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# **ChatGPT in English Language Learning: Exploring Perceptions and Promoting Autonomy in a University EFL Context**

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#### **Abstract**

Building on previous research, this qualitative exploratory study investigates the impact of ChatGPT on English language classes among Korean university students. The researcher uses pre- and post-training surveys, in-class observations, and interviews to explore 120 students' perceptions of their experiences over a 15-week semester. Results indicate largely positive attitudes, with students expressing optimism about ChatGPT's potential to enhance language skills. Classroom engagement was high, fostering collaboration and active participation. Post-training interviews revealed improved confidence, collaborative learning experiences, and a shift toward metacognitive awareness in learners and autonomous learning. Some technical and language challenges surfaced, as well as skepticism from a small number of learners. Long-term post-training surveys highlight sustained engagement and real-world applications. The findings provide insights for educators and policymakers considering the integration of AI tools in language education, emphasizing the importance of ongoing support and flexibility in implementation strategies.

*Keywords*: ChatGPT, AI technology, Language learning, Autonomous learning, Independent learning, EFL, Educational technology

Since its public launch in late 2022, ChatGPT, a robust chatbot powered by large language models, has gained rapid global recognition. The user-friendly application has achieved remarkable milestones, becoming the fastest-growing app in internet history (Hu, 2023). With its accessible interface and versatility, ChatGPT has found utility across a diverse user base, from parents and hobbyists to researchers and professionals. In addition, its free accessibility has further contributed to its widespread adoption. As this software continues to proliferate worldwide, it is poised to assume an increasingly prominent role in our daily lives, both domestically and professionally.

One of the domains that ChatGPT will continue to impact significantly is English as a Foreign Language (EFL) studies. Learners in contexts where English is not the primary spoken language often lack daily real-world exposure to the English language. For students learning in such contexts, ChatGPT offers easy access to accurate English language resources. Consequently, it might provide a realistic source of language exposure that learners can engage with meaningfully (Xiao & Zhi, 2023). Furthermore, if ChatGPT fosters learner independence, it could serve as a valuable supplement to, or even a replacement for, the classroom experience.

There has been a substantial influx of research into ChatGPT's role in education, yielding both positive and negative outcomes. The training provided in this trial study primarily aims to amplify and exemplify the positive effects while mitigating the negative ones. The current research pursues two primary objectives. First, it seeks to build on an exploratory study conducted by Xiao and Zhi (2023), which asked the question: *How do learners perceive the role of ChatGPT in English language learning?* Xiao and Zhi found that Chat GPT can be a valuable learning partner with the ability to provide immediate feedback and personalized learning experiences. They mentioned, though, that one of the methodological limitations of their study was its small sample size. The researchers went on to say that if the participants had "received systematic training or guidance instead of exploring things by themselves," results might have been different (p. 10). The present study seeks to integrate a well-designed training program across a larger sample size in order to thoroughly explore students' experiences and perceptions. Additionally, the current study seeks to investigate the impact of ChatGPT on student autonomy (also known as autodidactic learning or self-directed learning).

## **Literature Review**

John McCarthy first coined the term Artificial Intelligence (AI) in 1955 during the proposal for the Dartmouth Summer Research Project on Artificial Intelligence. McCarthy envisioned AI as machines capable of language use, abstraction, problem-solving, and self-improvement (McCarthy et al., 2006). In language teaching, AI has evolved alongside computer technology, leading to practices like Computer Assisted Language Learning (CALL) and later ICALL (Lu, 2018; Weischedel et al., 1978). Initial AI systems in education, such as Computer-Based Training (CBT) and Computer-Aided Instruction (CAI), emerged in the 1960s, and over the six-plus decades since, an enormous body of research has been dedicated to finding the best practices to integrate computer technology with learning and teaching languages. In the new millennium, computer technologies began to enhance language learning contexts tremendously as AI worked with big data dealing with learning languages (Amaral & Meurers, 2011). Most recently, ChatGPT has become available for public use. As the technology has developed, advances in language processing have made for more efficient analysis of web text, and now the technology is better able to separate meaningful information from results that are less relevant (Khurana et al., 2023). Now, as Roose (2022: paragraph 3) aptly stated, "ChatGPT is, quite simply, the best artificial intelligence chatbot ever released to the general public". Despite its potential, the integration of ChatGPT into education has sparked debate among educators and administrators worldwide, with myriad opinions both optimistic (e.g., Elkins & Chun, 2020; Tack & Piech, 2022) and pessimistic (e.g., Dehouche, 2021; Fyfe, 2022) regarding its utility and impact.

#### **Potential Drawbacks**

Skeptics of ChatGPT raise numerous concerns about potential drawbacks associated with its use in educational settings. First, a number of researchers point out that ChatGPT is often unable to distinguish reliable from unreliable information. Consequently, using ChatGPT as a study or research aid may present challenges, as the chatbot can sometimes generate inaccurate, biased, or incomplete results (Ferrouhi, 2023; Fyfe, 2022; Kohnke et al., 2023; Liebrenz et al., 2023; Menon & Shilpa, 2023). Indeed, even ChatGPT's homepage acknowledges some potential "limitations such as generation of invalid information, biased content, and limited knowledge of world events" (Rudolph, Tan, & Tan, 2023, p. 7). Without vigilant use, then, the software could contribute to reinforcing biases among learners as well as disseminating misinformation within the academic community (Mohamed, 2023).

Another evident drawback of ChatGPT is its lack of human qualities. As a result, many educators understandably question ChatGPT's potential as a substitute for human teachers. Shidiq (2023) provides a comprehensive perspective, noting that ChatGPT cannot: 1) model learning outcomes with the nuance of emotional connection; 2) match human creativity; 3) recognize the nuance of individual student learning styles; 4) teach learners how to interact socially; 5) foster creative thinking skills in learners (p. 354).

Addressing learner limitations, various researchers explore challenges related to ethical considerations, design, and implementation. For example, Mohamed (2023) and Zakaria and Ninfrum (2023) express concerns about potential drawbacks, cautioning against over reliance on AI software for completing academic tasks, as it may impede learners' ability to think critically. Ulla, Perales, and Busbus (2023) point to diminished critical thinking as a concern while also mentioning possible problems such as safeguarding learner privacy and data and monitoring learner engagement. Additionally, there is some apprehension among educators regarding overreliance on ChatGPT, which may lead to learner dependency and potential negative impacts on students' initiative, creativity, analytical skills, and well-being (Ferrouhi, 2023; Stepanechko & Kozub, 2023). Finally, some researchers explicitly voice valid concerns about potential issues such as cheating and plagiarism (Fyfe, 2022; Kohnke et al., 2023).

#### **Potential Benefits**

Despite all the concern, an increasing body of research highlights the potential benefits of using ChatGPT as a learning tool for EFL students and teachers. Perhaps the most commonly cited benefit is that of ChatGPT's ability to provide real time feedback to students, a feature that enhances engagement and tailors learning experiences (Hong, 2023). Koraishi (2023), for example, underscores the efficiency of ChatGPT in automating assessment processes, providing immediate feedback and adapting to individual learner needs, thereby enhancing its overall effectiveness in education. Zakaria and Ninfrum (2023) discuss the impact of ChatGPT, highlighting advantages such as personalized feedback and increased learner engagement. Xiao and Zhi (2023) also contribute to the body of empirical evidence on EFL learners' experiences with ChatGPT. Through participant interviews, the study highlights ChatGPT's potential as a valuable learning partner, aiding students in language-related tasks, emphasizing specifically benefits such as facilitating idea generation, fostering critical thinking, and providing real-time feedback. As mentioned before, ChatGPT lacks the nuance of human-to-human interaction; however, researchers like Kessler (2018) note that bots like ChatGPT can hold realistic

conversations and provide feedback and guidance at a much more efficient rate than a single teacher, especially in a class with a large number of students.

