

Developing Learning Materials Through AI for Germany Class as a Foreign Language

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ABSTRACT

Keywords:
Artificial Intelligence,
Learning Materials,
Germany Class,
Foreign Language,
In Indonesia

Learning materials is one of the keys for teachers to conduct a teaching-learning process in the classroom well. The materials are one of components and the source for teachers to teach perfectly in the classroom. Using AI for teachers to create learning materials has a positive impact, such as increasing the effectiveness. But not all AI can be used by the German teachers in Indonesia. This Article aimed encouraging AI to develop teaching materials, especially AI which are rarely utilized the teacher in Indonesia. The article focuses on two discussions (1) How to develop learning materials through AI -Gemini for Germany Class? (2) How to develop learning materials through AI- Quizlet for Germany Class. The methods which used in this study are literature review and library research. Google Forms was also used for data collection in this study. It was obtained from 20 German teachers to know what kind of AI that they used. Research results showed that (1) Gemini can help in developing materials for Germany teacher such as making lesson plan, exercises for the student (2) Quizlet can also provide a lot of various learning materials for Germany class. In conclusion that using AI appropriately by teachers is important and enhancing teachers' skills in using AI should be done to ensure the successful implementation of AI in German language teaching class.

INTRODUCTION

Nowadays, the presence of AI has a significant impact on human life. The term itself was used for the first time in 1956 by John McCarthy (Pokrivcakova, S 2019: 135). The topics about AI more discussed in public and science (Opel:2019). More than that with the presence of models of AI such as chat GBT and more frequently discussed until the emergence of ChatGPT 3 (Fujisawa, D., 2023).

It cannot be denied, that AI also has impacts the field of teaching, including in German language learning and teaching in Indonesia. AI has the ability to lead people to learn languages in new ways. AI also provides more effective, efficient, and interactive tools and technologies. For teachers, by using AI, the teacher can be guided easier to prepare good learning materials for the classes.

In German language learning and teaching in Indonesia, AI is also highly needed in this process (Pokrivcakova S. 2019:235), including as online resources (Basaran, 2023:140), (Duananda KD, M., 2011). German language teachers in Indonesia are also required to create effective, quality, and enjoyable learning experiences. Teachers have to collaborate various components to ensure that the learning process runs well and effective. In this situation, teachers are required to prepare several components. Preparing well about learning objectives, learning strategies teaching methods, assessment and evaluation. They also organize learning resources and learning materials (Prabajati, 2019:6). All must be done by the teachers. However, this conditions on teachers are not easy and complicated (Anwar, 2023: 1). The presentation of AI can facilitate the teacher in this learning process. The teacher ability to operate digital technology is necessary. Digital competence can be defined as 'the ability of individuals to handle digital technologies and tools safely and critically (Žufić, J. 2024: 3).

Based on observation by G-form for German language teachers in several cities in Java showed that teachers have also used the AI. Most of them often use Chat GBT, Canva, Kahoot, Grammarly and Microsoft Sway, but teachers rarely use AI such as Quizlet, Gemini.

The fact it is important to have good competencies for the teachers in exploring AI for the teaching process.

This article aims to give information the implementation of AI for the teacher, especially exploring AI Quizlet and AI Gemini. In this Article, this issue being discussed are: (1) How to develop learning materials through AI -Gemini for Germany Class? (2) How to develop learning materials through AI- Quizlet for Germany Class.

RESEARCH METHOD

This methodology aims to provide a comprehensive understanding of how AI is being used to enhance learning materials for German classes as GFL and used a literature review and library research. The approach is designed to investigate the experiences of German language teachers (in Indonesia) who use AI technologies in their classes. The study's goal is to inform the development of learning materials based on student needs through certain types of AI technologies. Google Forms was also used as instrument for data collection. The questions are made to cover aspects such as (a) the types of AI tools being used, (b) their specific features that they used, and (3) teachers' experiences with AI. The resources of data come from 20 teachers. It was obtained from German teachers which teach Germany in Surabaya, Gresik, Kediri, Jombang, Kediri and Sidoarjo.

