Perceptions, Integration, and Learning Needs of ChatGPT Among EFL Teachers

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This study examined EFL secondary school teachers' perceptions, integration, and learning needs regarding ChatGPT in language education. Both quantitative and qualitative data were collected by administering a survey to 41 teachers from 40 schools in Korea. Findings revealed that teachers perceive ChatGPT as valuable for language education, particularly for instant feedback and materials generation. Approximately 70 percent of teachers have utilized ChatGPT in various teaching-related activities, expressing a strong interest in AI integration. Many anticipated their role shift towards facilitating personalized learning experiences, with AI technology playing an important role. Consequently, teachers seek to develop expertise not only in English education but also in AI literacy. However, teachers also expressed concerns, including students' overreliance on AI tools and the potential for cheating. Therefore, this study highlights the importance of implementing comprehensive teacher training to address the needs and concerns of teachers, ensuring the successful integration of AI in language education.

Keywords: ChatGPT, secondary school, EFL, perception, integration, learning needs

INTRODUCTION

The rapid emergence of AI technology, exemplified by inventions like ChatGPT, has brought innovation to various fields in an unprecedentedly short period, and the field of language education is no exception. Since the public introduction of ChatGPT in November 2022, researchers have been intrigued by the potential of AI technology in language education and have explored its various possibilities. Early

studies have outlined anticipated benefits and concerns, setting the stage for subsequent empirical investigations (Baidoo-Anu & Ansah, 2023; Hong, 2023; Kasneci et al., 2023; Rasul et al., 2023; Rudolph et al., 2023). These early discussions paved the way for in-depth examinations of ChatGPT roles in language education, including writing assistance, research aids, grammar checkers, and more. Despite these valuable contributions, the existing studies have predominantly focused on university settings, and the roles of ChatGPT in EFL secondary school settings are relatively unexplored.

Therefore, this study seeks to fill this gap by investigating how Korean EFL secondary school teachers perceive and utilize ChatGPT in their teaching activities. The following research questions guide this inquiry:

RQ1. How do Korean secondary school English teachers perceive the utility of ChatGPT in enhancing their teaching practices?
RQ2. In what ways do these teachers incorporate ChatGPT into their teaching activities?
RQ3. What are these teachers' learning needs and concerns regarding integrating ChatGPT into their language classrooms?

Addressing these questions aims to provide essential insights for teacher training and equip language educators with practical knowledge to enhance language instruction in an EFL secondary school setting.

LITERATURE REVIEW

Use of ChatGPT in Language Education

Since its public introduction, ChatGPT has sparked substantial discussion regarding its myriad advantages and challenges in educational applications. On the positive side, ChatGPT, functioning as an adaptive large language model, stands out as a powerful tool for providing students with prompt and individualized feedback, which is conducive to student-centered learning (Hong, 2023; Kasneci et al., 2023; Rasul et al., 2023). Additionally, educators can harness ChatGPT to innovate their teaching methodologies. They can experiment with approaches such as flipped learning and discussion-based classes, allowing increased time to

engage with students and offer constructive feedback (Rudolph et al., 2023). Furthermore, the model proves beneficial for educators in creating lesson plans, developing activities (Kasneci et al., 2023), and simplifying the grading process (Tajik & Tajik, 2023), resulting in significant time and effort savings for teachers (Rasul et al., 2023). Moreover, as a large language model, ChatGPT offers considerable authentic language input to language learners based on its vast language data and adaptive technology (Hong, 2023).

However, integrating ChatGPT into educational settings is not without challenges. Many researchers express concerns about potential issues such as copyright infringement and plagiarism arising from the use of ChatGPT (Hong, 2023; Kasneci et al., 2023; Rasul et al., 2023; Rudolph et al., 2023). These concerns are anticipated to lead to changes in the education field, necessitating innovation in evaluation methods (Cotton et al., 2023; Moqbel & Al-Kadi, 2023; Rasul et al., 2023). In addition, large language models have the potential to present inaccurate information as fact (Baidoo-Anu & Ansah, 2023; Rudolph et al., 2023; Van Dis et al., 2023) and amplify existing biases (Kasneci et al., 2023), so fact-checking and verification processes will be essential when utilizing ChatGPT (Van Dis et al., 2023). Furthermore, scholars caution against learners over-relying on the model (Kasneci et al., 2023), emphasizing the potential detrimental impact on their ability to construct their own knowledge (Rasul et al., 2023).