In the last decade, studies have demonstrated the capacity of AI technology to boost student motivation. (Gikas & Grant, 2013; Peterson, 2017; Smith et al., 2018). Ali, Shamsan, Hezam, and Majeed (2023) conducted a quantitative study, revealing that ChatGPT generally motivates EFL learners, particularly in developing reading and writing skills. Other research underlines the potential for student motivation in a variety of contexts including writing classrooms, where students are commonly discouraged by difficult words or expressions (Zhai, 2022) and classrooms where teachers are looking for more authentic, intrinsically motivating assignments, assessments, and environments (Rudolph, Tan, & Tan, 2023). Muñoz et al. (2023) also investigated the impacts of ChatGPT on EFL students. The survey, conducted on 350 ESL students and teachers, revealed a significant correlation between teacher experience, student motivation, and engagement. Researchers consistently highlight the capacity of technology to provide authentic, interactive responses, thereby enhancing language learners' engagement and proficiency (Hassan et al., 2017; Loncar et al., 2021). In other words, the motivation that students feel often leads to quantitative results in terms of proficiency. Leveraging large-scale language models, ChatGPT generates human-like text, showcasing potential in various language-related tasks (Bender et al., 2021; Kasneci et al., 2023). The advantages of ChatGPT extend to aiding in the development of language skills, offering personalized practice materials, and supporting writing and problem-solving tasks (Kasneci et al., 2023).

Research shows some benefits for teachers specifically. For example, Koraishi (2023) emphasizes the role of ChatGPT in EFL education, specifically in material development and assessment. The study points out how ChatGPT's natural language processing abilities facilitate the creation of tailored content, fostering a more engaging and personalized learning experience for students. A growing body of research supports Koraishi's claims. Hong (2023), for example, delves into the opportunities ChatGPT presents for foreign language teachers, exploring common misconceptions, potential risks, and how educators can harness ChatGPT to enhance language teaching. Specifically, the article emphasizes the importance of open discussions among teachers to dissect ChatGPT's functions, mechanics, and limitations, forming the groundwork for establishing usage guidelines in educational settings. Hong and other researchers like Sowa et al. (2021) advocate for a balanced approach in which AI is an extension of the human teacher in the classroom

As we can see, research suggests that chatbots like ChatGPT have the potential to transform education; however, humans do still have a role to play. That is, ChatGPT is not yet equipped to teach on its own, but rather, the AI software should be used as an extension of human knowledge and nuance. Practically, despite challenges in assessment and academic integrity, educators should focus on training students to effectively utilize ChatGPT for its potential benefits in language learning (Liu & Liu, 2023). First, the accuracy and reliability of ChatGPT outputs depend heavily on how prompts are worded, indicating potential challenges in assessment (Kohnke et al., 2023). And even if an appropriate prompt is entered, there is no guarantee that ChatGPT will produce accurate, unbiased results. Baskara (2023) describes several potential avenues by which to mitigate problems that might arise in the classroom because of ChatGPT, emphasizing that "teachers must be involved in designing and implementing activities and tasks using ChatGPT and be prepared to provide support and guidance to students as needed" (p. 50). Teachers must provide students with adequate

examples including "showing them how to use ChatGPT to generate text and receive feedback and suggestions" (p. 50). Furthermore, future research should explore ways to introduce authentic materials to lower-proficiency students, fostering autonomy in learning and vigilance concerning potential issues like plagiarism and biases in ChatGPT utilization in instruction (Nguyen & Tran, 2023).

When a proper training program is implemented, students and teachers alike will inevitably enhance their digital literacy, and a byproduct of digital literacy could be improved selfdirected learning skills. Digital literacy means recognizing how and when to use digital information. In this regard, a number of signs point toward ChatGPT's potential as an effective tool for independent learning in an EFL context. In a 2023 study, Liu & Liu provide ethnographic insights into critical digital literacies in the Chinese context. This cross-sectional study, grounded in the Technology Acceptance Model (TAM), investigates EFL learners' acceptance of ChatGPT for self-directed English learning beyond the classroom. Positive attitudes toward ChatGPT's usefulness correlate with a "higher level of Behavioral Intention to use, which positively and strongly predicts their actual use of this AI-powered tool in English learning outside of the classroom" (p. 14). Similarly, Firat (2023) and Liu and Liu (2023) emphasize the transformative potential of ChatGPT in open education. Firat (2023) envisions ChatGPT's role in bolstering autonomy among autodidactic learners by providing personalized support and interactive assistance. Similarly, Liu and Liu (2023) advocate for teachers to support personalized learning beyond the classroom facilitated by AI technologies. In reshaping self-directed learning experiences, ChatGPT emerges as a promising tool, poised to redefine the landscape of autonomous education.

While the literature provides theoretical perspectives on ChatGPT's impact, additional research is needed to explore learners' perspectives on and understanding of this tool. Perhaps the best summation of the current educational landscape in regards to ChatGPT was made by Sakai (2023): "The rapid evolution of artificial intelligence and its concomitant advancements will necessitate extensive investigation into the harmonious—or contentious—interplay between human attributes and artificial intelligence" (p. 1). As of the current study, limited investigation exists regarding how students perceive ChatGPT. Furthermore, as of the time this research was conducted, there existed no practical proposal in terms of a ChatGPT training program for EFL students based on the benefits and potential drawbacks outlined in the research. Finally, while some research has highlighted ChatGPT's potential use as a study aide for autodidactic learning among EFL students, no research states explicitly that ChatGPT motivates learners in the long-term without continued teacher guidance. The research questions for the current study are as follows:

- RQ 1: How do Korean university students perceive ChatGPT's value and utility in English language classes?
- RQ 2: Can a short-term introduction of ChatGPT as a study aid be a catalyst for EFL students in terms of building long-term independent use of ChatGPT?

#### Method

## **Research Design**

To address the research questions above, this study employs an instrumental case study approach, using three distinct data collection methods: pre- and post-training surveys, semi-structured interviews (conducted both during and post-study), and in-class observations. According to Stake (1995) and Tlili et al. (2023), the instrumental case study approach is particularly useful when researchers aim to gain insight into a phenomenon within a specific context, which in this case pertains to ChatGPT. Note: In the current study, the researcher was also the classroom instructor and will, from now on, be referred to as *the researcher*.

#### **Context**

The current study was carried out at the request of the College of Liberal Arts at a private university in South Korea. It took place within six parallel compulsory (intermediate level) English conversation courses held over a 15-week semester. Each course group consisted of 20 students, making a total of 120 participants hailing from twenty-eight diverse majors that fell within the broad categories of arts and humanities; media and communication; sports and martial arts; administration and management; social, life and computer sciences; and health and wellness. Each course group met once a week for 110 minutes. The course participants comprised mostly first-year (n = 91) and second-year (n = 20) students as well as (n = 9) third-year students. There were nearly equal numbers of male (n = 57) and female (n = 63) students.

## **Training Program**

The training program was integrated into general university English courses spanning 15 weeks. Brief training sessions, lasting approximately 10 to 15 minutes, were conducted at the beginning of ten classes during the semester (Weeks 2 to 6 and Weeks 9 to 13). Each training session focused on various ways in which ChatGPT could serve as a learning aid. Following the completion of each weekly training session, the classes resumed their focus on the standard university English curriculum, unrelated to the research. Nevertheless, students were encouraged to freely utilize ChatGPT during individual and group tasks. The researcher observed students' independent usage of ChatGPT throughout the course, making notes, seeking feedback, and providing input as necessary. Students who were absent were required to attend the researcher's office hours for a brief summary of the lesson, including the 10-minute training session.

The primary aim of the training program was to introduce ChatGPT as a valuable tool for university students studying or using English as a Foreign Language. The researcher sought to foster long-term utilization of ChatGPT by exposing students to its potential applications throughout the course. Importantly, the researcher did not tie the short or long-term use of ChatGPT to the students' grades in any manner, a policy explicitly stated in the course syllabus. Additionally, participation in the associated research, which involved interviews and surveys, was entirely voluntary, with students having the option to volunteer for interviews and consent or decline participation via a checkbox provided on each survey.

In class, the researcher used an LCD projector or a Smart TV to model ChatGPT. All participants had access to their own Smart Phones/Tablets or laptop computers with Internet. See below for a brief outline of the program (Table 2) followed by a more detailed, week-by-week description.

**Table 2. Training Program Schedule** 

Week	Description	Students will:	
2	ChatGPT Overview	gain insights into how ChatGPT can serve as a valuable tool for language learning	
3	Vocabulary Practice & Translation	engage in practical translation tasks, exploring ChatGPT's capabilities in enhancing their understanding of words and expressions.	
4	Chat with GPT	practice engaging in dialogues with ChatGPT to enhance their English skills and develop confidence in real-time conversations.	
5	Sentence Construction	refine grammar skills through hands-on activities that involve creating well-structured and grammatically correct sentences.	
6	Role Play	apply language skills in simulated real-life scenarios, fostering practical communication abilities.	
9	Cross Referencing & Error Correction	engage in tasks that focus on error correction, receiving feedback to improve language skills and ensure accuracy.	
10	Prompt Revision Part 1	modify prompts to optimize outcomes when interacting with ChatGPT.	
11	Technical Issues – Problem Solving	develop problem-solving skills related to technical issues, ensuring a smoother experience with ChatGPT.	
12	Prompt Revision Part 2	further refine their skills in crafting effective prompts to obtain desired results when interacting with ChatGPT.	
13	Grammar Practice	engage in tasks focused on enhancing their grammar skills through interactive exercises with ChatGPT.	

