

The Use of Gemini Live as an Artificial Intelligence tool to Enhance Students' German Speaking Skills: A Case Study at Universitas Pendidikan Indonesia

ABS - ICOLLITE - 25193

Dra. Hafdarani, M.Pd., Nurhaida Juni Juwita

Universitas Pendidikan Indonesia

INTRODUCTION

PROBLEM



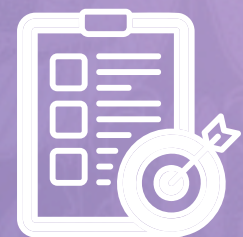
Students often struggle to learn languages due to limited interaction with native speakers and restricted access to learning media both analog and digital (with some analog media now having transitioned into digital) as clearly explained in the book “DLL 05: Lehr- und Lernmedien” from Rösler, Dietmar and Würffel, Nicola (2020)

SOLUTION



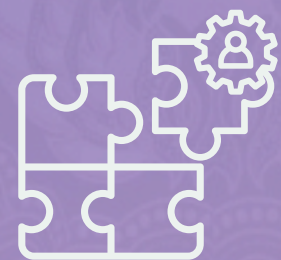
Gemini Live enables self-directed speaking practice, leveraging AI advancements for language learning.

PURPOSE OF STUDY



This study explores using Gemini Live to improve B1-level German speaking skills through collaborative planning and presentation tasks.

Gap in Existing Research



No studies have used Gemini Live for German speaking; this study fills that gap.

LITERATURE REVIEW

Speaking Skill



Speaking skills can be improved through Projektarbeit, which helps reduce students' anxiety (Hafdarani, 2021). At the B1 level CERFL, these skills include understanding everyday topics, handling travel situations, and speaking simply about experiences and plans.

Gemini Live



Gemini Live, a feature of Google Gemini, enables more natural, real-time conversations with the AI assistant.

General Impact of AI on Speaking Skills



AI tools have been shown to enhance speaking abilities (El Shazly, 2021; Widyasari & Maghfiroh, 2023), support self-regulated learning through apps like Duolingo (Qiao & Zhao, 2023), and improve fluency, grammar, and willingness to communicate (Junaidi, 2020; Fathi et al., 2024). They also boost learners' confidence in academic presentations (Zhu et al., 2025). Integrating AI with social interactions further strengthens speaking practice (Zou et al., 2023), while enjoyment and engagement with AI promote continuous language learning (Huang & Zou, 2024).

METHOD



Design: A qualitative descriptive method involving self-experimentation.



