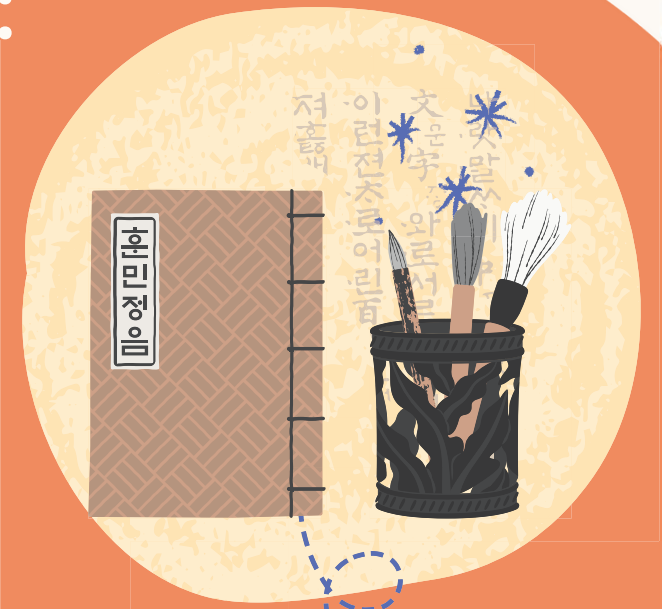


Innovating Korean Language Teaching with AI: Tools, Techniques, and Trends

Na-Young Ryu
Penn State University



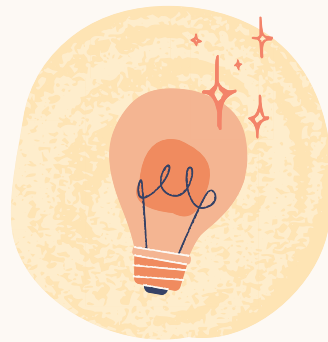
Feb 20, 2025

Key Takeaways



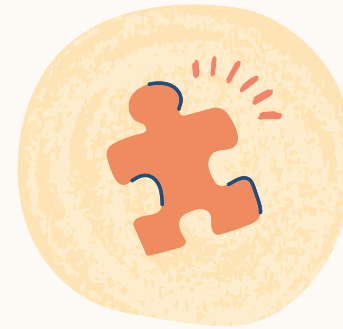
AI technology in language education

- Understand the role of AI in language education.
- Explore AI tools for Korean grammar, vocabulary, writing, and pronunciation.



Hands-on activities

- Engage in hands-on activities with AI chatbots and TTS applications.
- Develop guidelines for project-based learning with AI technology.



Implications of AI tools in language teaching

- Reflect on the impact of AI in Korean language teaching.
- Discuss the implications of AI tools in Korean language teaching.

1. AI in Education: Transforming Learning

- AI tools (e.g., ChatGPT) personalize learning, provide instant feedback, and offer accessible resources (Cehn et al., 2020; George & Wooden, 2023).
- AI creates engaging learning environments, adapting to individual student needs (Luckin et al., 2016).

1. AI in Education: Transforming Learning

[Impact on students]

- **Self-Efficacy:** Enhanced through immediate feedback and support (Holmes, Bialik, & Fadel, 2019).
- **Intrinsic Motivation:** Boosted by personalized learning, fostering competence and autonomy (Ryan & Deci, 2000).
- **Self-Regulation:** Improved via structured learning paths and performance analytics (Holmes, Bialik, & Fadel, 2019).

1. AI in Education: Transforming Learning

[Challenges of AI in education]

- **Data Privacy:** AI relies on sensitive student data; risks include breaches and misuse.
- **Over-Reliance:** Excessive use of AI may reduce human interaction and authentic communication.
- **Critical Thinking:** Quick AI solutions can hinder deep engagement with language concepts (Guerra-Carrillo, Katovich, & Bunge, 2017).

1. AI in Education: Transforming Learning

[AI tools in Korean language education]

- **AI Models:** ChatGPT, Copilot, Meta AI, Gemini, DeepSeek for grammar explanations, vocabulary learning and conversational practice.
- **AI Chatbots:** Sejong AI Tutor, Langotalk, Eggbun for Korean speaking practice and real-time feedback.
- **Text-to-Speech Applications:** Elevenlabs and Clova Dubbing for pronunciation practice and listening comprehension.

2. Using AI for Korean Grammar and Vocabulary Learning

- **[Hands-on activity] Use ChatGPT, Copilot, Gemini, Meta AI or DeepSeek to explain Korean grammar and vocabulary.**
- 



Hi, I'm DeepSeek.

How can I help you today?

"Show how to conjugate the verb 'to eat' (먹다) in present, past, and future tenses."

DeepThink (R1) Search

ChatGPT

What can I help with?

"Provide a dialogue in Korean between two friends meeting after a long time, focusing on everyday vocabulary."



Search



Reason





Gauge the temperature

Give me a concise summary of recent news about [product or company]

Have a laugh

Suggest 5 office-friendly jokes.

Start your research

How have world literacy rates changed in the past 30 years?

Compare trends

Compare 10 of the most innovative and creative workplace designs

CSS at a glance

What are three popular CSS techniques to lay out responsive web apps?