Week 2. The 10-minute training session began with an introduction to ChatGPT's capabilities and the purpose of the training program in general. The researcher covered the basics of accessing ChatGPT and provided an overview of the interface. The researcher then described the importance of crafting clear and specific prompts to optimize responses, emphasizing the potential for biases and inaccuracies (as described in the Literature Review). The researcher briefly described practical applications including vocabulary practice, translation tasks, and real-time conversations, showcasing the model's versatility. Caution and responsible use were stressed, encouraging critical thinking and reminding students that ChatGPT is a supplementary tool. Students were asked to create an OpenAI account and to explore the system during class in order to see ChatGPT in action.

**Week 3.** The researcher demonstrated how ChatGPT can be an effective translator from Korean to English and vice versa. The researcher emphasized that simple translation can be very accurate but that longer, more complex translation can be awkward and/or incorrect. The students completed similar translation tasks of varying complexity provided by the researcher. Subsequent student-researcher discussions allowed students to share experiences and address challenges.

**Week 4.** The researcher elicited topics of conversation from the class. The researcher then prompted ChatGPT by typing: *Hello. I am studying English, and I'd like to practice talking about (topic). Please start the conversation. Hi.)* Some further prompting was sometimes necessary as ChatGPT can be long-winded. In this case, the researcher demonstrated refining the prompt by saying something like, "Please use simpler sentences and questions." In addition, the researcher demonstrated that prompts could be delivered in Korean or English and that

ChatGPT could be an effective code-switching partner. Students provided sentences/questions orally to the researcher, and the researcher typed them in verbatim (grammar errors included, if present, for the purpose of the Week 5 training session below). The researcher also demonstrated how the voice-to-text feature on Smart Devices can be used to prompt ChatGPT orally.

**Week 5.** The researcher demonstrated how ChatGPT keeps a history of interactions. The researcher copied a conversation from the previous week, pasted it (errors included) into the prompt text box, and then prompted ChatGPT to help construct better sentences. The class, with necessary assistance from the researcher, identified error corrections and, when necessary, prompted ChatGPT to give explanations of the corrections in Korean and/or English. With the remaining time, the class held a similar conversation with ChatGPT about the same topic, this time trying to implement revised sentence structures.

Week 6. The researcher led a session emphasizing practical communication through role-play scenarios. The researcher provided the examples of *going to the doctor* and *job interview* and also elicited ideas from the class. The researcher prompted ChatGPT to write a role play scenario and demonstrated how to adjust the scenario by adding stage directions, new characters, or new information/vocabulary (e.g., *Min-Ah is allergic to lemons* or *Damon prefers working in the evening* or *Please use the vocabulary words* open minded *and* honest *in the script*). Students designed new, original scenarios. An example of an initial instruction is, *Hi, ChatGPT. Please create a role-play scenario for three actors: Ms. Kim and Mr. Lee, from a clothing manufacturing company, and Amy Park, a job applicant. An alternative prompt would see ChatGPT taking on the role of an actor (e.g., <i>Hi, ChatGPT. Please play the role of an interviewer at a clothing manufacturing company. I am the interviewee. Please begin the interview now.*)

**Note.** In Weeks 7 and 8, there were no training sessions at the beginning of classes. In these two weeks the students prepared for and took a midterm examination, respectively. During the Week 7 lesson/exam preparation session, students were encouraged to use ChatGPT as a study aid as necessary.

Week 9. The researcher asked ChatGPT a series of questions that he deemed familiar to at least some of the students in the class (e.g., Which K-pop group was the first to achieve success in the United States?). The researcher (with students' assistance) then modeled cross-referencing for error identification. The researcher did this in two ways – 1) by asking follow-up questions to ChatGPT (e.g., Didn't Wonder Girls become popular before BTS?) and 2) by using search engines (Google and Naver) to verify or reject ChatGPT's answer. The subsequent hands-on activity required students to cross-reference and correct sentences (provided by the researcher and containing intentional errors and/or incomplete information). The intention of this training session was to show that ChatGPT sometimes produces incorrect information.

**Week 10.** In the "Prompt Revision Part 1" training session, the researcher delivered a targeted session on modifying prompts for optimal outcomes with ChatGPT. We started with the question, *What's the best way to study English?* We then used modified prompts based on hypothetical needs and interests. The researcher then prompted the students to begin creating their own personalized English Study Plan using suitable prompts.

**Week 11.** The researcher addressed common challenges users may encounter in using ChatGPT, emphasizing effective communication and the significance of refining interactions.

The researcher identified issues like prompt length, login/server problems, and question comprehension, displaying the appropriate error/problem on the classroom screen and providing practical solutions and demonstrations. Strategies for unwanted answers included dealing with off-topic responses and repetitive answers by clarifying queries and altering prompts. In this section, it was difficult to replicate specific errors on students' devices, so instead, the researcher conducted a brief Q&A session to address student questions and gather feedback.

**Week 12.** "Prompt Revision Part 2" was similar to Part 1, but this time the researcher started with a less specific question (*How can I be a better person?*), which inevitably would require more nuanced prompts. The researcher provided little actual training this week. Instead, the researcher provided the initial prompt and then asked the students to use focused prompts for 10 minutes to see what information they could obtain from ChatGPT.

Week 13. The researcher modeled how to create grammar lessons and activities using ChatGPT. The researcher made sure to note that the lessons could be delivered in Korean or English (or both). The researcher finally showed students how to guide ChatGPT to make things like fill-in-the-blank or multiple choice worksheets, open-ended questions, error correction worksheets, stories and conversations containing target grammar, and more. The overall message in this final training session was that the students have the power to be creative in asking ChatGPT how best to assist them in their language learning journey.

#### **Procedure**

In this study, the researcher took a multi-faceted approach to capture the impact of the ChatGPT training program on students' perceptions of its use in class as well as its potential as a catalyst for future independent use. Data collection methods included student surveys conducted through Survey Legend software, open-ended interviews held during and post-course, and class observations.

**Pre & Post-Course Student Surveys.** Prior to the commencement of the training program, students participated in a pre-course survey designed using Survey Legend software. This survey (Table 3) aimed to elucidate students' general opinions about ChatGPT and its potential as a tool for language learning.

## **Table 3. Pre-Course Survey**

## **Ouestions**

- 1. Have you ever used ChatGPT? If so, how/when?
- 2. Have you ever used it to practice English? If so, how/when?
- 3. Do you think ChatGPT could be a helpful tool to study English in the future?
- 4. If so, how do you envision using it? / If not, why?

In the final week of the semester, a post-course survey (Table 4) was administered to gauge students' interest in independently using ChatGPT as a study aid in the future. The post-course survey also invited students to provide insights into their specific usage patterns and articulate their intentions for future utilization.

## **Table 4. Post-Course (Short-Term)**

#### **Ouestions**

- 1. What aspects of the ChatGPT Training Program did you find beneficial?
- 2. What aspects of the ChatGPT Training Program did you find less useful or frustrating?
- 3. Do you plan to use ChatGPT for studying English in the future?
- 4. If so, when/how? If not, why?
- 6. Please share any feedback you have that might help the teacher make the program better.

In addition, the researcher sent out a brief follow-up survey (Table 5) five months subsequent to the completion of the training program (i.e., the courses in the current study were completed in mid-June 2023, and the subsequent survey was sent out in mid-November 2023). The purpose of this survey was to see if (and how) students had continued using ChatGPT as an EFL study aid in the long-term.

## **Table 5. Post-Course (Long-Term)**

## Questions

- 1. Have you continued using ChatGPT independently for studying English after the training program?
- 2. If applicable, please share specific instances or experiences of using ChatGPT outside the classroom.
- 3. If applicable, please share specific instances or experiences of using ChatGPT inside the classroom.
- 4. Any additional comments or recommendations about using ChatGPT for language learning?

