesia. Using a sequential explanatory mixed-methods design, the study involved 68 undergraduate students learning German as a foreign language. There were thirty-four students in the experimental group and another thirty-four in the control group. Students in the experimental group were taught through Culturally Infused AI storytelling, whilst the control group received instruction via conventional methods. The post-test analysis from the ninth session showed that the experimental group was better at speaking than the control group. An independent samples t-test supported this conclusion, revealing a statistically significant difference between the groups and a large effect size. Qualitative data collected via semi-structured interviews with participants from the experimental group supported the quantitative findings. Students said that they found it easier to express themselves verbally since they were familiar with the cultural narratives. They were more engaged in discussions, and AI technologies helped them improve their pronunciation and presentation quality because the technology gave them quick feedback and helped them be more creative. These results indicate that Culturally Infused AI Storytelling is an effective teaching method for enhancing student's German speaking proficiency.

Keywords: Speaking Proficiency, German As a Foreign Language, Artificial Intelligence, Local Culture

INTRODUCTION

Speaking proficiency is still one of the most challenging but most important abilities to learn when it comes to learning a foreign language. Speaking proficiency is not only a fundamental communication skill but also an indicator of learners' proficiency in producing language in real-time, showcasing their command of vocabulary, grammar, pronunciation, and pragmatic application (Amiruddin et al., 2022; Fathi et al., 2024). Despite its significance, German as a Foreign language learners, particularly in non-European settings like Indonesia, frequently encounter considerable challenges in attaining oral fluency due to insufficient exposure to authentic language input, a scarcity of interactional opportunities, and diminished confidence in speech production (Ardiyani & Rofi'ah, 2022; Navruzabonu & Sanakulov, 2025).

To deal with these problems, teaching methods that are both dynamic and culturally relevant, and that also help students learn how to speak English, are needed. Recent technological advancements have facilitated the incorporation of digital storytelling (DST) into language teaching, providing students with a medium to create narratives, customise information, and engage in speaking within relevant contexts. Some studies confirmed that Digital Storytelling (DST) is effective to enhance language proficiency, especially within English as a Foreign

Language (EFL) contexts (Liang & Hwang, 2023; Nami & Asadnia, 2024; Yu & Wang, 2025). There is a paucity of research that systematically examines the development of speaking ability through DST in GFL environments.

Additionally, previous studies often neglect the integration of local cultural content, which is essential for boosting learners' motivation and promoting cognitive engagement by activating past knowledge (Hossain, 2024; Toledo-Sandoval, 2020). While some researchers have initiated the investigation of culture-based content in language education (Doganay & Yergaliyeva, 2013; Miqawati et al., 2024), there is a scarcity of studies examining its incorporation within AI-enhanced digital storytelling frameworks for speaking proficiency, especially in underrepresented areas like Southeast Asia.

To address this deficiency, the current study introduces and examines an innovative educational method called Culturally Infused AI Storytelling, which integrates Indonesian local cultural narratives with AI-driven digital technologies to improve students' oral proficiency in German. This study distinguishes itself from prior DST research by incorporating AI applications, such as image generation (Bing Image Creator), slide design (Canva), and pronunciation feedback tools (Ondoku and iTranslate Converse), to assist learners in composing, practicing, and presenting their narratives in German, rather than relying solely on static multimedia tools. This study used a sequential explanatory mixed-methods methodology, integrating quantitative assessments of speaking skill with qualitative investigations of learners' experiences to yield a holistic picture of the pedagogical influence.

The innovation of this study is in its interdisciplinary amalgamation of culture, artificial intelligence, and speaking-oriented digital storytelling within the framework of German language acquisition in higher education. This combination is important not only because it broadens the methodological range of GFL instruction, but also because it helps students get over the emotional and mental barriers they often confront in non-native settings. By incorporating recognisable cultural narratives into oral activities and augmenting them with advanced technology, this methodology aims to cultivate greater engagement, enhance pronunciation and fluency, and facilitate more substantive speaking practice.