Build good habits

Suggest a daily routine to help me stay organized at work

View prompt

Explain how to use '-기 때문에' vs. '-아서/어서' to express reasons, with example sentences."

85 / 128000

Ask Meta AI anything



Make my email sound more professional



Thrift fashion reels



Explain how to use '-기 때문에' vs. '-아서/어서' to express reasons, with example sentences



GRAMMAR LEARNING USING LANGUAGE MODELS

1. Simple Words and Phrases:

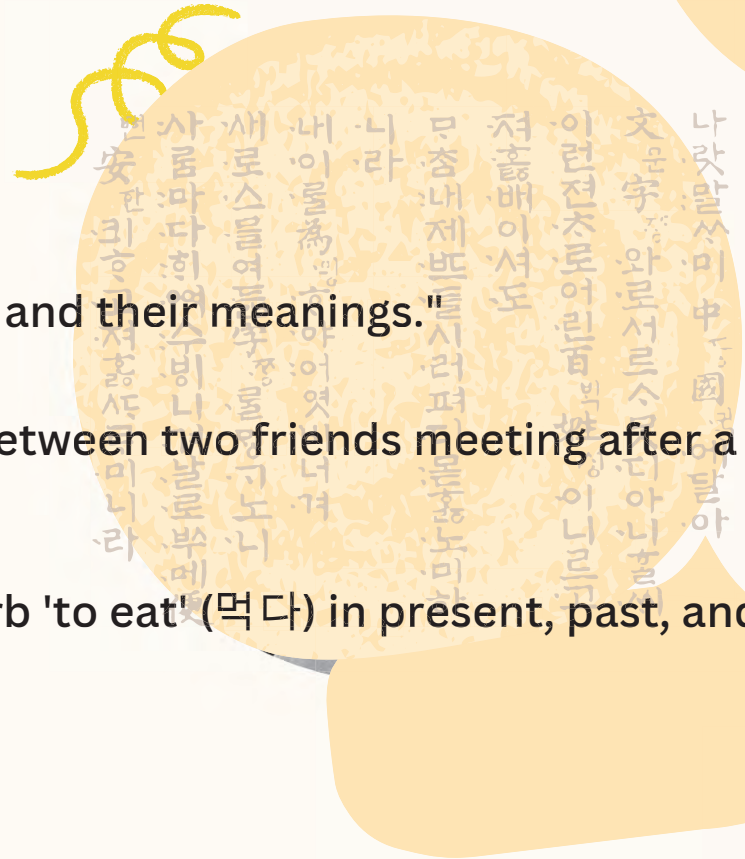
- Prompt: "List common Korean greetings and their meanings."

2. Contextual Vocabulary:

- Prompt: "Provide a dialogue in Korean between two friends meeting after a long time, focusing on everyday vocabulary."

3. Verb Conjugation:

- Prompt: "Show how to conjugate the verb 'to eat' (먹다) in present, past, and future tenses."



VOCABULARY LEARNING USING LANGAUGE MODELS

1. Understanding Particles (은/는, 이/가, 을/를, etc.)

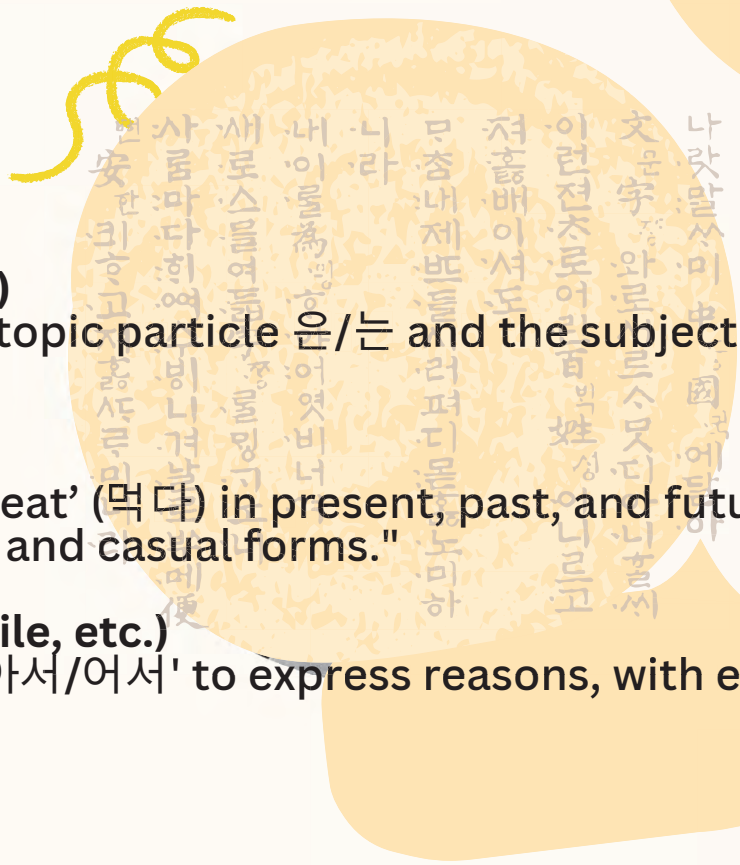
- Prompt: "Explain the difference between the topic particle 은/는 and the subject particle 이/가 with example sentences."