Class Observation. Classroom dynamics and student interactions were observed throughout the training program using a systematic class observation approach. The researcher maintained a dedicated notebook for each class, documenting individual and group activities during each class meeting. At the conclusion of each day, the researcher diligently reviewed and transformed these observational notes into narrative form. This method allowed for a qualitative understanding of students' engagement with ChatGPT in a classroom setting. All interview questions and observation protocols were determined through a series of discussions with colleagues at the university, aligning with the specific research questions of the current study.

**During & Post-Course Open-Ended Interviews.** Each week throughout the semester, one student per class was selected at random (via wheelofnames.com) to engage in a brief discussion with the researcher during office hours about his/her experience with ChatGPT in the classroom. No students were selected more than once for these discussions.

The post-course interviewees were selected using stratified random sampling. In this selection process the class was divided into three tiers (the top six students, the middle eight students, and the bottom six students according to final class ranking). In this way, the researcher selected three students from each of the six classes, (n = 18 total). The primary objective of all interviews was to assess students' plans regarding the independent use of ChatGPT as a study aid in the future. The initial question posed in the during-course and post-course interviews was, "How was your experience using ChatGPT this week/semester (respectively)?" The interviewer based follow-up questions on the answers to the initial question. All of the interviews were recorded and transcribed using MS Word voice-recognition software. In some cases, the voice-recognition software was unable to comprehend the speaker due to either audio

issues or code switching between Korean and English. In these cases, the researcher manually transcribed the audio as necessary.

## **Analysis**

Three independent coders (i.e., the researcher and two assistants) reviewed all of the data using two separate methods. First, they conducted a thorough review of all open-ended interviews and class observations. Three identical sets of the above data were analyzed by each of the coders working independently to identify relevant codes. The coders marked and labeled significant lines and phrases, and as a result, broader themes emerged. Coders then met to discuss and negotiate findings. In these collaborative sessions, they engaged in detailed discussions to compare their individual analyses, sharing insights and interpretations to refine and finalize the identified themes. Through this iterative process of discussion and negotiation, a general consensus on the identified themes was reached. The themes identified are described in the *Results* section below.

Analysis of the pre and post-course surveys was less intense. The coders simply segmented the text into manageable sentences or paragraphs (as necessary) and established clear criteria for labeling each segment as "positive," "neutral," or "negative" (i.e., positive sentiments were associated with expressions of enthusiasm, neutral sentiments used statements conveying indifference or uncertainty, and negative sentiments included expressions criticism, or concern). Coders had a pre-analysis discussion to ensure a shared understanding of the criteria, and blind analysis was conducted to independently assess each segment. Coders assigned a sentiment label to each segment, resulting in unanimous categorization without the need for further negotiation.

#### Results

The coding process was time-consuming due to the extensive amount of data and the iterative nature of the analysis and discussions. As a result of this process, a variety of themes emerged, each consisting of at least six (and up to ten) unique codes. However, due to the sheer number of codes, it is challenging to report them all within the confines of this article. Below, only the themes are reported, for the sake of brevity and clarity; however, the themes accurately depict how the study unfolded, which (hopefully) will inform instructors and/or researchers who wish to use/observe ChatGPT in the classroom. Full data sets are available upon request via email.

In this report of the results, there are a number of direct quotations from individual participants. Quotations have been edited for English language correctness or translated from Korean where relevant.

## **Pre-Course Survey**

Respondents highlighted several potentially positive aspects of using ChatGPT for English language learning. They expressed optimism about its potential to enhance various language skills, such as constructing sentences, refining grammar, and expanding vocabulary. One participant mentioned, "I can use ChatGPT as my own teacher to ask questions and study [by] myself." The idea of ChatGPT serving as a conversational partner for practicing spoken English was well-received, with a potential user stating, "Talking with ChatGPT in English and asking for words we don't know can help improve our English ability." Respondents also appreciated the potential of immediate corrections and guidance provided by ChatGPT on language-related queries, as one user noted, "When I send messages to ChatGPT, ChatGPT maybe can give me

advice directly, and fix my sentences." Of the total responses (n = 120), nearly 56% (n = 67) expressed a positive outlook about the potential of using ChatGPT as an EFL learning tool.

A significant portion of respondents (n = 45) provided neutral responses, expressing uncertainty about ChatGPT's effectiveness or indicating a lack of information and experience for conclusive opinions. One participant mentioned, "Some of us have not used ChatGPT for English learning, so we can't know if it's effective or not." Others suggested potential use cases, such as using ChatGPT for translation, finding meanings of unfamiliar words, and checking grammar in real-time. Overall, while there was a mix of positive and uncertain responses, the general sentiment was open to the idea that ChatGPT has the potential to contribute positively to English language learning.

While the overall sentiment was deemed positive or neutral, a small subset of respondents (n = 8) expressed reservations about using ChatGPT for English learning. These participants were uncertain about its potential, with statements like, "I don't know because I haven't used ChatGPT, but I like just talking and I don't like to use my phone or computer too much." Furthermore, a few responses indicated skepticism about the actual impact on improving English skills, as one user mentioned, for example, "I think ChatGPT can't improve our English skills." (See Table 6).

**Table 6. Pre-Course Attitudes** 

Positive	Neutral	Negative
56% (n = 67)	37% (n = 45)	7% (n = 8)
		Total (n = 120)

#### **Observation**

Through observation of the students' activity using ChatGPT during class, several themes emerged.

Classroom Dynamics & Engagement. Overall, classroom dynamics became more active, especially in typically quiet classes like Monday morning sessions. There was a high level of student interaction during the training sessions, consistently held for the first ten to fifteen minutes of each class meeting. In several classes, students collaborated and engaged with ChatGPT together before the official class time commenced. While not universal, this phenomenon was evident and notable across all classes.

Initial Student Engagement. During the first few weeks of the ChatGPT training program, students were initially surprised and amazed by the speed at which ChatGPT generated information, highlighting its novelty and efficiency. There was a notable buzz in the classroom as ChatGPT generated responses to researcher-modeled prompts. In addition, students actively engaged with their electronic devices during training sessions and maintained high levels of participation while experimenting with new prompts even *after* the 10-minute training sessions officially ended and the class moved on to designated activities from the course curriculum/textbook. Observing the high level of student participation, the researcher noted that the 10-minute training period might not be long enough (i.e., the students seemingly could have explored ChatGPT for longer), but due to the obligation to teach from the designated course textbook, this time period was kept at 10 to (maximum) 15 minutes. The students' positive sentiment was consistent across all study classes, especially for the first part of the semester.

**Post-Training, In-Class Utilization of ChatGPT.** As previously noted, during the initial weeks (Weeks 2 - 4) of the study, students remained consistently engaged during the training sessions and sustained their engagement even *after* transitioning to regular class activities as dictated by the course curriculum. However, in Week 5, although students continued to remain fully engaged during the 10-minute training session, there was a noticeable decline in participation *after* returning to normal class activities. Interestingly, the researcher noticed this phenomenon uniformly across all classes. As mentioned in the *Training Program* description, the researcher allowed free use of devices with a focus on ChatGPT during class, but without strict enforcement. During this time, some students became distracted by social media applications when unsupervised, and others engaged in individual ChatGPT use, reducing peerto-peer interaction. Despite reminders from the researcher about smartphone usage, these distractions persisted in Week 6, leading to the need for class restructuring.

Class restructuring took place in Week 7 after whole-class discussions as well as individual discussions with students during office-hours interviews. As a result of student feedback during these talks, the researcher implemented a "GPT in Use" sign that each pair/group used to indicate that they were actively using ChatGPT for specific tasks. This visual cue helped students stay focused, aided the researcher in monitoring usage, and was successfully implemented in all classes. As a result, collaborative problem-solving again became a prominent aspect during group activities. Students exchanged insights and strategies for effective ChatGPT utilization, engaging in discussions that compared ChatGPT with traditional language learning resources. Students displayed adaptation to the tool, demonstrating their ability to cross-reference information, refine prompts, and engage in dynamic dialogues with ChatGPT. In the remaining weeks of the course, the high level of engagement resumed, and there were no notable drop-offs in engagement for the entirety of the semester after expectations and accountability measures were clearly put in place.

Innovative or Unexpected Use. Observations uncovered diverse usage among students, such as seeking grammar assistance, engaging in spontaneous language practice through conversation, and holding voice-to-text conversations for pronunciation and spoken language assessment. In one scenario, for example, a student passionately supporting the benefits of mandatory military service in Korea sought grammatical assistance from ChatGPT. Engaged in an argumentative task, the student inputted a self-composed sentence. To this student, it was important to seek suggestions from ChatGPT to refine complex sentence structures. The student expressed the relevance of the topic, noting that he planned to study abroad in the future and that he "might need to really talk about [this topic] later in real life." Personalized use like this was evident throughout the courses, showing that ChatGPT has the potential to be an authentic language partner with real-world utility.