Furthermore, this study enhances the domain of language education by presenting and empirically substantiating a novel model that utilises local cultural identity and digital intelligence to rectify enduring deficiencies in GFL speaking instruction. The results are expected to be useful for curriculum development, the integration of instructional technologies, and learner-centred foreign language pedagogy in international higher education settings.

METHOD

This study utilised a sequential explanatory mixed-methods design, incorporating both quantitative and qualitative data collection and analysis across two successive periods (Creswell & Creswell, 2017). The reason for choosing this design is to let the quantitative results from the experimental intervention be supported and explained by the qualitative insights from the students' experiences. Because learning a language is so complicated, especially when it comes to speaking proficiency, this approach helps us better comprehend both the measurable results and the subjective experiences of using Culturally Infused AI Storytelling.

Research Procedure

The study took place over nine sessions in a regular German language class at an Indonesian institution. The process had the following steps:

Preparation Phase

The students chose local cultural stories, such as folklore and traditions, and rewrote them in simpler story forms. The experimental group was shown a collection of AI tools, including Bing Image Creator, Canva, Ondoku, and iTranslate Converse.

Implementation Phase (Sessions 1–8)

The students in the experimental group made digital stories using stories from Indonesian culture. They used Bing Image Creator to make pictures that fit the story, Canva to make digital presentations for conveying the story, and Ondoku and iTranslate Converse to practise their German pronunciation and get feedback. Students used these resources to practise their oral presentation at home and then gave it in class. After each presentation, the students talked in German, which encouraged them to talk to each other and practise speaking. The control group, on the other hand, learnt conventionally, focusing on speaking exercises from textbooks without employing AI technologies or integrating cultural information.

Post-Test and Evaluation Phase (Session 9)

Both groups took a test after the experiment. Semi-structured interviews were conducted with chosen participants from the experimental group to examine their experiences with the intervention.

Research Sample

The sample of the study was the same as the population; it consisted of 68 undergraduate students enrolled in a B1-level German course across two intact classes at the same institution. There were two classes, Class A and Class B, with an equal number of students in each class. A statistical matching technique employing an independent t-test was utilised, grounded in students' previous German proficiency exam scores, to confirm the equivalence of speaking ability between the two courses prior to the intervention.

Levene's test for equality of variances, as given in Table 1, showed that there was no significant difference in variance between the two groups ($F(1, 66) = 0.084, p = 0.773$). This means that the assumption of homogeneity of variances was met. Based on this assumption, the t-test showed that there was no statistically significant difference in mean proficiency scores, $t(66) = -0.153, p = 0.879$. The average difference between Class A and Class B was -0.12 ($SE = 0.77$), and the 95% confidence interval ranged from -1.65 to 1.41 . These results show that the two classes had the same level of German language proficiency before the treatment, both in terms of average scores and the variability in their scores. Consequently, Class A and Class B can be regarded as equivalent baseline samples, facilitating one class to function as the control group and the other as the experimental group in subsequent analyses.

After matching, one class was randomly chosen to be the experimental group and the other to be the control group. This sampling method ensured internal validity by reducing pre-existing disparities between the groups and facilitating causal conclusions about the intervention's effects.

Table 1. Statistical Matching Result using independent t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.084	.773	-.153	66	.879	-.11765	.76676	-1.64853	1.41324

Research Instruments

Speaking Proficiency Test

A post-test tool was modified from speaking assessment standards that were aligned with the CEFR. The rubric looked at four things: fluency, pronunciation, diction, and coherence. Three trained raters separately evaluated students' achievements to guarantee inter-rater reliability.

Interview Guide

A semi-structured interview guide was created to investigate participants' experiences with AI technologies and cultural content in their speaking activities. The questions centred on learners' impressions regarding ease of expression, engagement in conversations, perceived enhancement of pronunciation, creativity, and motivation. The qualitative data elucidated and enhanced the quantitative results.

Data Analysis

Quantitative Data Analysis

To analyze the outcomes of the pre- and post-tests, this study used descriptive statistics such as the mean and standard deviation. It used an independent samples t-test to assess the speaking proficiency gains between the control and experimental groups. Cohen's d was also calculated to assess the magnitude of the effect the intervention had

Quantitative Data Analysis

Thematic analysis, based on Braun and Clarke's (2006) framework, was used to look at the interview transcripts. Initial codes were derived from the data, organised into themes, and analysed in connection with the quantitative findings. To establish credibility, a subset of participants underwent member vetting.