2. Verb Conjugation & Honorifics

- Prompt: "Show how to conjugate the verb 'to eat' (먹다) in present, past, and future tenses, including polite (-요), formal (-습니다), and casual forms."

3. Complex Grammar Structures (Because, If, While, etc.)

- Prompt: "Explain how to use '-기 때문에' vs. '-아서/어서' to express reasons, with example sentences."





HANDS-ON ACTIVITY: EXPLORING KOREAN VOCABULARY AND GRAMMAR (15 MINUTES)

(1) Vocabulary Explanation Task:

[Intermediate level]

끝나다 vs. 마치다 / 느낌 vs. 기분 / 요새 vs. 요즘 /
아까 vs. 방금 vs. 조금 전 / 깎다 vs. 자르다 / 상하다 vs. 망가지다
지각하다 vs. 늦다



(2) Grammar Explanation Task:

[Beginner level] Korean particle 에 vs. 에서
[Intermediate level] 어서/아서 vs. 느라고





HANDS-ON ACTIVITY: EXPLORING KOREAN VOCABULARY AND GRAMMAR (15 MINUTES)



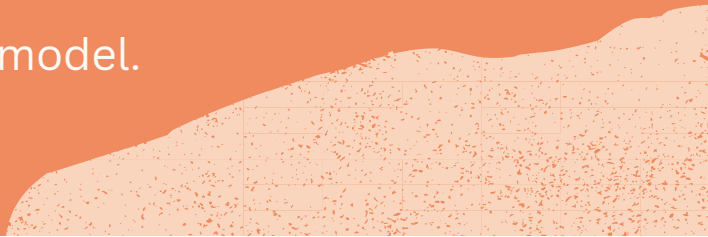
Step 1: Peer Discussion (5 minutes)

- Explain the given words and grammar to each other.
- Share your understanding and clarify any doubts.

Step 2: Language Model Exploration (7 minutes)

- Use language models (ChatGPT, Meta AI, Gemini, Copilot, DeepSeek) to explore and explain:
 - Differences in similar vocabulary
 - Grammar rules and exceptions

Step 3: Comparison and Discussion (3 minutes)

- Share your thoughts on the answers provided by each language model.
 - Discuss which tool is most effective for explaining Korean vocabulary and grammar.
 - Compare the strengths and weaknesses of each model.
- 
- 
- 

3. Using AI for Korean Writing Practice

[Writing revision with language models]

- Use AI-powered language models (e.g., ChatGPT, Meta AI) to revise and refine Korean writing samples.

[Student reflections]

- Reflect on the experience of using AI for writing revision.



EFFECTIVE WRITING REVISION WITH COPILOT

What is Copilot?

Copilot is an advanced AI-powered writing tool that assists with grammar and spelling checks, clarity improvement, and vocabulary enhancement. Utilize Copilot to refine your writing skills and produce polished texts.

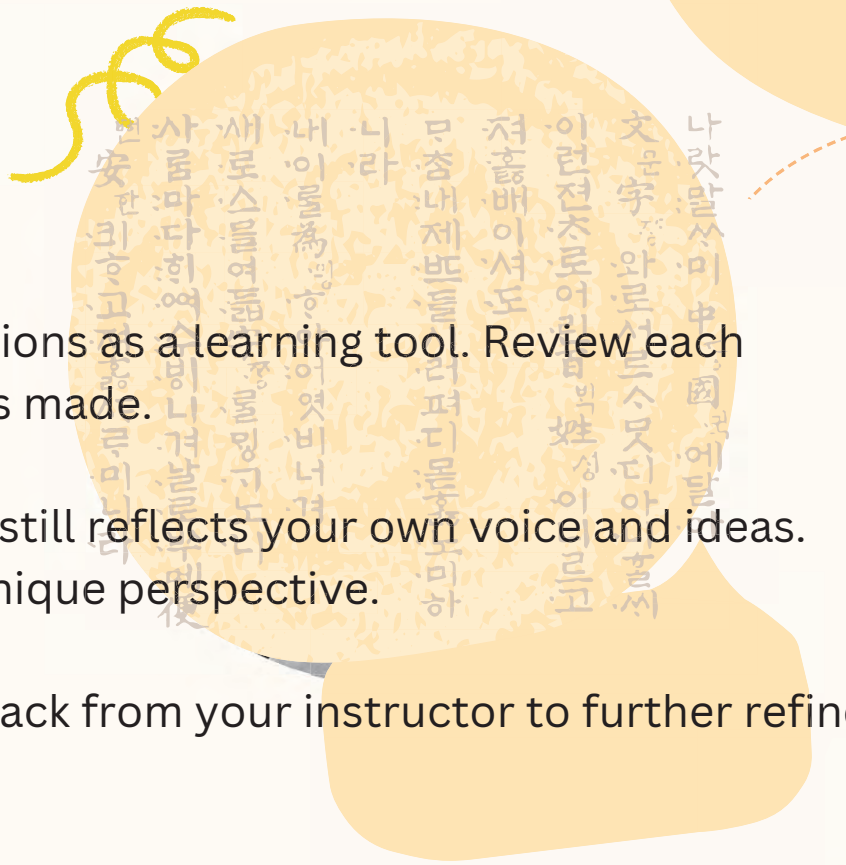
How Copilot Can Help You

- **Grammar and Spelling Checks:** Identify and correct errors in grammar, spelling, and punctuation.
- **Clarity and Conciseness:** Rephrase sentences for enhanced clarity, concision, and readability.
- **Vocabulary Enhancement:** Discover more varied and sophisticated vocabulary options.