Another example happened during a classroom debate between two students about who was a better boyfriend. The two students jokingly engaged in spontaneous language practice using ChatGPT. They took turns typing sentences and responses to each other with ChatGPT as an observer, thereby utilizing the opportunity to enhance their conversational skills. Notably, the students even sought ChatGPT's judgment on the debate, appreciating its logical and unbiased responses. One student said, "ChatGPT [doesn't] choose a side, but ChatGPT also doesn't care about feelings too much. It's [logical], so it can help us think without emotion. That's good." The engagement in this "fun" activity highlighted ChatGPT as a tool for facilitating enjoyable language practice and promoting critical thinking.

Several groups of students, with a focus on improving pronunciation, employed ChatGPT for voice-to-text conversations. Speaking sentences aloud, the students asked ChatGPT to transcribe spoken words, allowing for a comparison to identify pronunciation nuances. Specifically, the prompts in these cases looked something like: *I am going to input sentences using voice-to-text. Please identify my pronunciation errors.* While the researcher's educational philosophy emphasizes clear communication over exact pronunciation, students often express a desire for native-like pronunciation, and they found a way to use ChatGPT to help them achieve this goal. Common examples of confusion identified by ChatGPT included short 'I' and long 'E' sounds, as well as consonant confusions (e.g., P/F and R/L). Notably, ChatGPT was able to identify errors such as those described above, but students actively sought further assistance or clarification from the researcher.

Across all courses, students found new ways to engage authentically with ChatGPT. Students proactively sought best practices for learning specific topics, integrating ChatGPT's suggestions into their responses. Curiosity was evident as students posed questions to ChatGPT, reflecting a curiosity-driven language learning approach. Instances revealed students using ChatGPT as a bridge for complex expressions and nuanced vocabulary in navigating language barriers. Real-time corrections were actively sought, particularly during role-play scenarios, which evidenced students' dynamic interaction with ChatGPT. Again, it is notable that despite their tech-savvy approaches, students desired interaction and assistance from the researcher. Finally, some students also expressed interest in utilizing ChatGPT for creative projects like YouTube channels, showcasing their creativity in speaking, directing, and acting. The researcher found it particularly impressive, noting week after week that students frequently held conversations on metalinguistic or metacognitive aspects of using ChatGPT.

## **During-Course Interviews**

During-course interviews reflected predominantly positive reactions with some reservations also noted.

**Initial Excitement.** Initially, students expressed palpable enthusiasm due to the novelty of the learning tool. For most of the students, this was their first experience using ChatGPT in the classroom, and for all of the students, this was their first experience taking part in an organized ChatGPT training program in EFL. Responses similar to the following were common during the first three weeks of interviews:

- "I was excited to try something new in class."
- "ChatGPT is amazing. So fast!"
- "I think this will change my study style."
- "Actually I wasn't interested in English, but ChatGPT made me change my mind."
- "I was thinking about studying abroad in the US, but maybe ChatGPT can be my new American friend. My parents will be happy because it's free!"

**Efficiency.** Students humorously acknowledged the potential of ChatGPT to serve as a teacher. Although recognizing its inability to display "real emotion" or make "facial expressions" or "gestures," (which supports Shidiq, 2023), students agreed on its effectiveness as an efficient conveyor of information and instructor of practical language skills.

- "I don't need to use [a search engine] so I don't need to click any links. ChatGPT just gives me the information I need, and I can also use new prompts to get more or less detail."
- "Sometimes I don't know how to ask a question to the teacher in English, but I can do that with ChatGPT, so I can get the answer more quickly and get more work done."
- "ChatGPT can give me answers in Korean so I can understand it quickly. Then ChatGPT can translate [the results] to English, and I can use it to compare languages and learn new vocabulary and grammar easily and quickly."

**Metacognitive Awareness & Metalinguistic Communication.** A number of students explicitly remarked how this program allowed them to be creative, specifically in how they approached their own learning. In addition, peer collaboration became evident as students enjoyed discussing and exploring the functionalities of ChatGPT together.

- "This time made me think about the best way to practice English. Usually I just followed what my teacher said, but now I can talk to my friends and make my own plan."
- "I never talked to my friends about how to study English." (Researcher: Why?) "Hmm, because Korea is competitive. We don't want to share the secrets." (Researcher: But you can share the secrets with ChatGPT.) "Yes, I think so. And GPT can share the secrets with me!"
- "I'm not good with computers, but I talked to my friends in the class and I watched them, so I could learn how to use ChatGPT easily and ask good questions and use my phone well."

Skepticism, Technical Challenges, & Language Challenges. Initial skepticism surfaced among some students who questioned how using ChatGPT could genuinely enhance their English skills (e.g., "I think it will not be helpful for me because it's not a real person" [Week 2]). Other skepticism seemed to come from two main areas. First, the speed at which ChatGPT generated responses coupled with the length and detail of the responses was overwhelming for some students. Students acknowledged the tool's limitations, recognizing that ChatGPT faced challenges with more complex topics. This awareness of the tool's boundaries demonstrated a nuanced understanding among the participants. Second, the software (ChatGPT3.0) did not provide audio responses, so several students did not equate the experience to real communication.

Some additional challenges were noted, particularly related to technical issues. Some students encountered difficulties using ChatGPT on their devices, leading to moments of frustration. It should be noted that the vast majority of interviews in which students expressed challenges or difficulties occurred during the first half of the semester. The researcher used this student feedback as well as the ideas of Kohnke et al. (2023) and Baskara (2023) to revise upcoming training sessions to address the issues in question.

- "It is difficult to copy and paste information from ChatGPT when I'm using my mobile. My computer is easier." [Week 2]
- "Sometimes when I enter the prompt, I get an error message." [Week 6]

- "Sometimes ChatGPT can't understand my prompt, and I don't know how to fix it." [Week 3]
- "Sometimes it is too much information. Too much reading. I like to watch videos or listen to the teacher more." [Week 12]
- "When the English answer that ChatGPT gives me has too much difficult vocabulary, I can't understand the meaning easily. Even in Korean I can't understand." [Week 3]
- "Usually I know I am talking to a robot because the language is not natural there [on ChatGPT]. [Week 9]
- "I only want *some* information, not *all* the information."

**Uneven Participation.** A number of students remarked how they felt that some of their classmates were not participating well initially. As described above, this led to a number of difficulties that needed to be remedied over the first quarter or so of the semester.

#### **Post-Course Interviews**

Over the final week of the semester, the researcher conducted comprehensive post-course interviews with 18 participants (three students from each of the six classes), each lasting between 10 to 20 minutes. The insights gathered from these interviews resonated with the data obtained through in-class observations, providing a deeper understanding of students' experiences with ChatGPT. Specifically, distinct positive themes emerged, illustrating the overall (and perhaps lasting) impact of the ChatGPT training program.

**Confidence.** Improved confidence was a prevalent theme, with many students reporting feeling more assured in using English.

- "After the course, I feel more confident about English because ChatGPT gave me a lot of tips and language."
- "I am going to travel to Australia this summer and I'll keep ChatGPT in my pocket to help me."
- "I think I'll use ChatGPT next semester in my next English class. Maybe in the summer, too."
- "Do you think I can level up [to the advanced class] next semester? I think I can now."

**Authentic Collaboration.** Collaborative learning experiences emerged as a positive aspect, with students finding enjoyment in working on ChatGPT assignments with their classmates. The communal learning environment fostered mutual learning and exchange.

- "My friends and I found useful information that we can use in real life."
- "My English classes before were so boring, but this way is fun because it is real communication."
- "I liked getting away from the textbook and talking more about real things and solving problems."
- "We like the teacher, but the teacher always talking isn't good to learn communication."

**Autonomous Learning.** Another positive outcome was the promotion of autonomous learning, as students discussed using ChatGPT independently for language practice outside the

classroom setting. Students integrated ChatGPT into their study routines, indicating a potential shift in learning behavior and recognition of the tool's usefulness beyond the classroom. Some students integrated ChatGPT into their daily study routines, with some noting its regular use. Specifically, optional self-study homework assignments (which the researcher always makes available for supplementary work) saw heightened completion rates, with students crediting ChatGPT as a valuable resource for at-home learning.