RESULTS AND DISCUSSION

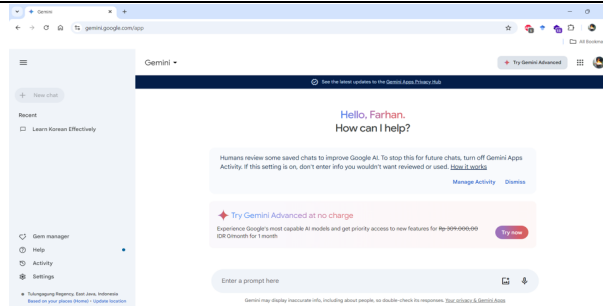
Research results showed using AI appropriately by teachers is important, however enhancing teachers' skills in using AI should be done to ensure the successful implementation of AI in German language teaching class. In general G-Form responses indicates that (1) It is needed to analyze about how teachers developing learning materials primarily using AI, (2) It is needed to analyze the learning material development that teachers require through AI, (3) What types of AI do they need in developing learning materials? But these article concern and focuses on two discussions which are how to develop learning materials resources- through AI - Gemini for German Class and how to develop learning materials through AI- Quizlet for German Class. These types of AI, either Gemini or Quizlet, are chosen based on G-Form from the teachers who teaching Germany in Indonesia as GFL. They ensure that they use most AI but Gemini and AI are not quite often. Chat GPT, Kahoot and Canva are familiar to use. And this article tries to provide more formation on how to explore both these AI.

(1) How to develop learning materials through AI - Gemini for Germany Class?

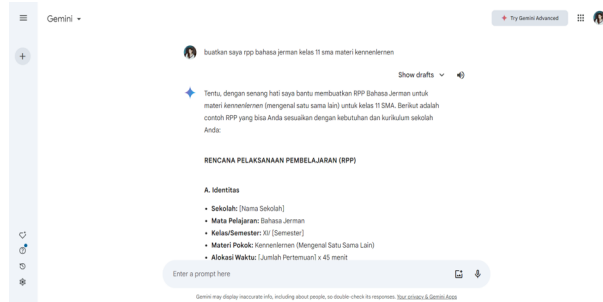
Gemini is AI which developed by Google AI. A kind of artificial intelligence is created specially to process and produce text and other forms of human language. The model has been made to handle a wide range of cues and inquiries, because it has access to a big data text. It offers the feature to comprehend, interpret, and react to a text and work well on a variety of tasks, such as creative writing, code production, and image analysis. Gemini can handle a variety of data formats and it can be used in a wide range of fields, such as information retrieval, coding, translation, and content production. Gemini as information source has also more processing power and trustworthy information than other AI, like Chat GPT, because it places a higher priority on factual correctness and relevancy than ChatGPT which occasionally generates inaccurate or misleading content. In the learning process in German Class, teacher can use the capabilities of AI-Gemini as a tool to help teacher to produce and develop learning material. Teacher can make and develop learning material appropriate. For example, teachers are able to make lesson

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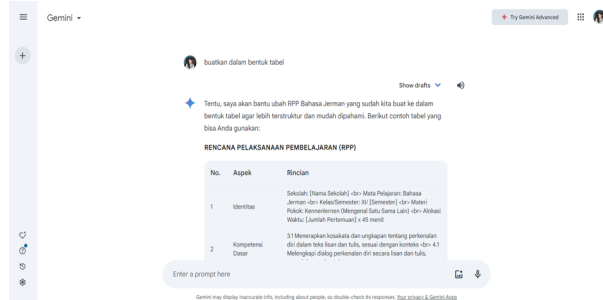
plan for 11 grade senior high school for introduction topic (*Kennenlernen*) or others topics. Teachers can choose the theme based on needs, whether teaching 10th grade, 11th grade or 12th grade teachers can fit the learning material by itself