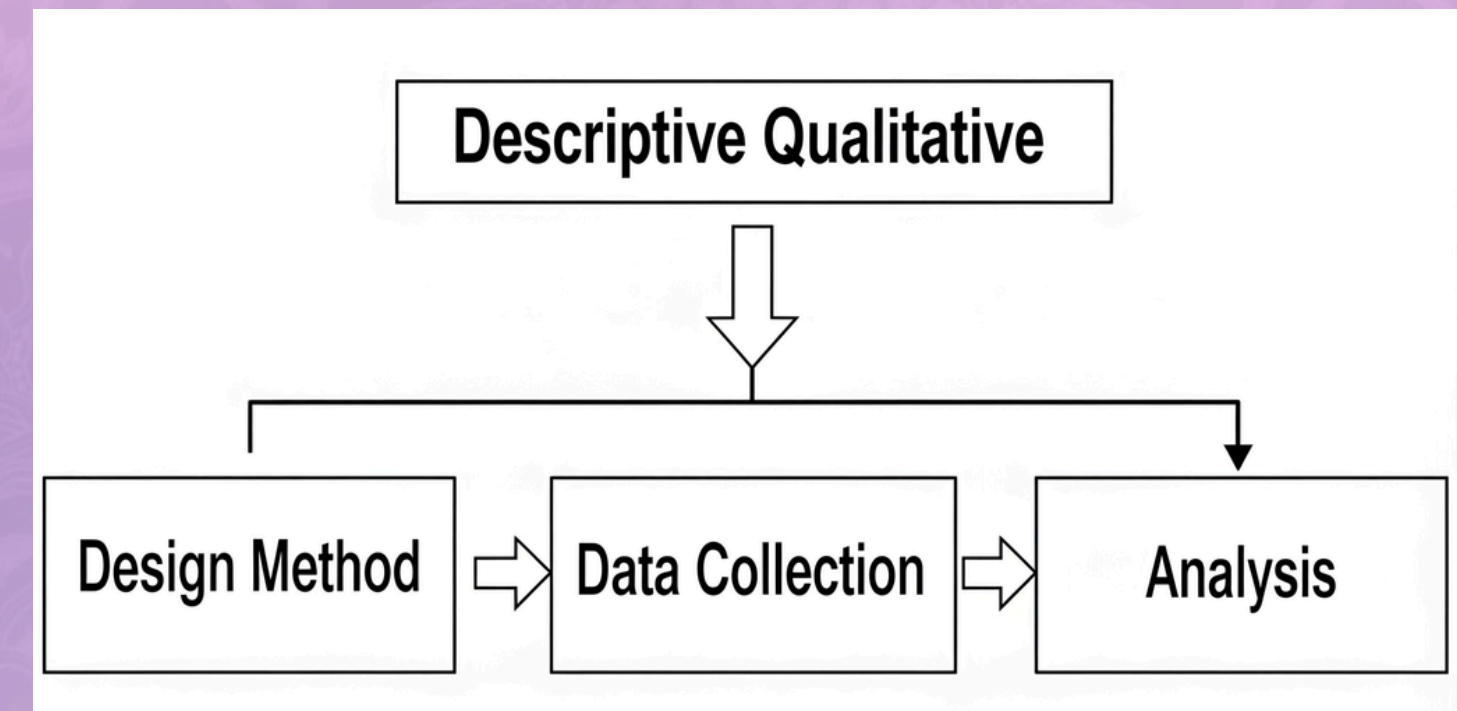
Data Collection: Speaking simulations consist of a presentation on a specific subject and a joint planning activity.



Analysis: A descriptive examination concentrating on fluency in speaking, self-assurance, vocabulary use, pronunciation, and the practicality of features during simulations.



Research Instrument: Two Titles for German Speaking Exams focusing on Task 2 “Presentation,” with the topic Zahlen mit Bargeld (“Paying with Cash”), as previously exemplified by the lecturer.



FINDING AND DISCUSSION

Presentation Task

Gemini Live assisted in organizing and shaping ideas for B1-level presentations and provided support in structuring content (introduction, advantages and disadvantages, conclusion).

Conversation Transcripts

Gemini : Du könntest damit beginnen, die Vorteile hervorzuheben, wie zum Beispiel die bessere Kontrolle über die Ausgaben und die Vermeidung von Schulden. Danach könntest du auf die Nachteile eingehen, wie die Unannehmlichkeiten bei größeren Beträgen oder Online-Käufen

Gemini : Du könntest eine kurze Zusammenfassung der wichtigsten Vor- und Nachteile geben und dann betonen, dass es letztendlich auf die individuellen Bedürfnisse und Vorlieben ankommt.

Gemini : Du könntest zum Beispiel sagen: "Für mich persönlich überwiegen die Vorteile des Bezahlens mit Bargeld, da ich so ein besseres Gefühl für meine Ausgaben habe. Aber ich denke, es ist wichtig, flexibel zu sein und je nach Situation die passende Zahlungsmethode zu wählen. mmenfassung der wichtigsten Vor- und Nachteile geben und dann betonen, dass es letztendlich auf die individuellen Bedürfnisse und Vorlieben ankommt.

FINDING AND DISCUSSION

Mistakes in Transcription

User said : Wie kann ich meine Präsentation beenden?