Additionally, students discussed the impact of ChatGPT on specific language skills, with some attributing improvements in vocabulary and grammar to their engagement with the tool, illustrating the tool's perceived influence on language proficiency. Students expressed their intentions to continue using ChatGPT beyond the course, emphasizing its sustained utility in their language learning journey.

- "My vocabulary improved, and I learned more about grammar rules when I used ChatGPT with my homework"
- "ChatGPT became a regular part of my study routine. I use it almost every day."
- "I didn't really love to use ChatGPT in the class because I couldn't talk to my friends enough, but I used it a lot to do my homework."
- "I liked getting quick feedback from ChatGPT. It helped me correct mistakes [immediately]."
- "I'm definitely going to use ChatGPT to study later, and I'm going to introduce it to my sister [who is in high school and studying for the college entrance exam]."

**Shift in Attitude.** A positive shift in attitude was observed, with initially skeptical students acknowledging the benefits of the tool. As mentioned, students expressed reservations due to a number of factors including overwhelming amount of information, lack of oral interaction, and uneven participation. However, for the most part, these attitudes seemed to shift as the semester unfolded, and in the latter weeks of the semester as well as in post-course interviews, a number of students expressed as much.

- "I learned ChatGPT well, so I am more comfortable using it."
- "I didn't believe it before, but now I think ChatGPT is good for me."
- "I'm surprised that I could change my mind like this."

**Mixed Feelings.** Even though there was a marked shift in attitude, a small number (n = 2) of responses continued to indicate mixed feelings. The researchers do not necessarily feel that a mixed feelings theme emerged; however, these participants expressed uncertainty about the overall impact of ChatGPT, stating that while it was interesting, they were unsure if it made a substantial difference for them. The researchers felt it necessary to report these statements.

- "I think it's good sometimes, but I don't want to use it every day. I just like to use a book or just talk."
- I like using ChatGPT, but I can't know if it is really improving my English more than other ways."

## **Post-course surveys**

**Short-Term Post-Training Program Survey.** The results of the short-term post-training program survey overwhelmingly reflected positive sentiments among participants. Participants expressed a high level of enthusiasm for ChatGPT as a language learning tool. Notably, of 120 total responses, only three expressed hesitancy about potentially using ChatGPT to study English in the future.

- "I don't know if I will use it or not. If my teacher suggests that, I will follow his guidance."
- "ChatGPT is good, but for me it is stressful. I probably will not use it."
- "I don't like ChatGPT."

Several respondents highlighted the potential utility of a voice-to-text option. For instance, a student mentioned, "I would like using a [built-in] voice-to-text option. It's a good way to check if the computer can understand my pronunciation. When ChatGPT can talk to me, I will use it even more."

Nearly all participants expressed a commitment to continue using ChatGPT for studying English during the upcoming summer vacation and in their next English class. Some students even expressed a desire for wider adoption, urging the researcher to advocate for ChatGPT among other English teachers at the university. One student explicitly stated, "Please tell the other English teachers at [this] University to use ChatGPT to help teach in the class."

Long-Term Post-Training Program Survey. The long-term post-training program survey, conducted five months after the completion of the training program, received a high response rate of 113 out of 120 potential responses. The data indicated a sustained and substantial engagement with ChatGPT. Approximately 70% of respondents (n = 84) reported using ChatGPT independently for studying English during the summer. As the fall semester commenced, a majority of students, 87.5% (n = 105), continued to utilize ChatGPT as a study aid either inside or outside the classroom. (See Table 7). It should be noted that, among the 113 respondents, 12 students were currently enrolled across five different "English 2" courses in the Fall semester with the same teacher/researcher. The researcher did not teach, emphasize, or explicitly encourage students in the Fall semester to use ChatGPT as a learning aid. That said, students in all of this researcher's classes are allowed to use their Smart devices and laptops freely, and in the long-term post-training surveys, students reported not only using ChatGPT independently as a learning tool, but also teaching and encouraging other students to use the software. The reported uses of ChatGPT aligned closely with the observations and survey results mentioned earlier, emphasizing its role in tasks such as grammar correction, vocabulary expansion, and assistance with written assignments.

Table 7. Long-Term Survey

Survey Data	Frequency (%)	
Total Potential Responses	120 (100%)	
Responses Received	113 (94%)	
Continued ChatGPT Usage		
Summer Vacation	84 (70%)	
Fall Semester	105 (87.5%)	

A notable trend in the long-term survey results was the emergence of real-world applications. Six respondents reported using ChatGPT in practical scenarios, such as while traveling abroad. Five learners utilized ChatGPT in various situations like restaurants, hotels, and public transportation during travels. One student shared, "I used ChatGPT every night in my hotel in America with my mom. ChatGPT made some conversations for us, and we practiced the conversations. When we couldn't understand it, we asked ChatGPT to translate the vocabulary." Another student used ChatGPT as a means of communication in the International District of Seoul, known as Itaewon, engaging in conversations with foreigners.

These findings suggest not only the sustained enthusiasm for ChatGPT as a language learning tool but also its integration into real-world language use, indicating a positive long-term impact on learners' language skills and autonomous language learning practices.

## **Discussion**

The study aimed to bridge the gap between theoretical considerations and practical implications by investigating Korean university learners' perceptions of ChatGPT's value and utility in English language classes. Additionally, the study explored whether a short-term introduction of ChatGPT as a study aid could be beneficial for EFL students in terms of building long-term independent study habits.

#### **Perceived Benefits and Concerns**

The student surveys indicated an overall positive outlook among participants regarding the potential benefits of using ChatGPT in English language learning. Students expressed optimism about its role in enhancing various language skills, including sentence construction, grammar refinement, vocabulary expansion, and spoken English practice. Immediate corrections and guidance provided by ChatGPT was also acknowledged. These findings align with existing literature that highlights the potential advantages of AI-driven chatbots, such as real-time feedback, personalized learning experiences, and enhanced engagement (Hong, 2023; Zakaria & Ninfrum, 2023; Xiao & Zhi, 2023). However, a subset of participants expressed reservations and uncertainty, particularly regarding the effectiveness of ChatGPT in improving English skills. These concerns echo some of the skepticism raised in the literature, including doubts about the model's ability to serve as a substitute for human teachers (Shidiq, 2023). Technical challenges and language-related issues were also noted, emphasizing the importance of addressing user-friendly interfaces and language proficiency levels in an iterative manner when implementing AI tools in educational settings (Koraishi, 2023).

## **Observational Insights and Classroom Dynamics**

The in-class observations highlighted the dynamic interactions between students and ChatGPT during the training program. Students were able to work independently both individually and with partners and in groups, which supports Kessler's (2018) observation that AI can be more efficient than teachers in terms of providing real-time feedback and guidance, especially in dealing with large groups of learners. Student motivation was high, with students expressing excitement about the novelty and efficiency of ChatGPT, and the use of ChatGPT contributed to more active classroom dynamics, fostering collaboration among students and sparking discussions about language learning strategies. The observation results align with existing literature that emphasizes the potential of AI tools to enhance student engagement and collaboration (Koraishi, 2023; Hong, 2023). In addition, the current study shows that chat bots

like ChatGPT can help enhance student motivation during speaking activities in addition to activities in reading and writing classes (Ali et al., 2023; Zhai, 2022). Another takeaway that should not be overlooked is that the training program, followed by independent student usage, appeared to trigger heightened metacognitive awareness among the students. This increased awareness of metacognitive strategies was observed by the researcher during class sessions and further affirmed through interviews conducted with students throughout the course. This suggests a potential avenue for future research, exploring the correlation between the utilization of ChatGPT (or other chatbots) and the enhancement of metacognitive awareness, a significant aspect of language learning emphasized by researchers such as Cohen and Henry (2020). On the other hand, some challenges emerged during the implementation phase, including distractions, uneven participation, and technical difficulties. These challenges reflect Baskara's (2023) call for careful (iterative) planning and management strategies to optimize the integration of AI tools into the classroom environment.

It is worth considering that the temporary decrease in engagement observed in Week 5 and extending into Week 6 could be attributed to a common human tendency to experience a decline in enthusiasm after a time (approximately four weeks, in this case). Conducting an extensive literature review on this phenomenon could provide valuable insights for the development of a training program that effectively addresses and mitigates students' waning interest over time. In the context of this study, it is noteworthy that the students rekindled their engagement after collaboratively devising a plan with the researcher. This outcome underscores the necessity for continuous flexibility on the part of the classroom teacher, allowing for the judicious reconceptualization of strategies based on ongoing observations. In the context of the current study, the researcher did not fully conceptualize and establish clear norms and expectations for the use of ChatGPT in the classroom. Doing so mid-semester appeared to influence students' behavior positively.