This academic discourse surrounding the potential uses of ChatGPT in education has led to various empirical studies. Kovačević (2023) advocated for the versatile application of ChatGPT in the context of English for specific purposes (ESP), emphasizing its efficacy in generating customized texts and crafting language exercises for the specific target language use (TLU) domains. Han et al. (2023) explored the integration of ChatGPT into EFL college writing courses, revealing positive student satisfaction and multifaceted benefits, including translation assistance, brainstorming support, grammar aid, and draft revision. Schmidt-Fajlik (2023) investigated ChatGPT's utility as a grammar checker in a Japanese university setting while comparing its effectiveness with Grammarly and ProWritingAid. Widiati et al. (2023) also illuminated the positive impact of AI writing tools, including ChatGPT, on enhancing writing quality among EFL college students in Indonesia.

Despite these advancements, the current research on ChatGPT in

language education predominantly exists in theoretical realms or is confined to higher education settings. Therefore, a critical need exists to extend investigations into diverse educational settings, including secondary school language education, to comprehensively understand the implications and potential of ChatGPT in varied educational contexts.

Technology Use in EFL Secondary School Settings

In most EFL contexts, opportunities for students to engage with the target language outside the classroom are limited (Hong, 2023; Wulandari, 2019). However, technological advancements have facilitated EFL students to learn English more efficiently within more meaningful and authentic contexts. Various studies have explored the impact of different technological interventions in EFL secondary school classrooms. A comprehensive review of recent research on technology utilization in EFL secondary school settings, alongside an exploration of teachers' or students' perceptions, will provide valuable insights for the current study.

Integrating technology in the EFL classroom provides students with more authentic language input and a richer language learning environment. For instance, Yang (2020) found that incorporating TikTok into English classes in a Chinese secondary school enhanced the authenticity of language materials, enriched classroom activities, and positively influenced students' motivation. Binmahboob (2020), in a study on the use of YouTube among secondary school teachers in Saudi Arabia, revealed that technology, such as YouTube, contributes to diversifying the learning environment and increasing learners' motivation. In a study of Thai secondary school teachers' perception and experience of using technology in classrooms, teachers reported frequent use of internet-based tools such as Kahoot, Quizizz, and Padlet, which were perceived to add variety to traditional lessons and help students become more engaged in language learning (Boonmoh et al., 2021). Meanwhile, Chang et al. (2020) reported that lessons utilizing augmented reality (AR) technology helped to create more authentic English situational context environments, which increased students' motivation, learning satisfaction, and learning performance in a study of junior high school students in Taiwan.

One notable application of AI technology in language learning is evident in a study employing a chatbot. Han (2020) investigated the impacts of voice-based AI chatbots on Korean EFL middle school

students' speaking competence and their related affective domains, revealing positive changes in students' beliefs, motivation, and a reduction in anxiety toward English learning. Another study by Park (2019) explored the use of AI-based grammar checkers among Korean high school students, suggesting that while these tools may not address all error types, they can facilitate improvements in grammatical accuracy for English learners.

The literature demonstrates a diverse array of technologies already integrated into EFL secondary contexts, with teachers generally holding positive perceptions of these tools. The use of technology in EFL language learning not only provides students with varied and authentic language input but also introduces innovation into traditional teaching methods, positively impacting students' affective domains.

However, despite the growing use of technology in EFL secondary school settings, there remains a research gap regarding the specific utilization and perceptions of adaptive large language models such as ChatGPT. To address this gap, the current study aims to offer a detailed snapshot of how Korean secondary school English teachers are utilizing ChatGPT and their perceptions of this emerging technology. This investigation will serve as a foundational step toward further empirical studies in the EFL secondary school context.

METHOD

Participants

In this study, 41 secondary school English teachers from 40 schools in Korea participated. Surveyed participants were recruited exclusively from an online community designed for secondary school English teachers, serving as a dedicated virtual platform for educators to address queries about English teaching activities and share relevant information. For the study, an advertisement was posted within this online community for a week (from September 7 to 13, 2023), outlining the objectives of the study and providing the survey link. Subsequently, interested teachers voluntarily participated in the survey, supplying details such as school information, names, and email addresses during their involvement. To confirm respondents' current teaching status, the author cross-referenced this information with details available on each school's official website.