FINDINGS

To examine the effectiveness of culturally infused AI storytelling to enhance German-speaking proficiency, the researchers analyzed the results of the post-tests and the interviews. The following are the detailed results of the post-tests and the interviews.

Post-Test Analysis Results

Descriptive Statistics Results

Descriptive statistical analysis indicated significant disparities in German-speaking ability between the experimental group, instructed using Culturally Infused AI Storytelling, and the control group, taught by traditional methods.

As shown in Table 2, the mean score on the post-test for the control group was 70.65 (SD = 2.44, 95% CI [69.80, 71.50]), with scores ranging from 67 to 75. The scores were somewhat skewed to the right (0.198) and had a negative kurtosis value (-0.853), which means that the distribution was very symmetrical but had lighter tails than a normal curve. The experimental group, on the other hand, had a much higher mean score of 79.88 (SD = 2.56, 95% CI [78.99, 80.77]), with scores ranging from 76 to 85. The distribution exhibited a slight positive skewness (0.232) and negative kurtosis (-0.970), indicating a distribution pattern akin to the control group, albeit with a heightened central tendency.

The descriptive patterns indicate that students exposed to Culturally Infused AI Storytelling consistently outperformed their classmates instructed with traditional methodologies, with a mean difference of around 9.23 points in favour of the experimental group. These results offer initial evidence for the efficacy of incorporating culturally pertinent AI-driven narratives to improve German language competency among university students.

Table 2. Descriptive Statistics Results

Statistics	Control Group	Experimental Group
Mean	70.6471	79.8824
Median	70.5000	80.0000
Variance	5.932	6.531
Std. Deviation	2.43562	2.55562
Minimum	67.00	76.00
Maximum	75.00	85.00
Range	8.00	9.00
Interquartile Range	3.50	4.00
Skewness	.198	.232
Kurtosis	-.853	-.970

Normality Test Result

The normality test in this study used the Kolmogorov-Smirnov test statistic. The Kolmogorov-Smirnov test statistic is an effective and valid normality testing method used for small samples. The results of the normality test calculations for the learning outcome data of the control and experimental classes are shown in Table 3 below.

Table 3. Normality Test Results

	Statistic	df	Sig.
Control	.105	34	.200*
Experiment	.122	34	.200*

In Table 3, the results of the one-sample Kolmogorov-Smirnov normality test show that the Sig. value for the control class is 0.2 and the Sig. value for the experimental class is 0.2. This indicates that the Sig. value for the control class is $0.2 > 0.05$, and the Sig. value for the experimental class is $0.2 > 0.05$. Therefore, the results of the normality test for the speaking scores for the control class and the experimental class meet the assumption of normal distribution.

Homogeneity Test Results

The homogeneity test is used to determine whether several variances in a population are equal. As a testing criterion, if the Sig. value is > 0.05 , it can be concluded that the variances of two or more groups are equal. The homogeneity test was conducted on the control and experimental class data to determine whether the variances of the two data groups are equal. In this study, the homogeneity test was calculated using the Levene test. The results of the homogeneity test calculation for the control and experimental classes can be seen in Table 4 below.

Table 4. Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.143	1	66	.707

Based on the results of the Levene statistics homogeneity test analysis in Table 4, the Sig. value is 0.143. The results of this calculation show that the Sig. value of the Levene test = $0.143 > 0.05$, so it can be concluded that the variance of students' speaking scores from the control class and the experimental class has the same variance.

Independent t-test Result

The post-test analysis was conducted to determine the effectiveness of the Culturally Infused AI Storytelling intervention in enhancing students' German-speaking proficiency. A total of 68 students participated in the study, divided equally into an experimental group ($n = 34$) and a control group ($n = 34$). Speaking proficiency was assessed across four dimensions: fluency, pronunciation, vocabulary use, and coherence. To determine the differences in learning outcomes between the control and experimental classes, a t-test statistic was used. The basis for making the t-test decision is as follows:

1. If the asymp. Sig. (2-tailed) value is < 0.05 , there is a significant difference in learning outcomes.
2. If the asymp. Sig. (2-tailed) value is > 0.05 , there is no significant difference in learning outcomes.