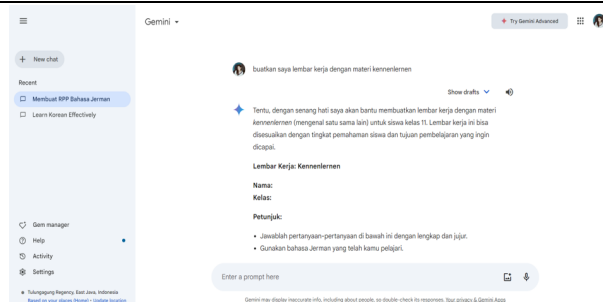
1. Visit <https://gemini.google.com/>. Login with Google account at the first appearance of Gemini AI.



2. Type the right prompt, your topics to develop. Example: Make lesson plan- Introduction (*kennenlernen*) for Germany class XI

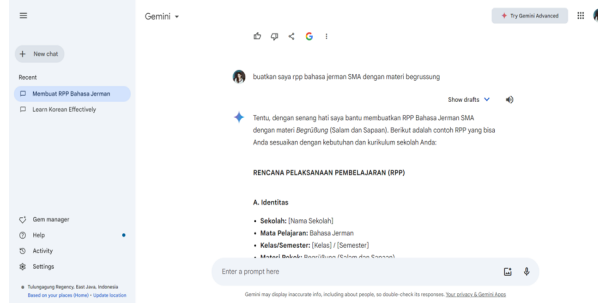


3. Other development material, type in prompt: create lesson plan in table form, topic Introduction class XI

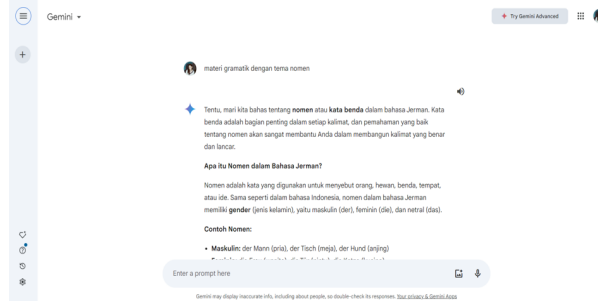


4. Others development example: making exercises. Type in prompt "make worksheet for class XI with topics introduction (*kennenlernen*)"

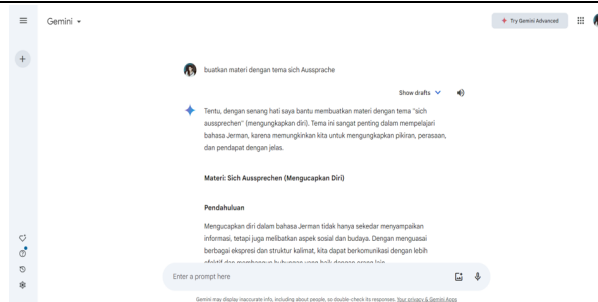
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5. another development you can make lesson plan another topics *Begrüssung*



6. Other development, creating material for grammatic learning. Type grammar material with the theme of nouns (*Nomen*)



7. Development material for speech training, the teacher can click the speaker icon automatically- Gemini AI -will read the text. Teacher can use as listening and speaking training for student. Type -make materials for pronunciation with topics *kennenlernen*.

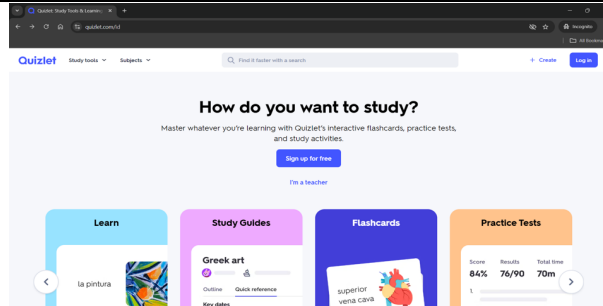
(2) How to develop learning materials through AI - Quizlet for Germany Class?