While the participant selection method did not employ random sampling, these participants were considered suitable for the study − a snapshot capturing English teachers' interests and usage patterns concerning ChatGPT. Participants exhibited diverse teaching experience: 5 years or less (19.5%), 6−10 years (29.3%), 11−15 years (14.6%), 16−20 years (22%), 21−25 years (7.3%), and more than 25 years (7.3%). The majority were high school teachers (75.6%), while middle school teachers accounted for 24.4%.

Instruments

To comprehensively capture participants' perceptions, implementation, and learning needs regarding ChatGPT, a survey using a questionnaire was employed as an efficient and accessible mode of data collection. The questionnaire comprised 20 questions, excluding administrative questions, and was divided into three main sections: Perceptions of ChatGPT, Integration and Implementation, and Learning Needs. Also, the survey strategically employed various types of questions, including multiple-choice and open-ended questions, and Likert scale questions to gather both quantitative and qualitative data. Currently, researchers increasingly prefer to combine qualitative and quantitative methods so as to benefit from the strengths of both methods (Nimehchisalem, 2018, p. 31). In this study, multiple-choice questions enabled a structured approach for gathering responses, thereby facilitating quantitative analysis. Likert scale questions were included to quantitatively measure participants' attitudes and opinions, while open-ended questions provided qualitative insights and a deeper understanding of participants' viewpoints.

The questionnaire items and response options were crafted by drawing upon insights from prior research studies (Baidoo-Anu & Ansah, 2023; Hong, 2023; Kasneci et al., 2023; Rasul et al., 2023; Rudolph et al., 2023) outlining the potential benefits and concerns of ChatGPT. The questionnaire design also incorporated the author's firsthand experience as an EFL secondary school teacher. Additionally, the study found inspiration in Binmahboob (2002) and Emre (2019), whose investigations examined EFL teachers' perceptions regarding the effectiveness of YouTube in enhancing students' speaking skills, and the prospective teacher's views on obstacles to integrating technology in education. After extracting the topics that comprised the questionnaire, each question was constructed by referring to the question-wording method proposed by

Nunan (1992). Lastly, the questionnaire underwent a comprehensive review process involving three beta testers: a TESOL professor, an EFL teacher, and an ESL teacher. Their valuable insights and suggestions contributed to the refinement and improvement of the survey.

Data Collection

The survey was conducted using an online platform; given that all participants were located in Korea while the author was based in the US, Google Forms, a platform familiar to Korean teachers, was utilized for the online survey. Respondents expressing interest in participating in the study were granted access to the survey link. A concise overview of the research was presented at the outset on the Google Forms survey, accompanied by a request for consent from participants. For any survey-related questions, communication took place through email and text messages. The survey was carried out over one week, from September 7 to 13, 2023.

Data Analysis

Since the survey included both the quantitative and the qualitative sections, each type of data was analyzed based on quantitative and qualitative analyses, respectively. For the quantitative portion, including multiple-choice and Likert scale items, frequency analysis and descriptive statistics were used. Frequency analysis was employed for multiple-choice items, presenting frequencies and percentages to show the distribution of responses across options. For Likert scale items, descriptive statistics such as mean, median, and standard deviation were provided to summarize participants' perceptions of the given topic. Responses from open-ended questions were qualitatively analyzed using Nunan's (1992) keyword analysis. Initially, all responses were meticulously reviewed to gain a comprehensive understanding of the content. Then, repetitive keywords and phrases were identified and organized into thematic categories. That is, the author generated categories from the statements made by respondents. Each response was classified based on these themes, and the frequency was counted and presented.

RESULT AND DISCUSSION

EFL Secondary School Teachers' Perceptions of ChatGPT

Initial Impressions About Using ChatGPT in Language Teaching

Upon their first encounter with the concept of integrating ChatGPT into language teaching, a significant 73% of survey respondents expressed enthusiasm and intrigue, indicating a strong interest in exploring its potential. Another 14.6% conveyed curiosity mixed with uncertainty, while 9.8% reported a mix of worry and hesitation. Only one participant expressed skepticism about the tool's usefulness. This indicates that most teachers are highly interested in this new AI tool, suggesting the potential for widespread use of this technology in teachers' educational settings in the future.