Table 5. Independent Samples Test

	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	15.254	66	.000	9.23529	.60545

From Table 5 above, the Sig. (2-tailed) value of the independent sample t-test is 0.000, because the asymp. Sig. (2-tailed) value is < 0.05 or the Sig. (2-tailed) value = $0.000 < 0.05$, then according to the basis for decision making in the t-test, it can be concluded that there is a significant difference in the learning outcomes of students in the control and experimental classes. The effect size, calculated using Cohen's d, was 3.73, indicating a large and significant effect of the intervention on students' speaking proficiency. These findings provide strong quantitative evidence that Culturally Infused AI Storytelling significantly enhances speaking proficiency in German as a foreign language among university students.

$$\begin{aligned} \text{Cohen's } d &= (M2 - M1) / SD_{\text{pooled}} \\ &= (70.6 - 79.9) / 2.490723 \\ &= 3.733856. \end{aligned}$$

Interview Analysis Results

To substantiate and elucidate the quantitative findings, qualitative data were gathered from semi-structured interviews with 12 students from the experimental group, chosen via purposive sampling to reflect a range of speaking proficiency levels. Thematic examination of the interview transcripts produced four principal themes:

Familiarity with Cultural Content Enhances Verbal Expression

Participants consistently indicated that incorporating local culture narratives, including traditional folklore and community rituals, alleviated cognitive burden during idea generation. This gave them more mental energy to focus on producing precise and fluent German. These studies indicate that cultural familiarity functions as a scaffolding mechanism, allowing learners to circumvent challenges in conceptual formation and focus on verbal encoding, thus enhancing fluency and coherence.

"Because I already knew the story, I could focus more on how to say it in German, not thinking too much about what to say."
(Participant 4)

"The cultural stories made me feel connected. I already understood the context so that I could pay attention to grammar and pronunciation." (Participant 6)

Increased Engagement and Interaction in Class Discussions

Students stressed that using known cultural topics made it easier for them to talk to each other. Students' shared cultural knowledge helped them understand one another better and made classroom conversations more lively. These kinds of interactions fit with sociocultural learning theories, which say that shared background knowledge makes people more likely to participate and leads to deeper conversations.

"When my friends told stories I knew from childhood, it was easier for me to understand and ask questions in German."
(Participant 7)

"We could respond to each other's stories because we understood them well, so the conversation became more natural in German." (Participant 11)

Tools Improve Pronunciation and Confidence

Adding AI apps, especially for practicing pronunciation, was a significant boost to students' confidence. Tools like Ondoku gave rapid auditory models, allowing for repetitive rehearsal and self-correction before performing in class. These results show that AI-driven feedback loops improve the accuracy of pronunciation and make learners more inclined to speak in the target language.

"I listened to how Ondoku pronounced the words, and I practiced until I sounded similar. It helped a lot with my confidence."
(Participant 2)

"AI gave me instant feedback. I knew when my pronunciation was wrong, so I could fix it before speaking in front of the class."
(Participant 5)

Enhanced Creativity and Motivation Through Digital Design

Using creative digital tools like Bing Image Creator and Canva made the story more engaging. Students remarked that the design process made them feel inspired and in charge, which made them feel more confident when they presented their presentations. These creative aspects not only made learners more interested, but they also helped them learn in multiple ways by combining visual and textual information.

"I liked creating the slides with Canva. It made my presentation look professional, and I was proud to speak in front of the class." (Participant 9)

"Making my own images and slides made the project feel personal. I wanted to present it well in German." (Participant 1)

The alignment of quantitative and qualitative results indicates that the experimental group's enhanced performance is due to a synthesis of cognitive, emotional, and technical influences. Being familiar with the culture made it easier to comprehend ideas, AI tools helped with language, and innovative digital design boosted motivation and self-efficacy. These things worked together to generate a learning environment that was both linguistically challenging and personally relevant, which led to measurable increases in German-speaking skills.

