

Balancing Benefits and Risks: University Students' Perspectives on GenAI Integration in English Language Learning

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Introduction

Generative AI tools such as ChatGPT and Grammarly are increasingly transforming English language classrooms worldwide. These sophisticated technologies offer real-time feedback, dynamic content generation, and seamless translation capabilities, fundamentally reshaping how English Language Learners (ELLs) approach their language acquisition journey.

Modern AI tools provide comprehensive support through grammar correction, contextual vocabulary suggestions, and intelligent content summaries. These capabilities facilitate multimodal, self-paced learning environments that align perfectly with established learner autonomy principles, empowering students to take greater control of their educational experience.

However, risks include:

Over-Reliance on AI-generated answers

Students may become dependent on AI solutions without developing independent problem-solving skills or critical analysis capabilities.

Academic dishonesty

The ease of AI-generated content raises concerns about plagiarism and authentic assessment of student learning and original thought.

Reduced critical thinking

Excessive AI assistance may diminish students' ability to engage in deep analytical thinking and creative problem-solving processes.

Inaccurate or biased responses from AI tools

AI systems can perpetuate misinformation, cultural biases, or provide contextually inappropriate responses that mislead learners.

Literature Review

One comprehensive study by **Chan and Hu (2023)** surveyed 399 undergraduate students from various disciplines to explore their perceptions of ChatGPT. The research revealed significant benefits alongside notable concerns.

Despite the recognized advantages, students expressed substantial concerns about the accuracy of ChatGPT's results, privacy issues, moral implications, and potential impacts on their personal growth, future job prospects, and broader societal values.

Abbas et al. (2024) expanded on these concerns by examining the broader consequences of GenAI usage among university students. This research underscores the critical importance of carefully considering the circumstances under which academic settings introduce GenAI and strategically frame its use to avoid unintended negative consequences.

Literature Review

Song and Song (2023) highlighted diverse perspectives among students, with some acknowledging the innovative role of GenAI in enhancing writing skills and motivation. Beyond exploring the technical aspects of ChatGPT's utility, several studies have focused on the varying perceptions of its appropriate use in the writing process.

Barrett and Pack (2023) noted that both students and institutions require more time to utilize ChatGPT effectively, necessitating clear instructions and comprehensive professional development programs for teachers to maximize its educational potential.

Context of the Study

Tech-Rich Environment

South Korea offers a uniquely advanced tech-rich educational environment where English proficiency is not only highly valued but considered essential for academic and professional success. The country's robust digital infrastructure supports innovative educational technologies.

AI Integration

While AI tools are being rapidly introduced into educational settings, understanding ELLs' perspectives and experiences remains essential for developing sustainable, effective AI integration strategies that benefit learners long-term.



Research Purpose

This study aims to investigate the multifaceted impact of Generative Artificial Intelligence (GenAI) on university students' learning experiences within English language education contexts. Specifically, the research seeks to examine three critical dimensions of student engagement with GenAI technologies that directly influence learning outcomes.

The investigation focuses on **motivational outcomes** that drive student engagement, **cognitive processing demands** that affect learning efficiency, and **satisfaction levels** that determine long-term adoption and continued use of AI-enhanced learning environments.

Research Questions

01

Motivation Impact

How does the use of GenAI impact the motivation of university students in their English language learning journey?

02

Cognitive Load

How does using GenAI impact university students' cognitive load during English language learning tasks and activities?

03

Satisfaction

How does using GenAI impact university students' overall satisfaction with their English language learning experience?

Study Participants

The study included university students enrolled in English language courses at Changwon National University in South Korea. Participants represented diverse academic backgrounds and English proficiency levels, providing a comprehensive sample for analyzing GenAI's impact across different learner profiles. All participants had prior experience with traditional English learning methods, allowing for meaningful comparisons with AI-enhanced approaches.

Questionnaire

We employed a comprehensive end-of-semester questionnaire to collect quantitative data on three key areas: **(1) motivation**, **(2) cognitive load**, and **(3) satisfaction**. The survey instrument was carefully adapted from **Woo et al.'s (2024)** validated study, featuring 29 strategically designed questions.

The questionnaire utilized Likert-scale responses to capture nuanced student perceptions and experiences. This methodological approach ensured reliable, quantifiable data collection while maintaining sensitivity to individual differences in AI technology adoption and usage patterns.