TABLE 1. Initial Impressions About Using ChatGPT in Language Teaching (Select one)

Statements	*N* (41)	%
Intrigued and excited to learn more.	30	73.2
Curious but uncertain about its practicality.	6	14.6
Worried and hesitant.	4	9.8
Skeptical about its usefulness in language teaching.	1	2.4
None of the above.	0	0

Current Familiarity with Using AI Technologies in Teaching-Related Activities

Participants' familiarity with AI technologies in teaching-related activities varied across the spectrum, as indicated in Table 2. A minority (4.9%) expressed minimal familiarity (Rating 1), while 14.6% had a modest acquaintance (Rating 2). A significant portion (43.9%) positioned themselves at a mid-level of familiarity (Rating 3), suggesting notable exposure. Moving higher, 22% demonstrated considerable understanding and integration (Rating 4), and 14.6% exhibited the highest familiarity level (Rating 5). The results indicate a broad spectrum of participants' exposure to the concept of integrating AI technologies into teaching. This highlights the need for tailored support and guidance to bridge the gap among teachers.

TABLE 2. Summary of Survey Response (Perception)

Questions	1	2	3	4	5	M	Me	SD
4.1.2. Current familiarity with using ChatGPT in language teaching-related activities.	2 (4.9)	6 (14.6)	18 (43.9)	9 (22)	6 (14.6)	3.27	3	1.04
4.1.3. Opinion on the efficacy of using ChatGPT in language teaching-related activities.	0	2 (4.9)	11 (26.8)	20 (48.8)	8 (19.5)	3.83	4	0.79
4.1.4. Perceived benefits of ChatGPT in students' language learning experience.	1 (2.4)	2 (4.9)	12 (29.3)	17 (41.5)	9 (22)	3.76	4	0.93

Note. *M* = mean, *Me* = median, *SD* = standard deviation. For Question 4.1.2, 1 = *not familiar*, 5 = *very familiar*. For Question 4.1.3, 1 = *not helpful*, 5 = *highly effective*. For Question 4.1.4, 1 = *strongly disagree*, 5 = *strongly agree*.

Opinion on the Efficacy of Using ChatGPT in Language Teaching-Related Activities

A majority of teachers (48.8%) perceived ChatGPT as highly effective in supporting English instruction, with an additional 19.5% rating it at the highest level (see Table 2). To gain more detailed ideas regarding this question, participants were asked to identify the most significant benefits they envisioned regarding the use of ChatGPT from a teacher's perspective. As outlined in Table 3, a substantial number of participants responded that "providing instant language assistance and feedback to students" is the foremost benefit of utilizing ChatGPT, given the teachers' challenge of addressing individual students' questions in a timely manner. Additionally, a comparable number of participants considered the tool's ability to generate diverse and engaging language materials particularly beneficial, which can contribute to improving the quality of lessons. This is consistent with the general consensus in the literature (Hong, 2023; Kasneci et al., 2023; Rasul et al., 2023) that ChatGPT is a valuable tool for providing students with prompt and individualized feedback.

TABLE 3. Teachers' Perceived Benefits of Using ChatGPT in Language Teaching (Select one)

Statements	N (41)	%
Providing instant language assistance and feedback to students.	14	34.1
Generating diverse and engaging language learning materials.	12	29.3
Saving teacher's time on generating prompts and resources for language activities.	7	17.1
Supporting differentiated instruction for students with varying proficiency levels.	4	9.8
Providing an extra resource for students to enhance their practical conversational abilities.	4	9.8
I don't see any potential benefits from ChatGPT in language teaching.	0	0

Teachers' Perceived Benefits of ChatGPT in Students' Language Learning Experience

As shown in Table 2, teachers widely perceived the integration of ChatGPT into language instruction as beneficial not only for both teaching practices but also for students' overall learning experiences. When respondents were asked a follow-up question about how ChatGPT contributes to improving students' language learning experience, the tool's ability to provide students with more input; exposure to diverse, authentic texts; and support in expanding vocabulary emerged as the most significant benefits. Additionally, it was also noted that ChatGPT enables students to receive immediate feedback, thereby increasing their motivation, as detailed in Table 4.

In an EFL context, students often face challenges in accessing language input beyond the classroom and textbooks (Hong, 2023; Wulandari, 2019). In these circumstances, ChatGPT could significantly enhance both the quantity and quality of students' language input. Teachers' responses also indicated that ChatGPT could assist in students' review and self-study by enabling them to request more texts on similar topics of the textbook passage at their own levels. At the same time, students can get a variety of sentence examples, including vocabulary usage in various authentic contexts. Additionally, "immediate feedback and enhanced motivation" also stood out as a prominent benefit. Teachers often find it challenging to provide timely and personalized

feedback to individual students because they are dealing with a large number of students. As many participants responded, ChatGPT could help teachers address this issue by offering immediate and tailored feedback to each student's needs. This aligns with the argument of Kasneci et al. (2023), suggesting that ChatGPT will significantly contribute to providing students with a personalized learning experience.