Gemini wrote : On which can I dipresenthi that you on be enden?

Gemini answered : Du könntest zum Beispiel sagen: "Ich hoffe, ich konnte Ihnen einen guten Überblick über die Vor- und Nachteile des Bezahlens mit Bargeld geben. Vielen Dank für Ihre Aufmerksamkeit!" Oder du wählst eine etwas lockerere Formulierung: "Ich hoffe, Sie konnten etwas Interessantes mitnehmen. Vielen Dank fürs Zuhören!"

User said : Ok. Danke

Gemini wrote : Oke, game ini Danko of the

Gemini answered : Gerne geschehen! Auf Wiedersehen und viel Erfolg bei deiner Präsentation!

FINDING AND DISCUSSION

Limitations & Future Directions

Gemini Live sometimes repeated phrases or misunderstood context, mistakes in transcription, struggled to handle multiple or unclear questions simultaneously, and the findings are limited to a single self-experiment, requiring broader participant testing.

Conversation Transcripts

"Student: „Wie kann ich mich am Ende meiner Präsentation bedanken und sie beenden?“"

"Gemini Live: No response due to the double question."

CONCLUSION



- ✦ **Gemini Live effectively supports B1-level German speaking practice, including presentations and collaborative planning.**
- ✦ **Enhanced idea structuring, vocabulary use, and speaking confidence during practice.**
- ✦ **Some limitations remain, such as repeated phrases and difficulty handling multiple questions.**
- ✦ **Teachers must intensively train German pronunciation vowel length, umlauts, consonant clusters, and word stress, to help AI tools like Gemini transcribe speech more accurately.**

REFERENCES

- El Shazly, R. (2021). Effects of artificial intelligence on English speaking anxiety and speaking performance: A case study. *Expert Systems*, 38(3), e12667.
- 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/10.1016/j.system.2024.103254>
- Hafdarani. (2021). Project based learning of German vocabulary and speaking skills. *Atlantis Press Proceedings*, 1-15. <https://doi.org/10.2991/assehr.k.211119.048>
- Huang, F., & Zou, B. (2024). English speaking with artificial intelligence (AI): The roles of enjoyment, willingness to communicate with AI, and innovativeness. *Computers in Human Behavior*, 159, 108355. <https://doi.org/10.1016/j.chb.2024.108355>
- Junaidi, J. (2020). Artificial intelligence in EFL context: Rising students' speaking performance with Lyra virtual assistance. *International Journal of Advanced Science and Technology Rehabilitation*, 29(5), 6735–6741.
- Qiao, H., & Zhao, A. (2023). Artificial intelligence-based language learning: Illuminating the impact on speaking skills and self-regulation in Chinese EFL context. *Frontiers in Psychology*, 14, 1255594. <https://doi.org/10.3389/fpsyg.2023.1255594>
- Rösler, D., & Würffel, N. (2020). *Lehr- und Lernmedien - Deutsch Lehren Lernen - Neubearbeitung* (p. 13). Ernst Klett Sprachen - Goethe-Institut.
- Widyasari, P., & Maghfiroh, A. (2023). The advantages of artificial intelligence ELSA speak application for speaking English learners in improving pronunciation skills. *ELTT*, 9(1), 286–292. <https://doi.org/10.32682/eltt.v9i1.3572>
- Zhu, Y., Zou, B., & Jia, W. (2025). The impact of artificial intelligence (AI) technology on EAP speaking: A study of MA TESOL students in an EMI context. *International Journal of Distance Education Technologies*, 23(1), 1–19. <https://doi.org/10.4018/IJDET.356828>
- Zou, B., Guan, X., Shao, Y., & Chen, P. (2023). Supporting speaking practice by social network-based interaction in artificial intelligence (AI)-assisted language learning. *Sustainability*, 15(4), 2872. <https://doi.org/10.3390/su15042872>

THANK YOU!