TABLE 2
Questionnaire structure and reliability

Category	Number of questions	Cronbach's alpha
Motivation	7	.876
Cognitive	8	.853
Satisfaction	14	.941
All questions	29	.933

How AI is Used for General English Courses



Listening

NotebookLM provides personalized audio content generation, creating engaging listening materials tailored to student interests and proficiency levels.



Speaking

Soulmachines and DelphiAI offer conversational practice with AI-powered digital humans, providing safe spaces for speaking practice and pronunciation improvement.



Writing

Grammarly and Quillbot enhance writing skills through real-time feedback, grammar correction, and style suggestions for improved clarity and coherence.



Reading

ChatGPT with CEFR functionality provides leveled reading comprehension support, vocabulary assistance, and contextual explanations for improved understanding.

NotebookLM

<https://notebooklm.google.com/>

AI in Korean Education: Transformation and Applications

이 자료들은 한국 교육 내 인공지능(AI)의 통합, 특히 영어 교육에 미치는 영향을 초점을 맞추고 있습니다. 이를 통한 개인 맞춤형 학습 경험, 즉각적인 피드백, 그리고 교사 지원과 같은 이점들이 강조됩니다. 또한, AI 디지털 교과서의 정부 정책, 온라인 학습의 중요성, 그리고 듣기, 말하기, 읽기, 쓰기와 같은 특정 언어 능력 향상을 위한 실제 AI 도구 및 응용 사례들을 다룹니다. 이 자료들은 AI를 교육에 도입할 때의 기회와 과제를 모두 탐색하며, 교사 재교육과 학생 안전까지 포괄적으로 설명합니다.

Briefing Document: AI in Korean Education - Transforming English Language Teaching

Source: Excerpts from "AI in Korean Education: Transforming English Language Teaching" (Presentation Transcript)
Main Themes: This presentation focuses on the integration of Artificial Intelligence (AI) in Korean education, specifically within the context of English Language Teaching (ELT). It explores the opportunities, challenges, and practical applications of AI in various educational settings, from primary and secondary education to the university level. The presentation covers ethical considerations, government initiatives (AI digital textbooks), practical tools for different language skills (listening, speaking, reading, writing), and the potential of deepfake technology for multilingual communication. It also includes student perspectives on AI-integrated English learning.

Key Ideas and Facts:

- **Digital Transformation & the Role of AI:** The application of AI in education is driven by digital transformation. AI is seen as a pivotal tool for "enhancing teaching methodologies, personalizing learning experiences, and improving overall educational efficiency."
- **Advantages of AI in Education:** The presentation highlights three key benefits:
 - Instant feedback to students.
 - AI as a teaching assistant for teachers.
 - Personalized and adaptive learning to meet individual needs.
- **Ethical Considerations:** The presentation emphasizes the importance of ethical AI use, warning against simply "copying and pasting AI-generated content." It stresses the need to educate students on responsible AI usage as a learning enhancement tool rather than a shortcut.
- **AI Digital Textbook (AIDT) Policy:** The Korean government is actively promoting AI-powered digital textbooks. The goal is to "analyze students' learning patterns, provide personalized recommendations, and support differentiated instruction based on individual progress." A pilot program is being launched in English, Mathematics, and Information, with plans to expand to all subjects.
- **Teacher Retraining:** The presentation mentions professional development programs for teachers

NotebookLM revolutionizes personalized learning by allowing users to upload their own documents (PDFs, Google Docs, web articles), enabling the AI to generate contextually relevant responses based on personalized content. This ensures both relevance and contextual accuracy for individual learners.

The platform excels at generating concise, intelligent summaries of lengthy documents, making it significantly easier for ELLs to grasp main ideas, identify key themes, and understand complex academic content within their zone of proximal development.

A Sample Podcasting

Podcasting offers an authentic, conversational tool to engage ELLs.



This innovative feature transforms student-uploaded materials into engaging podcast-style discussions between AI hosts, creating authentic listening experiences that mirror natural conversational English while maintaining academic relevance and educational value.