TABLE 4. Teachers' Perceived Benefits of ChatGPT in Students' Language Learning Experience

Views	N
More input; access to diverse, authentic texts; expanding vocabulary	8
Immediate feedback and enhanced motivation	7
Grammar check and writing improvement	4
Supporting individualized learning and self-study	4
Increased willingness to try out a new language due to reduced pressure	2
Increased conversation practice and interaction opportunities (chatbot)	5
Content-based learning (studying topics of their own interest while acquiring language)	1
Expanding background knowledge about the target culture	1

Teachers' Perceived Concerns About Using ChatGPT in Language Teaching

Participants were also asked about their primary concerns or challenges regarding integrating ChatGPT into language teaching. As illustrated in Table 5, the most prevalent concern was the potential overreliance of students on AI for language learning (46.3%). This highlights the importance of adopting a balanced approach in using ChatGPT as a language education tool. Teachers must carefully consider when and to what extent ChatGPT should be incorporated into the language classroom, providing students with clear guidelines.

Moreover, participants expressed concerns about the accuracy and appropriateness of AI-generated content (24.4%). As various studies noted, ChatGPT occasionally produces inaccurate information presented as factual (Baidoo-Anu & Ansah, 2023; Rudolph et al., 2023; Van Dis et al., 2023). This issue is also intertwined with potential biases in ChatGPT outputs, acknowledged by 7.3% of the respondents. Given the limited ability of secondary school students to critically discern incorrect

information and biased opinions, teachers must inform students explicitly that while ChatGPT can be a valuable aid in language learning, it may occasionally provide inaccuracies and prejudiced perspectives. Also, students should be advised to cross-check the tool's results with those from other sources and understand their accountability for any errors the tool may introduce (Wood & Kelly, 2023).

Lastly, a considerable number of teachers (17.1%) expressed concerns about the potential for students to cheat using ChatGPT. This aligns with prior research highlighting broader concerns about academic integrity and the risk of plagiarism associated with the integration of AI technology in educational settings (Kasneci et al., 2023; Rudolph et al., 2023; Westfall, 2023). In light of these concerns, educators are urged to design assessments and assignments where ChatGPT cannot be directly employed for cheating (Cotton et al., 2023; Moqbel & Al-Kadi, 2023). Moqbel and Al-Kadi (2023) proposed a shift from purely quantitative assessment to a blend of qualitative and quantitative assessment that focuses not solely on the final learning product. They suggested that alternative assessment, such as performance-based assessment (e.g., projects, presentations, discussions), portfolios, and self-assessment, should be the future direction of assessment in language classrooms. Cotton et al. (2023) also recommended assessments that ask students to showcase their critical thinking, problem-solving, and communication skills. This could involve having students make presentations, engage in group discussions that require the application of their knowledge and skills, or submit a series of drafts before the final version.

TABLE 5. Teachers' Perceived Concerns About Using ChatGPT in Language Teaching (Select one)

Statements	*N* (41)	%
Ensuring the accuracy and appropriateness of AI-generated content.	10	24.4
Addressing potential biases present in AI responses.	3	7.3
Managing students' overreliance on AI for language learning.	19	46.3
Balancing AI integration with traditional teaching methods and curriculum.	1	2.4
Preventing or detecting students' potential cheating using ChatGPT.	7	17.1
I don't see any concerns or challenges.	0	0
Other (Lack of proficiency in using ChatGPT among students).	1	2.4

EFL Secondary School Teachers' Integration of ChatGPT into Their Teaching

Teachers' Usage of ChatGPT in Teaching-Related Activities

When asked about their use of ChatGPT in English teaching-related activities, 68.3% of the participants affirmed its utilization. Among regular users, 56.1% reported using it "a few times a month," followed by "several times a week" (19.5%), "once a week" (12.2%), and "infrequently" (12.2%). Approximately 70% of respondents have experience using ChatGPT, indicating a substantial proportion of educators already familiar with AI integration. However, the varying usage frequencies (32% more than once a week vs. 68.3% a few times a month or less) highlight a noticeable difference among teachers in their ability to use and preferences for integrating AI technology into language education. This variation in teachers' utilization of AI technology is directly linked to the amount of exposure students have to this AI tool, ultimately leading to differences in students' ability to utilize AI technology. Therefore, it is essential for more teachers to have an interest in emerging AI technologies and actively incorporate elements that could benefit students' learning into their teaching. Additionally, educational authorities should provide teachers with useful training on utilizing AI technology and suggest guidelines for seamlessly integrating AI technology into teaching and learning practices.