DISCUSSION

The results of this study show that using AI to augment digital storytelling significantly improved university students' ability to speak German. The post-test results showed that students' speaking fluency, pronunciation accuracy, and vocabulary richness had all improved significantly since the pre-test. These quantitative results are consistent with prior studies highlighting the beneficial effects of digital storytelling on language production skills (Benabbes & Taleb, 2024; Lee et al., 2021). This study enhances the existing literature by integrating AI-driven feedback systems that provide real-time, personalised language support, a characteristic often overlooked in prior research.

The interview data corroborated the quantitative findings by offering profound insights into students' learning experiences. Students said they felt more confident speaking, more motivated, and more able to grasp cultural differences, especially when the storytelling activities included themes from Indonesian culture. Numerous students indicated that AI applications, such as speech recognition, pronunciation trainers, and grammar-checking tools, alleviated anxiety associated with speaking a foreign language by facilitating practice in a low-pressure setting prior to participating in classroom activities. These qualitative findings corroborate recent studies that emphasise the motivational and emotional advantages of multimodal and technology-enhanced language learning environments (Liu et al., 2024; Rahmanu & Molnár, 2024).

This study presented a culturally adaptive storytelling methodology, integrating Indonesian local culture with German language acquisition content, in contrast to previous research. This innovation tackles two significant pedagogical deficiencies: (1) the insufficient representation of learners' own cultures in foreign language educational resources, and (2) the inadequate investigation of how AI-supported platforms might be culturally contextualised. Interviews made it very clear that including culturally relevant topics made students more interested and made the speaking challenges more meaningful. The research not only improved the linguistic aspect of speaking, but it also

helped people learn how to communicate across cultures, which is becoming increasingly important in global schooling settings.

The study's mixed-methods methodology also helped us comprehend both the effectiveness and the learner experience more comprehensively. This showed how useful it is to combine post-test data with reflective qualitative observations. This method makes sure that the intervention's effectiveness is not only statistically significant, but also pedagogically significant and socially relevant.

In other words, the results show that digital storytelling, when enhanced with AI techniques and local cultural information, can make learning German as a foreign language more fun and helpful. This new idea helps both language education theory and practice. It supports the desire for language learning methods that are more inclusive, use technology, and are culturally relevant.

CONCLUSION

This study has shown that AI-assisted digital storytelling greatly improves university students' ability to speak German. The use of interactive AI technologies and culturally relevant narrative assignments not only helped students speak better, especially in terms of fluency, pronunciation, and vocabulary, but it also made them more confident, motivated, and interested in learning the language. The creative incorporation of Indonesian local culture into German storytelling content enhanced the learning experience by rendering it more relatable and significant for students. The results show that integrating AI-enhanced learning with culturally responsive teaching methods is an effective approach to teaching foreign languages.

This study has significant limitations, even though its results are intriguing. The research was performed with a restricted cohort of students at one university, potentially influencing the generalisability of the results. Subsequent research should encompass a broader and more heterogeneous sample from other institutions and language proficiency levels. Although this study concentrated on speaking skills, subsequent research may investigate the influence of AI-assisted digital storytelling on additional language competencies, including writing, listening, and reading, to provide a comprehensive understanding of its efficacy. The present investigation evaluated immediate outcomes after the intervention. Subsequent investigations may undertake longitudinal studies to assess the durability of linguistic enhancements and motivation over time. Subsequent study may examine various AI tools and storytelling formats (e.g., text-based, video-based, or immersive VR storytelling) to determine which combinations produce the most successful results for diverse learner profiles.