[Listen to Sample Podcast](#)

Speaking: SoulMachines.com

<https://www.soulmachines.com/>



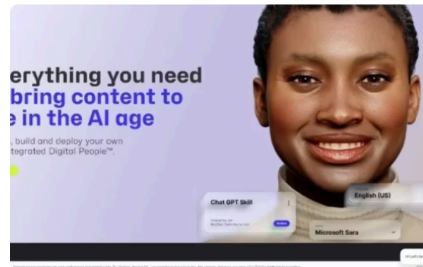
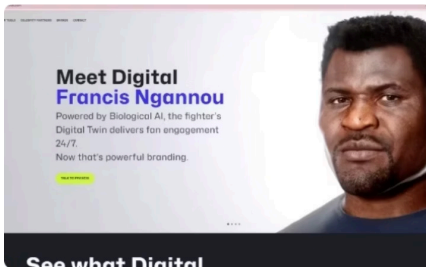
Digital Humans

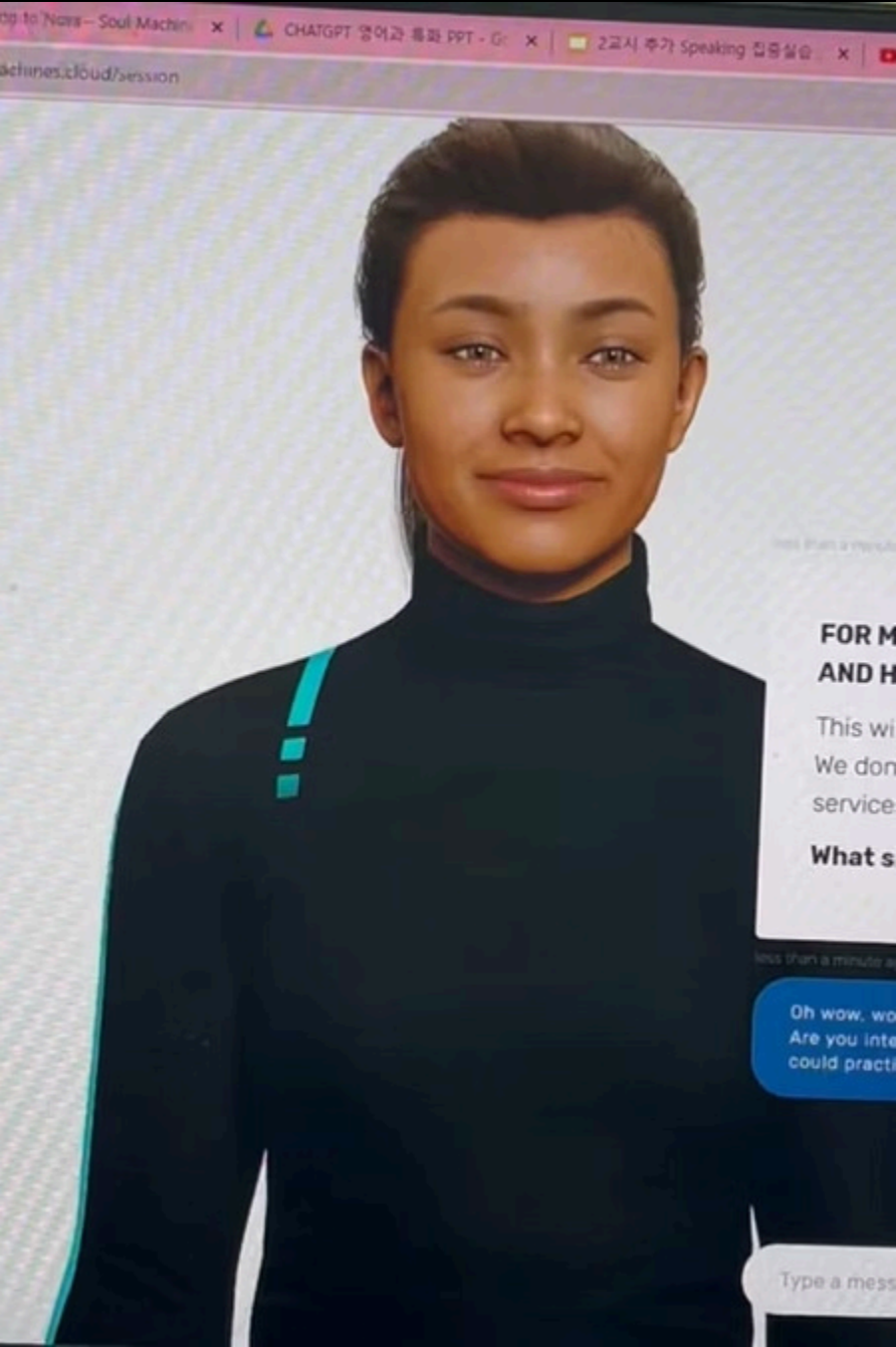
SoulMachines creates incredibly lifelike digital humans featuring realistic facial expressions, natural gestures, and authentic conversational abilities that provide ELLs with comfortable, non-judgmental speaking practice environments.