In optimal conditions, the observation of innovative or unexpected uses of ChatGPT, such as seeking grammar assistance and holding voice-to-text conversations, shows the adaptability of students in incorporating AI tools into diverse language learning activities. To elaborate, various instances were observed that mirrored the potential benefits highlighted in the literature. For instance, the student who passionately advocated the benefits of mandatory military service sought grammatical assistance from ChatGPT, utilizing the chatbot to refine complex sentence structures in real-time. This aligns with the literature's acknowledgment of ChatGPT's ability to provide immediate feedback, enhancing engagement and tailoring learning experiences (Hong, 2023). Additionally, during the classroom debate on the qualities of a better boyfriend, two students engaged in spontaneous language practice, utilizing ChatGPT to facilitate their conversation. This echoes the literature's recognition of ChatGPT's motivational aspects, fostering engagement and personalized learning experiences (Koraishi, 2023; Zakaria & Ninfrum, 2023). Finally, in the case of the groups of students who focused on pronunciation improvement, ChatGPT had the ability to provide real-time feedback. This feature seemed to enhance the overall education process by automating the assessment process (Koraishi, 2023; Hong, 2023). The diverse usage patterns observed in the study align with existing literature. As such, the study effectively illustrates how ChatGPT can serve as a versatile tool that fosters engagement and provides valuable support, contributing to various language learning activities. It should be noted at last that, in the end, the students almost always sought support from the researcher after/during interactions with ChatGPT, so the current study does nothing to suggest that teachers are no longer relevant and useful.

## Post-Course Interviews: Confidence, Collaboration, and Autonomous Learning

The post-course interviews provided deeper insights into the lasting impact of the ChatGPT training program. Improved confidence emerged as a prominent theme, with students reporting increased assurance in using English. Collaborative learning experiences were also highlighted, emphasizing the positive influence of ChatGPT on mutual learning and exchange among students. These findings align with literature emphasizing the collaborative potential of AI tools in language learning (Koraishi, 2023; Hong, 2023). Furthermore, in-class collaboration using ChatGPT, as observed and reported by students, highlights the potential for social learning and mutual exchange. Students expressed enjoyment in working on tasks with classmates using ChatGPT, fostering a sense of community in language learning. This aligns with the literature on collaborative learning and the positive impact of social interactions on language acquisition (Hassan Taj et al., 2017).

For the researcher, the promotion of autonomous learning was perhaps the most promising outcome, with students integrating ChatGPT into their study routines and crediting the tool for improvements in their vocabulary and grammar. The shift in attitude, where initially skeptical students acknowledged the benefits of ChatGPT, reflects the potential for these tools to positively influence learners' perspectives over time (Liu & Liu, 2023). Mixed feelings among a few participants underscore the importance of recognizing diverse learning preferences and the need for a balanced approach that iteratively integrates AI tools alongside traditional learning resources (Koraishi, 2023).

## **Conclusion**

The current study aimed to explore Korean university EFL students' perception of ChatGPT's value and utility in English language classes as well as the influence of a short-term introduction of ChatGPT on long-term independent use. Qualitative findings show ChatGPT can be a valuable tool to use in language classes for several reasons. In interviews, students reported that, while the teacher is still important, ChatGPT is a supplementary tool that gives them confidence to have authentic, autonomous experiences in English. Moreover, ChatGPT provides a platform upon/through which to have meaningful collaboration with peers as well as with the chatbot itself. Researcher observations corroborated the interview results with the researcher observing the students taking part in metacognitive conversations and proactively seeking best practices during class, participating in collaborative problem solving, and using ChatGPT in innovative and unexpected ways. Perhaps most importantly, results showed that participants continued to use ChatGPT as a study aid beyond the term of the current study.

This study is also one of the first to implement a ChatGPT Training Program in an EFL setting, and therefore, the results provide insights for educators, curriculum designers, and policymakers considering the integration of ChatGPT or similar AI tools in language education. The current study emphasizes the importance of a balanced approach, where AI tools like ChatGPT complement rather than replace human teachers. Establishing guidelines for when and how to use ChatGPT in the learning process can help strike a balance between traditional and technology-driven pedagogies. Furthermore, a huge takeaway from the current study was that regular feedback from students can inform iterative improvements in both the technical aspects and the pedagogical implementation of ChatGPT. Specifically, participants in the current study encountered several technical issues, and in class, students strayed from efficient use of ChatGPT. In both instances, student feedback and teacher-student discussions

led to iterative improvements to both the training program itself and the way the program was implemented session to session. All that said, no two classrooms are the same, so training plans must be flexible according to specific needs as they arise.

The current study also has limitations. First, future researchers could explore the applicability of ChatGPT in more diverse settings (Xiao & Zhi, 2023) as well as in a context where the teacher is not also the researcher/interviewer as this context could impact the authenticity and generalizability of the results. For instance, the teacher-researcher's preconceived notions or expectations about ChatGPT's effectiveness may inadvertently influence data collection, analysis, and interpretations. Additionally, students may feel inhibited in expressing their true opinions or experiences with ChatGPT if they perceive the teacher-researcher's involvement as an indication of endorsement or preference for the tool. In addition, while the study provides qualitative insights into ChatGPT's effects, quantitative studies are needed to assess the short and long-term impact of ChatGPT on language proficiency, independent study habits, and overall language learning trajectories. Based on results of this exploratory study, then, the researcher may conduct a more traditional study including a control group and various quantitative measurements. Another notable limitation observed in the training program was the time constraint for exploring ChatGPT during class sessions. The allocated 10-minute period for training occasionally felt insufficient, leaving the researcher with a desire for more extensive engagement, but the researcher had to devote ample class time to the actual class curriculum, so the training time could not be lengthened. For future studies, it is recommended to either 1) implement the training program in a longer class, allowing for more in-depth exploration of ChatGPT, or 2) consider implementing the training method in a class dedicated entirely to ChatGPT-focused learning, free from the constraints of a mandatory general curriculum. This adjustment would enable a more comprehensive investigation into the potential of ChatGPT as a language learning tool. Finally, even as this study is published, the evolution of ChatGPT will continue, so it is imperative that researchers work tirelessly to keep up with trends in educational technology.

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#### References

- Ali, J., Shamsan, M., Hezam, T., & Majeed, A. (2023). Impact of ChatGPT on Learning Motivation: Teachers and Students' Voices. *Journal of English Studies in Arabia Felix*, 2(1), 41-49. https://doi.org/10.56540/jesaf.v2i1.51
- Amaral, L. A., & Meurers, D. (2011). On using intelligent computer-assisted language learning in real-life foreign language teaching and learning. *ReCALL*, *23*(1), 4-24. https://doi.org/10.1017/S0958344010000261
- Baskara, F. R. (2023). Integrating ChatGPT into EFL writing instruction: Benefits and challenges. *International Journal of Education and Learning*, *5*(1), 44-55. Retrieved from [PDF] https://repository.usd.ac.id/46683/1/9773\_858-3369-2-PB.pdf
- Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? In *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency (FAccT '21)* (pp. 610-623). Association for Computing Machinery. https://doi.org/10.1145/3442188.3445922
- Cohen, A. D., & Henry, A. (2020). Focus on the language learner: Styles, strategies and motivation. In N. Schmitt & M. P. H. Rodgers (Eds.), *An Introduction to Applied Linguistics* (3rd ed., pp. 171-183). Routledge.
- Dehouche, N. (2021). Plagiarism in the age of massive Generative Pre-trained Transformers (GPT-3): "The best time to act was yesterday. The next best time is now." *Ethics in Science and Environmental Politics*, 21, 17-23. https://doi.org/10.3354/esep00195
- Elkins, K., & Chun, J. (2020). Can GPT-3 pass a writer's Turing test? *Journal of Cultural Analytics*, 5(2), 1-16. https://doi.org/10.22148/001c.17212
- Ferrouhi, E. M. (2023). Evaluating the accuracy of ChatGPT in scientific writing (Version 1) [Preprint]. *Research Square*. 1-20. https://doi.org/10.21203/rs.3.rs-2899056/v1
- Firat, M. (2023). How ChatGPT Can Transform Autodidactic Experiences and Open Education. *OSFPreprints*, 1-5. https://doi.org/10.31219/osf.io/9ge8m
- Fyfe, P. (2022). How to cheat on your final paper: Assigning AI for student writing. *AI & Society*, 38(6), 1395-1405. https://doi.org/10.17613/0h18-5p41
- Gikas, J., & Grant, M. (2013). Mobile Computing Devices in Higher Education: Student Perspectives on Learning with Cellphones, Smartphones & Social Media. *The Internet and Higher Education*, *19*, 18-26. https://doi.org/10.1016/j.iheduc.2013.06.002
- Hassan Taj, I., Ali, F., Sipra, M., & Ahmad, W. (2017). Effect of technology enhanced language learning on vocabulary acquisition of EFL learners. *International Journal of Applied Linguistics & English Literature*, 6, 262-272. Retrieved from https://journals.aiac.org.au/index.php/IJALEL/article/download/3104/2736
- Hong, W. (2023). The impact of ChatGPT on foreign language teaching and learning: Opportunities in education and research. *Journal of Educational Technology and Innovation*, *5*, 37-45. Retrieved from https://jeti.thewsu.org/index.php/cieti/article/view/103/64