Quizlet is an online and free platform learning platform founded by Andrew Sutherland. It offers a various set of tools for efficient learning and memorization, like flashcards but more modern. Some people from different ages like from primary school to university can utilize for courses in anything from science and math to languages and history. More than that Quizlet also utilizing artificial intelligence to help improve users experience, they use AI features like text to speech and AI virtual assistant (Q-Chat) to help users more understanding the learning material. There are several key features from Quizlet- flashcards for adding text, photos, music, and video to their own flashcard. The user is possible to create their learning process according to their own requirements and needed.

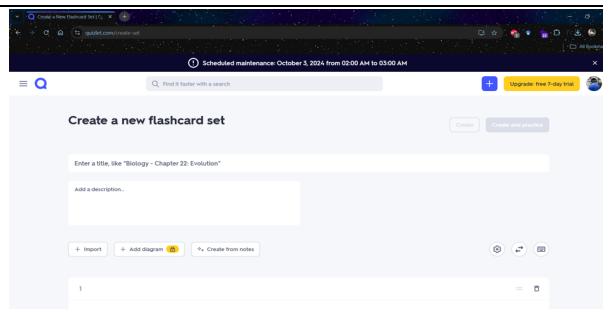
For the student, AI- Quizlet can encourage and collaborate, exchange knowledge, and gain insight from one another. The students have more fun and competitiveness of more motivate in the class. For the teacher Quizlet can accommodating various learning preferences and it can help to produce evaluation such as multiple choice, true/false, and matching or collaborative learning by allowing users to share study sets with one another, peer-to-peer learning is encouraged. More than that the teacher who want to use Quizlet as learning material could be done too. For examples using *Kennenlernen* theme

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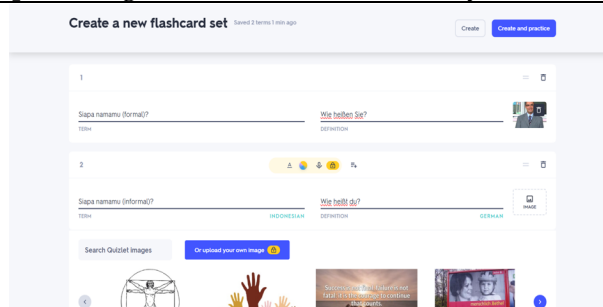
for senior high school. Teachers can choose the theme based on needs, whether teaching 10th grade, 11th grade or 12th grade teachers can fit the learning material by itself.



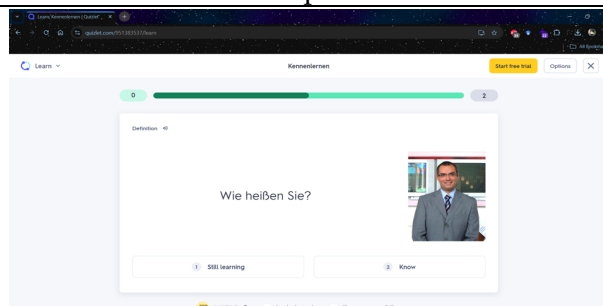
1. Visit <https://quizlet.com/id>.
log in with google account first. Start create flashcard



2. Here is the flashcard section. Enter your topics here, for example is "*Kennenlernen*" (*introduction*) add description to give an information about your flashcard.

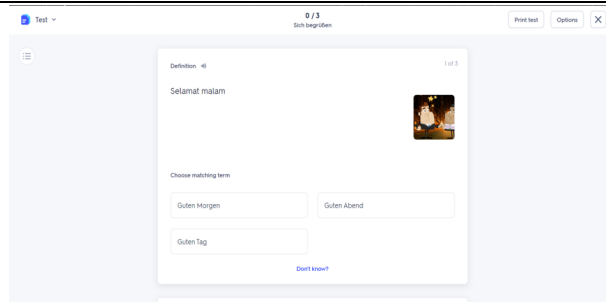


3. Write the term and definition, for the example the term is "*Wie heißen Sie?*" (what is your name (formal form)?) Teachers also can add images and voice recording to give how to pronounce it. Press the blue button create and practice.