EFFECTIVE WRITING REVISION WITH COPILOT

How to Use Copilot Effectively

- **Be Active in the Process:** Use Copilot's suggestions as a learning tool. Review each suggestion carefully and understand why it was made.
- **Maintain Your Voice:** Ensure that the final text still reflects your own voice and ideas. Copilot is there to assist, not to replace your unique perspective.
- **Seek Feedback:** After using Copilot, seek feedback from your instructor to further refine your writing skills.



나랏말싸미
文은 字와로
이런 전초로
저 흠배이셔
무춤내 제
니라
내이를
새로스를
사름과다
안관
중
어
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에
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스
못
디
아
홀
씨
성
이
고

EFFECTIVE WRITING REVISION WITH COPILOT

Step-by-Step Guide for Using Copilot

- **Log in:** Visit copilot.cloud.microsoft.com. It is available for free for PSU students.
- **Paste Your Text:** Copy and paste your text into Copilot. Please copy each paragraph individually, not the entire script.
- **Use the Prompt Below to Check for Grammar and Spelling Errors:**
 - **Prompt: “Please check my text for any grammar and spelling errors.”**
- **Use the Prompt Below to Improve Clarity and Conciseness:**
 - **Prompt: “Can you rephrase my sentences to improve clarity and conciseness?”**

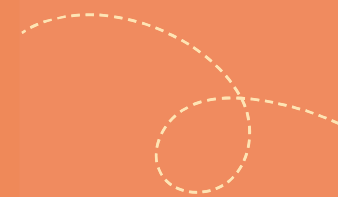
EFFECTIVE WRITING REVISION WITH COPILOT

- **Use the Prompt Below to Enhance Vocabulary:**
 - **Prompt: “Could you suggest more varied and sophisticated vocabulary for my text?”**
- **Review and Correct:** Review the suggestions and make the necessary corrections.
- **Reflect on Your Experience:** Write about your experience using Copilot for your writing revision. This should be about 100 words, either in English or Korean.





[Instructions for using Copilot for writing revision]



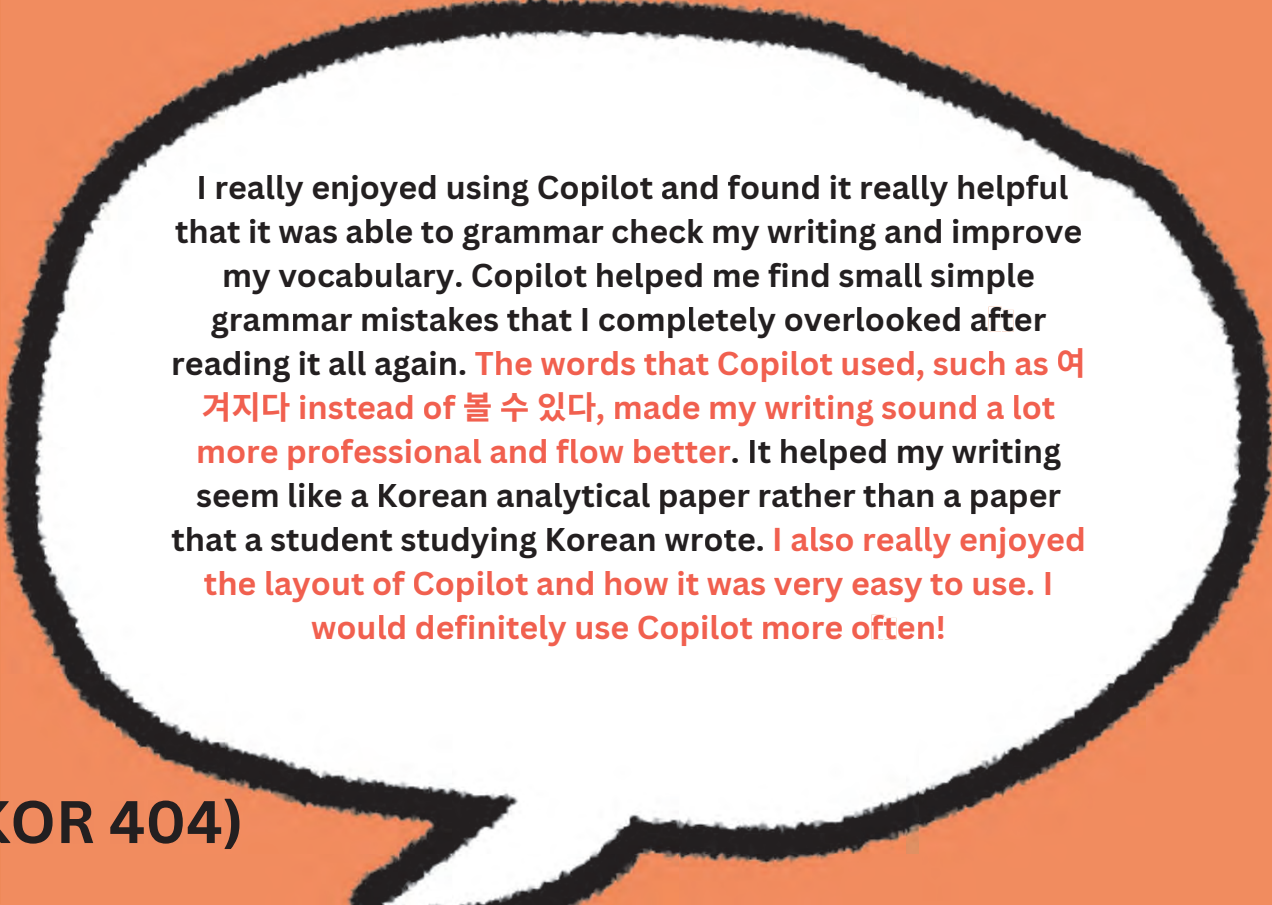
Students' reflections on using Copilot for writing revision