Conversational AI

The platform's advanced technology enables natural, human-like conversations with digital agents that can adapt to different proficiency levels, provide immediate feedback, and maintain engaging dialogue flows.





Demonstration Video: Example

<https://youtu.be/KL9RTgrZmCg>

Speaking practice with digital human

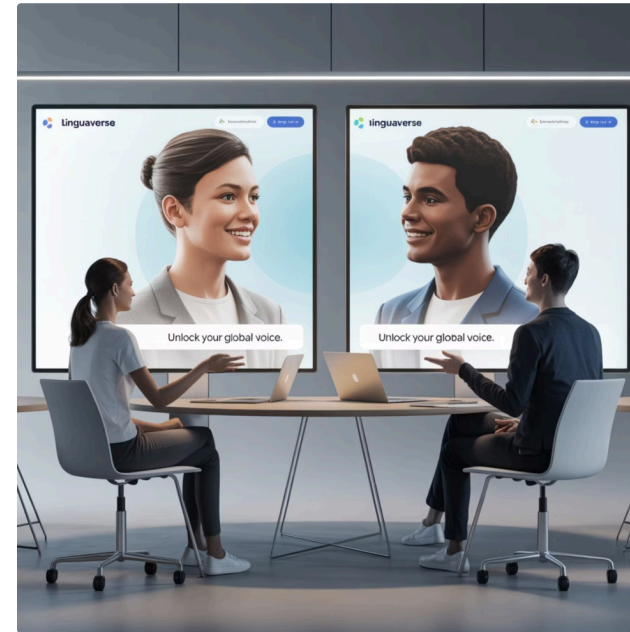
This demonstration showcases how ELLs can engage in meaningful, real-time conversations with AI-powered digital humans. The technology provides immediate pronunciation feedback, conversational flow guidance, and culturally appropriate responses, creating an immersive speaking practice environment that builds confidence and fluency.

Demonstration Video: Example

<https://www.delphi.ai/>

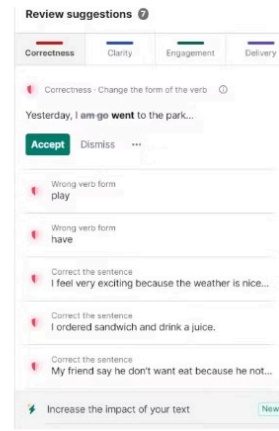
DelphiAI represents another innovative AI platform that enables ELLs to participate in authentic conference calls with various digital humans, creating opportunities for group conversation practice and collaborative speaking exercises.

This platform allows learners to practice both speaking and listening skills in simulated professional and social contexts, preparing them for real-world English communication scenarios with multiple participants and diverse conversational dynamics.

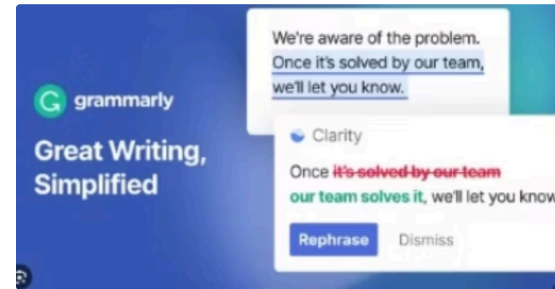


Writing: Grammarly

Yesterday, I am go to the park with my friend. We play many games and have fun, but it was very tiring. I feel very exciting because the weather is nice and sun is shining bright. After playing, we decide to eat lunch. I ordered sandwich and drink a juice. My friend say he don't want eat because he not hungry. After lunch, we take some pictures and walk around the park. It was great time, and I will remember it for long time.



Grammarly serves as a comprehensive AI-powered writing assistant that significantly enhances ELLs' writing capabilities through sophisticated grammar correction, spelling verification, and overall writing quality improvement.



The platform provides intelligent real-time feedback and contextual suggestions designed to enhance clarity, coherence, and overall communicative effectiveness, helping ELLs develop stronger writing skills through guided practice and immediate correction.

Writing: QuillBot

Paraphrasing Tool

QuillBot functions as an advanced AI-powered paraphrasing tool specifically designed to help ELLs rephrase, reorganize, and significantly improve their written communication while maintaining original meaning and intent.

Streamlined Writing

The platform helps users write more effectively by providing intelligent suggestions, alternative phrasing options, and comprehensive text improvements that enhance readability, flow, and overall communicative impact.