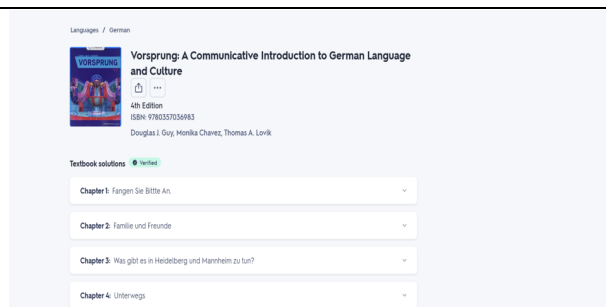


4. Here is the result of the flashcard. There is so many possibilities to use this as learning material

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5. Others development from Quizlet is making practice test. For example: example the theme is "Sich Begrüßen". Set the option by pressing the blue button create and practice you can check the multiple choice.



The textbook solution is another feature that Quizlet provide. Here teacher and student can get the solution and more explanation about the book. Not all the book is available but is enough as an additional learning material.

CONCLUSION

The use of AI in learning for German language teachers is already recognized as very important. However, AI with certain applications in Germany as GFL still dominates in usage in the future (Sauer N: 2024). Therefore, more exploration of AI with other features is needed not only AI- *Gemini and Quizlet*. And more Information for the teacher about exploring AI and how to develop perfectly the learning materials is still needed. For Gemini and Quizlet are required and explore to be used in teaching Germany class for the teacher in Indonesia. Through these both AI, teachers have a lot choices to develop their learning materials. It is proven that (1) Gemini can help in developing materials for Germany teacher such as making lesson plan, exercises for the student, and (2) Quizlet can also provide a lot of various learning materials for Germany class

REFERENCES

- Anwar, S., & Prof. Dr. Ida Hamidah, M. S. (n.d.). Metode Pengembangan Bahan Ajar Four Steps Teaching Material Development (4STMD). Indonesia Emas Group. <https://books.google.co.id/books?id=ZXWyEAAAQBAJ>
- Basaran, B. (2023). Chapter 10 Ai: Redefining Language Learning and Teaching-a Focus on German. October. <https://www.researchgate.net/publication/375001244>
- Fujisawa, D. (2023). Künstliche Intelligenz und ihre Konsequenzen für den DaF-Unterricht-Ein Erfahrungsbericht. 独協大学ドイツ学研究, (82), 93-102.
- Duananda KD, M. (2011). Pengembangan Bahan Ajar dengan Menggunakan Media WEB Pada Mata Kuliah Telaah Pranata Masyarakat Jerman 1 (landeskunde 1). <http://repository.um.ac.id/id/eprint/57109>
- Opel, S., Schlichtig, M., & Schulte, C. (2019). Developing teaching materials on artificial intelligence by using a simulation game (Work in progress). ACM International

- Conference Proceeding Series, November.
<https://doi.org/10.1145/3361721.3362109>
- Pokrivcakova, S. (2019). Preparing teachers for the application of AI-powered technologies in foreign language education. *Journal of Language and Cultural Education*, 7(3), 135–153. <https://doi.org/10.2478/jolace-2019-0025>
- Prabajati, A. D. (2015). Developing Teaching and Learning Materials for Encouraging the Involvement and Concentration of the Students with Special Needs (Specified for the Autism Students in SLB YPAC).
- Sauer, N. (2024). The AI Revolution of DaF Teaching. <https://germanonlineinstitute.com/the-ai-revolution-of-daf-teaching/>
- Žufić, J. (2024). Die Nutzung digitaler Werkzeuge im DaF-Unterricht. University of Rijeka, Faculty of Humanities and Social Sciences. <https://urn.nsk.hr/urn:nbn:hr:186:102557>