Using Copilot for my writing was extremely helpful, even though it was my first time using it. I was able to identify and learn from the areas lacking in my writing. The clear instructions made the process quite simple and efficient, and it didn't take as much time as I initially thought, which was fantastic. I appreciated the suggestions provided; they made a lot of sense and were easy to understand.

Overall, Copilot's assistance significantly improved my writing skills and boosted my confidence in producing well-structured and error-free writing. I also found the experience enjoyable and engaging, making the learning process even more rewarding.

트니 (Spring 2025, KOR 404)

Students' reflections on using Copilot for writing revision



I really enjoyed using Copilot and found it really helpful that it was able to grammar check my writing and improve my vocabulary. Copilot helped me find small simple grammar mistakes that I completely overlooked after reading it all again. **The words that Copilot used, such as 여겨지다 instead of 볼 수 있다, made my writing sound a lot more professional and flow better.** It helped my writing seem like a Korean analytical paper rather than a paper that a student studying Korean wrote. **I also really enjoyed the layout of Copilot and how it was very easy to use. I would definitely use Copilot more often!**

키라 (Spring 2025, KOR 404)

Students' reflections on using Copilot for writing revision

I appreciate using CoPilot for help with grammar and spelling, especially with particles, which continue to be my biggest challenge. I also think prompting CoPilot to enhance vocabulary by suggesting more varied and sophisticated options can be quite useful. I used several suggestions from CoPilot of words that I haven't used before, like 부합하다 instead of 맞다. However, I think there are inconsistencies within CoPilot that make me hesitant to ask it for assistance with certain things. For example, the prompt for clarity and conciseness cut my sentences too short and took away my writing voice, and directly conflicted with its suggestions for varied vocabulary. For example, one of my original sentences included 국가, but the clarity and conciseness prompt recommended replacing it with 나라 while the varied vocabulary prompt suggested 국가. Additionally, I chose to use plain form in my writing, which CoPilot originally kept for consistency in the first two paragraphs, but by the third paragraph, it began suggesting the deferential form. One last thought: since I am still slower at reading 한글, it was sometimes difficult to compare all the recommendations to my original sentences and recognize especially subtle differences.

사라 (Spring 2025, KOR 404)

4. Using Text-To-Speech (TTS) Applications for Korean Pronunciation Practice

- **Introduction to TTS tools**
- **[Hands-on activity] Practice with Elevenlabs and Clova Dubbing**



TEXT-TO-SPEECH TECHNOLOGY

- **Text-to-speech (TTS) technology** is a revolutionary tool that converts written text into natural-sounding spoken language. This innovative technology uses specialized software and algorithms to synthesize human-like speech, enabling users to access information and communicate more easily.
- **Assistive Technology:** TTS helps individuals with visual impairments, dyslexia, or reading difficulties to access written content.
- **Audiobooks and Podcasts:** TTS enables the creation of audiobooks and podcasts, making written content more accessible and enjoyable.
- **Virtual Assistants:** TTS powers virtual assistants like Siri, Alexa, and Google Assistant, allowing users to interact with devices using voice commands.

ENHANCING LANGUAGE SKILLS WITH TTS TOOLS

- **Improved Pronunciation:**

- TTS tools help learners hear and practice correct pronunciation, improving sounds and intonation.

- **Listening Practice:**

- Provides a clear audio model for learners to hear native-like speech patterns and pacing.

- **Fluency Development:**

- Mimicking TTS models improves fluency and encourages speaking practice with accurate pronunciation.

- **Multilingual Support:**

- Supports multiple languages, allowing learners to practice in different linguistic contexts.