- Hu, K. (2023, February 2). ChatGPT sets record for fastest-growing user base analyst note. *Reuters*. Retrieved from https://www.reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023–02-01/
- Kasneci, E., Sessler, K., Kuchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Gunnemann, S., Hullermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., ... Kasneci, G. (2023, January 30). ChatGPT for Good? On Opportunities and Challenges of Large Language Models for Education. https://doi.org/10.35542/osf.io/5er8f
- Kessler, G. (2018). Technology and the Future of Language Teaching. *Foreign Language Annals*, *51*, 205-218. https://doi.org/10.1111/flan.12318
- Khurana, D., Koli, A., Khatter, K., & Singh, S. (2023). Natural language processing: State of the art, current trends and challenges. *Multimedia Tools and Applications*, 82(15), 3713-3744. https://doi.org/10.1007/s11042-022-13428-4
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for Language Teaching and Learning. *RELC Journal*, *54*(2), 537-550. https://doi.org/10.1177/00336882231162868
- Koraishi, O. (2023). Teaching English in the Age of AI: Embracing ChatGPT to Optimize EFL Materials and Assessment. *Language Education & Technology (LET Journal)*, *3*(1), 55-72. Retrieved from https://langedutech.com/letjournal/index.php/let/article/view/48/37
- Liebrenz, M., Schleifer, R., Buadze, A., Bhugra, D., & Smith, A. (2023). Generating scholarly content with ChatGPT: Ethical challenges for medical publishing. *Lancet Digital Health*, *5*, e105-e106. https://doi.org/10.1016/S2589-7500(23)00019-5
- Liu, J., & Liu, S. (2023). The application of ChatGPT in medical education. *EdArXiv Preprints*, 1-14. https://doi.org/10.35542/osf.io/wzc2h
- Loncar, M., Schams, W., & Liang, J.-S. (2021). Multiple technologies, multiple sources: Trends and analyses of the literature on technology-mediated feedback for L2 English writing published from 2015–2019. *Computer Assisted Language Learning*, *36*, 722-784. https://doi.org/10.1080/09588221.2021.1943452
- Lu, X. (2018). Natural language processing and Intelligent Computer-Assisted Language Learning (ICALL). *The TESOL encyclopedia of English language teaching*, 1–6. https://doi.org/10.1002/9781118784235.eelt0422
- McCarthy, J., Minsky, M. L., Rochester, N., & Shannon, C. E. (2006). A proposal for the Dartmouth Summer Research Project on Artificial Intelligence, August 31, 1955. *AI Magazine*, 27(4), 12-14. https://doi.org/10.1609/aimag.v27i4.1904
- Menon, D., & Shilpa, K. (2023). "Chatting with ChatGPT": Analyzing the factors influencing users' intention to use the OpenAI's ChatGPT using the UTAUT model. *Heliyon*, *9*(11), e20962. https://doi.org/10.1016/j.heliyon.2023.e20962
- Mohamed, A. M. (2023). Exploring the potential of an AI-based chatbot (ChatGPT) in enhancing English as a Foreign Language (EFL) teaching: Perceptions of EFL faculty members. *Education and Information Technologies*, 1-23. https://doi.org/10.1007/s10639-023-11917-z

Muñoz, S., Gayoso, G., Huambo, A., Tapia, C., Incaluque, J., Aguila, O., Cajamarca, J., Acevedo, J., Rivera, H., & Arias-Gonzales, J. (2023). Examining the Impacts of ChatGPT on Student Motivation and Engagement. *Przestrzeń Społeczna (Social Space), 23*. Retrieved from

https://www.researchgate.net/publication/370894242\_Examining\_the\_Impacts\_of\_ChatGPT \_on\_Student\_Motivation\_and\_Engagement

Nguyen, T., & Tran, T. (2023). Exploring the Efficacy of ChatGPT in Language Teaching. *AsiaCALL Online Journal*, *14*, 156-167. https://doi.org/10.54855/acoj.2314210

Peterson, M. (2017). The use of technology in teaching English as a foreign language. *TESOL Quarterly*, 51, 183-210. https://doi.org/10.3390/languages8030212

Roose, K. (2022, December 5). The Brilliance and Weirdness of ChatGPT. *New York Times*. https://www.nytimes.com/2022/12/05/technology/chatgpt-ai-twitter.html

Rudolph, J., Tan, S., & Tan, S. (2023). Title of the Article. *Journal of Applied Learning and Teaching*, 6(1), 1-22. https://doi.org/10.37074/jalt.2023.6.1.9

Sakai, N. (2023). Investigating the Feasibility of ChatGPT for Personalized English Language Learning: A Case Study on its Applicability to Japanese Students. *The Journal of Okayama e-learning Research Group*, *1*, 29-49. Retrieved from https://osf.io/cv9f2/download/?format=pdf

Shidiq, M. (2023). The use of artificial intelligence-based Chat-GPT and its challenges for the world of education; from the viewpoint of the development of creative writing skills. *Proceeding of International Conference on Education, Society and Humanity, 1*(1), 353-357. Retrieved from https://ejournal.unuja.ac.id/index.php/icesh/article/view/5614

Smith, R., Kuchah, H., & Lamb, M. (2018). Learner Autonomy in Developing Countries. In A. Chik, N. Aoki, & R. Smith (Eds.), *Autonomy in Language Learning and Teaching* (pp. 7-27). Palgrave Pivot. https://doi.org/10.1057/978-1-137-52998-5\_2.

Sowa, K., Przegalinska, A., & Ciechanowski, L. (2021). Cobots in knowledge work. *Journal of Business Research*, 125(C), 135-142. https://doi.org/10.1016/j.jbusres.2020.11.038

Stake, R. E. (1995). The art of case study research. Sage Publications, Inc.

Stepanechko, O., & Kozub, L. (2023). English teachers' concerns about the ethical use of ChatGPT by university students. *Grail of Science*, 297-302. https://doi.org/10.36074/grail-of-science.17.03.2023.051

Tack, A., & Piech, C. (2022). The AI teacher test: Measuring the Pedagogical Ability of Blender and GPT-3 in Educational Dialogues. *Cornell University ArXiv*, 1-8. https://doi.org/10.48550/arXiv.2205.07540

Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*, *10*(15), 1-24. https://doi.org/10.1186/s40561-023-00237-x

Ulla, M. B., Perales, W. F., & Busbus, S. O. (2023). ChatGPT in language education: How to use it ethically? *PASAA*, *67*, 361-377. Retrieved from https://www.culi.chula.ac.th/en/pasaa/view/72

Weischedel, R. M., Voge, W. M., & James, M. (1978). An artificial intelligence approach to language instruction. *Artificial Intelligence*, *10*(3), 225-240. https://doi.org/10.1016/S0004-3702(78)80015-0

Xiao, Y., & Zhi, Y. (2023). An Exploratory Study of EFL Learners' Use of ChatGPT for Language Learning Tasks: Experience and Perceptions. *Languages*, 8(3), 1-12. https://doi.org/10.3390/languages8030212

Zakaria, & Ninfrum, S. (2023). ChatGPT's Impact: The AI Revolution in EFL Writing. *Borneo Engineering & Advanced Multidisciplinary International Journal*, 2(Special Issue (TECHON 2023), 32-37). Retrieved from https://beam.pmu.edu.my/index.php/beam/article/view/109/45

Zhai, X. (2022, December 27). ChatGPT User Experience: Implications for Education. 1-18. https://doi.org/10.2139/ssrn.4312418

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