REFERENCES

- Amiruddin, Razaq, Y., Satriani, Sri Widistari, B., & Asyurah Khas, S. (2022). Speaking skills for English as a foreign language in video-based discussion. *ETDC: Indonesian Journal of Research and Educational Review*, 1(3), 371–380. <https://doi.org/10.51574/ijrer.v1i3.392>
- Ardiyani, D. K., & Rofi'ah. (2022). Learners' German speaking difficulties: A case study in Indonesia. *Proceedings of the International Seminar on Language, Education, and Culture (ISoLEC 2021)*, 612(ISoLEC), 51–56. <https://doi.org/10.2991/assehr.k.211212.010>
- Benabbes, S., & Taleb, H. A. H. A. (2024). The effect of storytelling on the development of language and social skills in French as a foreign language classrooms. *Heliyon*, 10(8), e29178. <https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e29178>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Creswell, J. W., & Creswell, J. D. C. (2017). *Research design: Qualitative, quantitative, mix methods approaches* (1st ed.). SAGE Publications Inc.
- Doganay, Y., & Yergaliyeva, A. M. (2013). The impact of cultural based activities in foreign language teaching at intermediate (B1) Level. *Procedia - Social and Behavioral Sciences*, 89, 734–740. <https://doi.org/https://doi.org/10.1016/j.sbspro.2013.08.924>
- Fathi, J., Rahimi, M., & Derakhshan, A. (2024). Improving EFL learners' speaking skills and willingness to communicate via artificial intelligence-mediated interactions. *System*, 121, 103254. <https://doi.org/https://doi.org/10.1016/j.system.2024.103254>
- Hossain, K. I. (2024). Reviewing the role of culture in English language learning: Challenges and opportunities for educators. *Social Sciences & Humanities Open*, 9, 100781. <https://doi.org/https://doi.org/10.1016/j.ssaho.2023.100781>

- Li, J., Brar, A., & Roihan, N. (2021). The use of digital technology to enhance language and literacy skills for Indigenous people: A systematic literature review. *Computers and Education Open*, 2, 100035. <https://doi.org/https://doi.org/10.1016/j.caeo.2021.100035>
- Liang, J.-C., & Hwang, G.-J. (2023). A robot-based digital storytelling approach to enhancing EFL learners' multimodal storytelling ability and narrative engagement. *Computers & Education*, 201, 104827. <https://doi.org/https://doi.org/10.1016/j.compedu.2023.104827>
- Liu, Y., Thurston, A., & Ye, X. (2024). Technology-enhanced cooperative language learning: A systematic review. *International Journal of Educational Research*, 124, 102314. <https://doi.org/https://doi.org/10.1016/j.ijer.2024.102314>
- Miqawati, A. H., Wijayanti, F., & Purnamasari, A. I. (2024). Integrating local culture in English language teaching: Enhancing authentic materials and cultural awareness. *Journal of English in Academic and Professional Communication JEAPCO*, 10(2), 2024. <https://doi.org/10.25047/jeapco.v10i2.5096>
- Nami, F., & Asadnia, F. (2024). Exploring the effect of EFL students' self-made digital stories on their vocabulary learning. *System*, 120, 103205. <https://doi.org/https://doi.org/10.1016/j.system.2023.103205>
- Navruzabonu, Q., & Sanakulov, Z. (2025). Overcoming foundational challenges in learning German: Insights for beginner language learners in Uzbekistan. *Allemania*, 15(1), 1–8.
- Rahmanu, I. W. E. D., & Molnár, G. (2024). Multimodal immersion in English language learning in higher education: A systematic review. *Heliyon*, 10(19), e38357. <https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e38357>
- Razmi, M., Pourali, S., & Nozad, S. (2014). Digital Storytelling in EFL Classroom (Oral Presentation of the Story): A Pathway to improve oral production. *Procedia - Social and Behavioral Sciences*, 98(2011), 1541–1544. <https://doi.org/10.1016/j.sbspro.2014.03.576>
- Toledo-Sandoval, F. (2020). Local culture and locally produced ELT textbooks: How do teachers bridge the gap? *System*, 95, 102362. <https://doi.org/https://doi.org/10.1016/j.system.2020.102362>
- Yu, B., & Wang, W. (2025). Using digital storytelling to promote language learning, digital skills and digital collaboration among English pre-service teachers. *System*, 129, 103577. <https://doi.org/https://doi.org/10.1016/j.system.2024.103577>