RECOMMENDED AI VOICE GENERATORS FOR LANGUAGE LEARNING

11-LABS

www.elevenlab.io

offers realistic and captivating speech in 29 languages

LOVO

www.lovo.ai

offers hyper realistic AI voices
500+ voices in 100 languages

MURF

www.murf.ai

offers over 100 AI voices in 20 languages
modifies tone, pitch and speed
Add pause
Adjust the emphasis

POPULAR AI VOICE GENERATORS

GOOGLE TEXT-TO SPEECH

provides natural sounding voices in multiple languages

AMAZON POLLY

offers lifelike voices and supports multiple languages

IBM WATSON TEXT TO SPEECH

offers natural-sounding audiotapes and supports multiple languages

Find Your Perfect Voice

120+ voices, 20+ languages

Search by voice name

Apply voice to entire project

English - US & Can...
Male Female Non-Binary
All age groups
Hide Pro Voices

Reset Filters

Choose a voice style

- Promo
- Conversational
- Calm
- Narration
- Storytelling
- + more

Tailor-made voices for

- E-Learning & Presentations
- Podcasts/ Audio Blogs
- Advertisements
- + more

| | | | | | | |
|--|---|--|---|--|--|---|
| Natalie (F) Young Adult PRO | Terrell (M) Middle-Aged PRO | Clint (M) Middle-Aged PRO | Carter (M) Middle-Aged PRO | Miles (M) Young Adult | Delliah (F) Young Adult PRO NEW | Jayden (M) Middle-Aged PRO NEW |
| Amara (F) Young Adult PRO NEW | Charles (M) Middle-Aged PRO | Molly (F) Young Adult PRO NEW | Julia (F) Young Adult PRO | Caleb (M) Middle-Aged PRO NEW | Alicia (F) Young Adult PRO | Josie (F) Middle-Aged PRO NEW |
| Finn (M) Middle-Aged PRO | Brianna (F) Young Adult PRO | Ronnie (M) Young Adult PRO | Marcus (M) Young Adult PRO | Daniel (M) Young Adult PRO | June (F) Middle-Aged PRO NEW | Clara (F) Middle-Aged PRO NEW |
| Samantha (F) Young Adult PRO | River (NB) Young Adult PRO NEW | Wayne (M) Middle-Aged PRO | Daisy (F) Young Adult PRO | Ken (M) Middle-Aged PRO | Michelle (F) Young Adult PRO | Dylan (M) Middle-Aged PRO |
| Evander (M) Middle-Aged PRO NEW | Cooper (M) Young Adult PRO | Naomi (F) Middle-Aged | Claire (F) Middle-Aged | Iris (F) Young Adult | Lucas (M) Middle-Aged | Julie (F) Middle-Aged |

TEXT TO SPEECH

VOICE CHANGER

DUBBING

TEXT TO SFX

VOICE CLONING

안녕하세요. 만나서 반갑습니다. 저는 펜실베이니아 주립 대학교에서 한국어를 강의하는 류나영이라고 합니다. 오늘 한국어를 AI 기술을 이용해서 어떻게 가르칠 수 있는지에 대해서 제 경험을 공유하고자 합니다.



TELL A STORY

INTRODUCE A PODCAST

CREATE A VIDEO VOICEOVER

BRIAN

115/500



Voice AI



EXPERIENCE THE FULL AUDIO AI PLATFORM

GO TO APP

HANDS-ON ACTIVITY: EXPLORING TTS FOR KOREAN SPEECH (7 MINS)

1.Objective:

Compare the voice quality of Korean speech generated by two Text-to-Speech (TTS) platforms and discuss potential applications for Korean language learning.

2.Visit the following websites:

- **Elevenlabs: <https://elevenlabs.io>**
- **Clova Dubbing: <https://clovadubbing.naver.com>**

3.Create Korean speech using both platforms.

4.Compare the voice quality, intonation, and naturalness of the generated speech.

[Instructions for improving Korean speaking using Clova Dubbing AI voice generator]



5. Using AI Chatbots for Korean Speaking Practice

- **AI Chatbots in language education: Benefits and challenges**
- **[Hands-on activity] Explore Sejong AI Tutor and Langotalk**



AI CHATBOTS IN LANGAUEG EDUCATION

Benefits:

- Automate repetitive tasks (Zhang & Aslan, 2021)
- Offer personalized learning experiences
- Improve student engagement and motivation (Pedro et al., 2022)
- Provide instant feedback and support self-paced learning
- Enhance conversational practice, vocabulary acquisition, and grammar reinforcement (Tlili et al., 2022)

AI CHATBOTS IN LANGAUEG EDUCATION

Challenges:

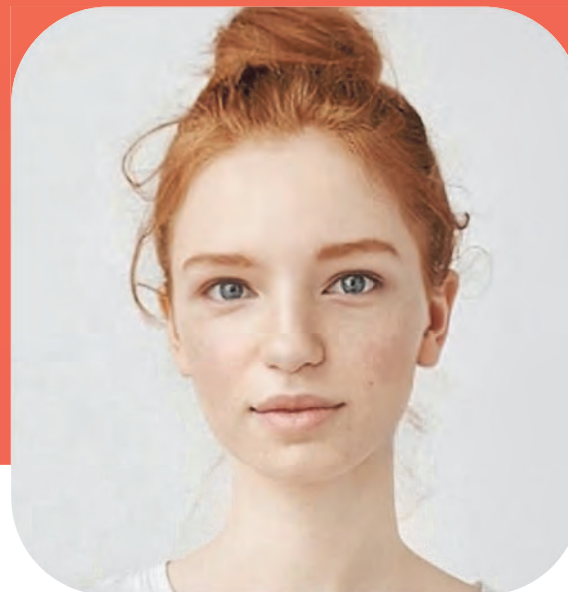
- **Natural Language Processing (NLP) limitations:** Understanding nuances of language, idioms, and context.
- **Accents and pronunciation:** Recognizing and responding to different accents and pronunciation.
- **Conversational flow:** Creating natural and engaging conversations.