Results:

ELLs' Motivation to Learn About Generative AI

The motivation data reveals overwhelmingly positive student attitudes toward GenAI integration in English learning. Students demonstrated high levels of intrinsic motivation, expressing genuine interest in exploring AI capabilities and recognizing the practical value of these tools for their academic and professional development.

Particularly noteworthy was students' enthusiasm for continued learning about AI technologies, suggesting strong potential for long-term engagement and sustainable integration of AI tools in English language education programs.

Results:

ELLs' Cognitive Load to Learn About Generative AI

The cognitive load analysis revealed moderate levels of mental effort required for GenAI integration. While students generally managed the learning demands effectively, certain aspects of AI tool usage created noticeable cognitive challenges that warrant instructional attention and support.

Students particularly noted difficulties in understanding complex AI functionalities and occasionally felt overwhelmed by the multitude of features and options available. This suggests the need for scaffolded introduction and structured guidance in AI tool adoption.

Results:

ELLs' Satisfaction with Learning About Generative AI

Student satisfaction levels with GenAI-enhanced learning were remarkably high across all measured dimensions. Participants consistently rated their AI-enhanced learning experiences favorably compared to traditional English learning methods, indicating strong acceptance and perceived value.

The data suggests that students found AI tools not only helpful but genuinely enjoyable to use, with many expressing preferences for AI-enhanced learning environments over conventional instructional approaches. This positive reception bodes well for broader AI adoption in English education.

Discussion:

The comprehensive data analysis indicates that students consistently perceived learning with ChatGPT and other GenAI tools as highly engaging and educationally valuable experiences. The highest-rated survey item reflected students' recognition of GenAI's practical applications in real-world contexts, suggesting strong transfer potential.

Similarly, students' expressed interest in furthering their knowledge of GenAI technologies underscores its appeal as a contemporary, relevant learning tool that aligns with their academic and professional aspirations. This enthusiasm suggests sustainable long-term engagement with AI-enhanced learning environments.

Discussion:

Cognitive Load

The study's cognitive load analysis highlights a moderate level of mental effort associated with GenAI usage, with students identifying instructional methods and task complexity as primary sources of learning difficulty and occasional frustration.

Challenges

Participants reported specific challenges in understanding course requirements and felt frustrated during certain complex tasks. These challenges suggest that instructional design, including pacing and task complexity, may require better alignment with students' cognitive capacities.

Discussion:

Student satisfaction with the AI-based course was consistently high across all measured dimensions, clearly reflecting the approach's effectiveness in maintaining engagement and fostering genuine enthusiasm for English learning.

ELLs rated the AI-enhanced course favorably compared to other traditional courses they had previously attended, and the overall satisfaction scores indicate remarkably positive reception. Furthermore, the course's interactive design successfully sustained attention spans and promoted authentic enjoyment of the learning process.



ELT Instructor's Role:

1

Ethical Models

Instructors must provide clear, comprehensive models for ethical AI use, establishing guidelines that promote responsible integration while maximizing educational benefits and minimizing potential risks.

2

Critical Evaluation

Teachers should systematically train ELLs to evaluate AI output critically, developing students' ability to assess accuracy, relevance, and appropriateness of AI-generated content.

3

Curriculum Integration

Effective integration requires incorporating comprehensive AI literacy components into existing curriculum frameworks, ensuring sustainable and meaningful technology adoption.

Future Studies



Performance Measurement

Future research should incorporate comprehensive pre-test and post-test measurements of standardized English proficiency scores (such as TOEIC) to quantitatively assess GenAI's impact on actual language learning outcomes and skill development.



Expanded Focus

Additional research areas should include comprehensive AI literacy development, long-term retention studies, and cross-cultural comparisons to understand GenAI's broader educational implications across diverse learning contexts.



Conclusion:

Generative AI offers tremendously promising emotional and cognitive support for English Language Learners, demonstrating significant potential for enhancing motivation, managing cognitive load effectively, and increasing overall satisfaction with the learning experience.

With appropriate pedagogical guidance and structured support, students can develop into responsible, reflective AI users who leverage technology ethically while maximizing their English language learning potential. The future of ELT lies in thoughtful AI integration that empowers learners rather than replacing human insight and creativity.

Thank you!

Questions or comments are very welcome.

This research represents an important step toward understanding how AI can enhance English language education. We look forward to continuing this vital work and hearing your insights about AI integration in your own educational contexts.

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