AI CHABOTS FOR FOREIGN LANGUAGE LEARNING



King Sejoing Institute AI teacher

Choose a conversation topic and practice various Korean conversations based on different situations



chat.d-id.com

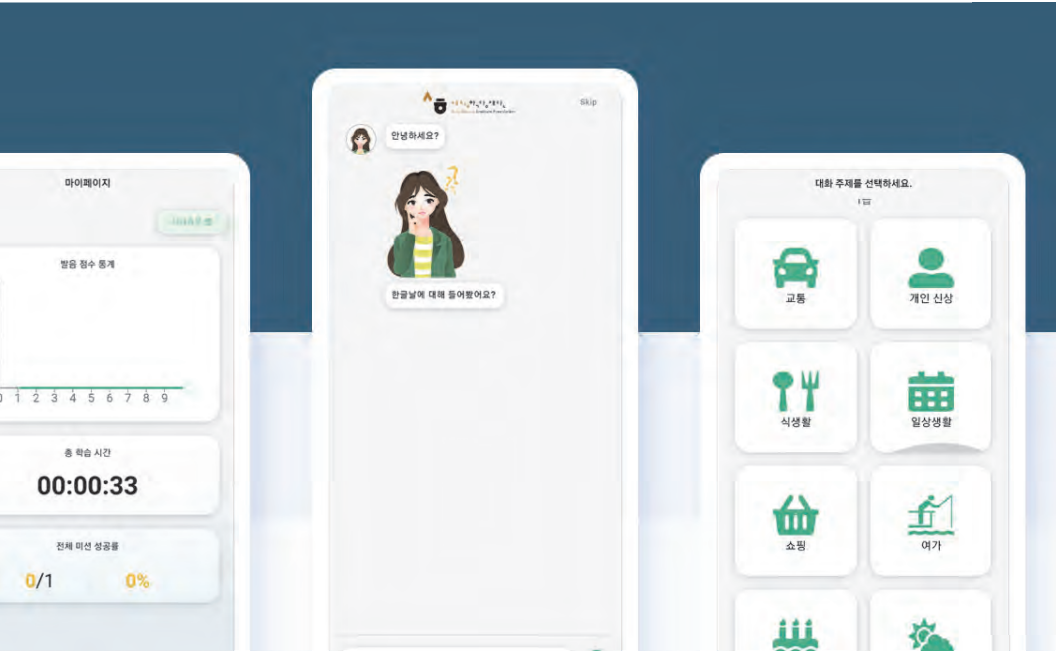
Face-to Face conversational AI chatbot
Choose your avatar and voice
Powered by ChatGPT



www.langotalk.org

Support 19+ different languages
Speak just like you would with a friend or a teacher
Powered by GPT-4





Example: Using the Sejoing AI tutor chatbot for Korean speaking practice











Example: Using the Langotalk chatbot for Korean speaking practice

Starter Chats

Free tier: 5 messages left [Upgrade](#)

| | | | |
|---|---------------------|---|---------------|
|  Langa Learn about Langotalk Start Here | Introduction |  Sophie Just a friendly chat | Friend |
|  Noah Get travel tips | Travel Guide |  Emily Ready for our date? | Date |

Categories

| | | | | |
|--|--|---|--|--|
|  Your Chats 5 Chats |  Friendly 8 Chats |  Beginner Friendly 5 Chats |  Roleplay 8 Chats |  Professional 4 Chats |
|  Fun 5 Chats |  Practice Tools |  Created | | |



HANDS-ON ACTIVITY: EXPLORING AI CHATBOTS FOR KOREAN LANGUAGE LEARNING (10 MINS)

1. Objective:

Investigate the capabilities and effectiveness of AI chatbots in supporting Korean language learning.

2. Instructions:

- Download and install one of the following AI chatbot apps on your smartphone:
 - 세종어학당 AI 선생님 (Sejong AI Tutor)
 - Langotalk
- Launch the app and explore its chatbot features.
- Engage in conversations with the chatbot to practice your Korean language skills.

3. Reflection:

- How effective is the chatbot in supporting your Korean language learning?
- What are the strengths and weaknesses of the chatbot's responses?
- How can AI chatbots be used to supplement traditional language learning methods?

6. Project-Based Learning with AI Technology

- **Showcase student work: “My Korean Language Journey at Penn State University” video**
 - **[Hands-on activity] Develop Guidelines for an AI-powered video project**
- 

MY KOREAN LANGUAGE JOURNEY: A MULTIMEDIA PORTFOLIO

- **Task: Creating a Multimedia Portfolio - My Korean Language Journey at Penn State University.**
- **Objective: Design a multimedia portfolio that showcases your Korean language learning experience, demonstrates your communication skills, and shares your enthusiasm for Korean language and culture.**

STUDENT WORK

“MY KOREAN LANGUAGE JOURNEY AT PSU”

NAUMOVA, MARINA (KOR 402, FALL 2024)

나랏말싸미 다방언어에 달아
文(문)을 와로서 르
이런 전초로 어 린
저 흙배이셔도
무춤내 제브들 시러
니라
내이를 爲 하야어 너겨
새로스를 여 품
사름과 다히여 스비
안관 키고겨 할
미니라
날로부
이니크
디아니
에달아



Hello, my name is Marina and I am a 4th year Biology major.



HOME > UNDERGRADUATE > KOREAN

Undergraduate

VIEW COURSES IN ASIAN STUDIES

[Asian Studies](#)

[Chinese](#)

[Japanese](#)

[Korean](#)

[Hindi and South Asian Studies](#)

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[Janssen Award](#)

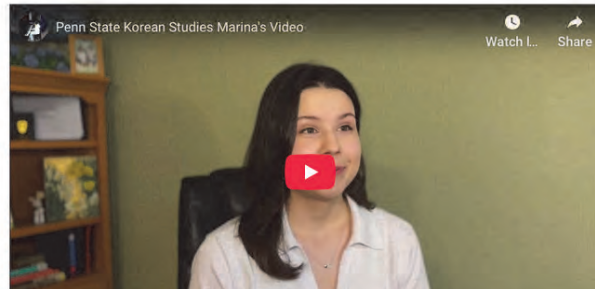
[Fellowship and Scholarship Opportunities](#)

Korean

Korea has played a vital role in the history and culture of the Asian region for more than 3,000 years. Today, Korea is a global leader in information and communication technologies and has shown global competitiveness in the production of automobiles, smart phones, semiconductors, chemicals, steel, and ships. Additionally, Korean popular culture ("K-pop") is a cultural juggernaut, pulling in worldwide audiences in a variety of areas, including television programs, films, music, video games, e-sports, beauty, cuisine, and much more.

The Department of Asian Studies at Penn State is the first university in Pennsylvania to offer a B.A. in Korean. We offer a variety of courses that enable students to explore K-pop culture, history, literature and film, linguistics, and media and communication. We also offer all levels of the Korean language, from elementary to advanced. Hangeul, the Korean alphabet, is very easy to learn and use! Language courses place strong emphasis on enhancing the language proficiency in all four skills (i.e., listening, speaking, reading, and writing) as well as intercultural competence.

The strength of the Korean major at Penn State derives from its academic rigor and excellent teaching by faculty and language instructors, who offer cutting-edge instruction in a culturally diverse and academically vibrant environment. We also promote cultural activities and events and provide scholarship opportunities and resources to enrich the study of Korea across the Penn State commonwealth in order to strengthen students' intercultural and global awareness.



HANDS-ON ACTIVITY:DESIGNING GUIDELINES FOR VIDEO SUBMISSIONS (10 MINS)

1. Objective:

Collaborate with peers to create guidelines for video submissions that showcase Korean language skills, incorporating writing, speaking, and video creation using technology.

2. Instructions:

Discuss and brainstorm the following:

- **What are the essential components of a video submission that demonstrates Korean language skills?**
- **How can technology be utilized to enhance writing, speaking, and video creation?**

3. Create a set of guidelines that addresses the above considerations.



Instructions for multimedia portfolio: My Korean language journey

**Student sample:
Writing revision using Copilot**



7. Implications of AI Tools in Korean Language Teaching

- **Insights into AI's impact on teaching and learning**





What should new teachers consider when integrating AI tools?



1. Be open to new technologies:

- Stay updated on AI developments in language education.
- Experiment with new tools and share insights with colleagues.

2. Balance technology with traditional methods:

- AI should complement, not replace, human interaction.
- Use AI to enhance, not overshadow, the cultural and interpersonal aspects of language learning.

3. Ensure accessibility and equity:

- Make sure all students have access to the necessary tools.
- Address potential barriers (e.g., cost, technical skills, or internet access).



4. Encourage student autonomy:

- AI tools empower students to take charge of their learning.
- Provide guidance on how to use AI tools effectively and responsibly.

5. Collaborate with other language teachers:

- Share experiences, lesson plans, and best practices with colleagues.
- Learn from other teachers who are using AI tools in their classrooms.

6. Be open to students' feedback:

- Regularly ask students for their input on AI tools and activities.
- Use their feedback to refine your teaching methods and tool selection.



Discussion & Reflection





Questions for reflections

- ✓ How can AI enhance the Korean language learning experience for your students?
- ✓ What challenges might you face when using AI in your teaching?
- ✓ How can you incorporate AI tools into your own teaching practices?



Conclusion





Summary

- ✓ AI tools like writing assistants, text-to-speech apps, and chatbots are transforming how we teach and learn Korean.
- ✓ These tools provide personalized feedback, promote autonomous learning, and enhance engagement in language practice.
- ✓ Thoughtful integration and continuous adaptation to new AI advancements are key to effective teaching.



Thank you
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nmr5569@psu.edu