TABLE 6. Teachers' Usage of ChatGPT in Teaching-Related Activities

Frequency of Usage	N (41)	%
Daily	0	0
Several times a week	8	19.5
Once a week	5	12.2
A few times a month	23	56.1
Infrequently	5	12.2

Types of Utilization of ChatGPT in Teaching-Related Activities

Table 7 outlines the varied applications of ChatGPT in teaching-related activities. The most prevalent usage reported by teachers is in creating sample sentences for vocabulary or grammar teaching. This aligns with the perceived benefits of ChatGPT, emphasizing "more input; access to diverse, authentic texts; and expanding vocabulary" in Table 4.

Moreover, the survey responses indicated that teachers frequently

utilize ChatGPT during writing classes. As shown in multiple studies, ChatGPT has already been widely recognized and utilized in higher educational settings for its utility as a writing assistant and a grammar checker (Han et al., 2023; Schmidt-Fajlik, 2023; Widiati et al., 2023). This was also evident in a secondary school setting, and such features of ChatGPT are expected to be more beneficial for students in EFL settings where writing fluency and accuracy tend to be lower compared to students in English as a second language (ESL) settings.

In addition to these, ChatGPT has been shown to serve various other purposes, such as providing information on cultural insights and background knowledge related to the topic of each lesson, creating various assessments, and customizing learning materials. This result demonstrates that ChatGPT is already effectively serving as a teacher's assistant in several areas. It is anticipated that the utilization of ChatGPT in language teaching will continue to expand in the future.

TABLE 7. Types of Utilization of ChatGPT in Teaching-Related Activities (Select all that apply)

Types of Usage	N (41)	Rank
Creating lesson plans	2	10
Creating sample sentences for vocabulary or grammar teaching	28	1
Creating a reading passage	10	4
Creating a listening/speaking script	2	10
Creating a rubric	2	10
Grading students' writing assignments	9	8
Creating formative assessment: weekly vocab quiz, grammar quiz, etc.	10	4
Creating summative assessment: midterm and final	10	4
Customizing learning materials: Tailoring learning materials based on student's specific needs and levels	10	4
In-class activity: Engage students in chat conversations with ChatGPT	8	9
In-class activity: Writing assistance for students. Using ChatGPT to provide grammar and writing tips for students' writing assignments	15	2
Providing cultural insights and background knowledge about the passage to students	11	3
Brainstorming creative language activities	9	8
Other	2	10

Anticipated Shifts in English Teacher Roles

Regarding the potential impact of AI technologies (particularly ChatGPT) on the future role of English teachers, participants expressed various views. As seen in Table 8, 41.5% recognized an expected change in the role of English teachers. Interestingly, 29.3% of the respondents answered "No" or "I don't know." This might be because English education in the Korean secondary school context is closely tied to the university entrance exam. Due to this reality, some teachers tend to think that technological advancements will not have a significant impact on the English education situation and the roles of teachers in Korea. However, new technologies will inevitably influence our educational environment and the behavior of educational participants in some way, and we can glean clues about the direction of these changes from the responses of certain teachers.

TABLE 8. Opinion on Evolving Roles of English Teachers in the EFL Secondary School Setting

Opinion	N (41)	%
Yes	17	41.5
No	12	29.3
I don't know	12	29.3

For a detailed look, Table 9 shows the perspectives of teachers expecting changes due to AI technology. The finding suggests an anticipation of a transformative role, where teachers move towards providing personalized education tailored to students' individual interests and proficiency. At the same time, there is an expectation that students will gradually become less dependent on teachers, while teachers themselves shift to a facilitating role in the learning process. In a situation where students have access to AI tools that can instantly address their curiosity, it is clear that teachers will lose competitiveness if they attempt to impart standardized knowledge only. Moreover, with the likelihood of a gradual decrease in students' dependency on teachers, educators need to contemplate how they can better serve as facilitators and advisors. One respondent even mentioned, "It seems that students will rely more on AI tools like ChatGPT than on teachers." While it may not go to that extent, it is evident that students' independent learning will become increasingly feasible. Therefore, efforts should be directed

towards managing student learning, attending to their affective factors, and providing a curriculum that encompasses various student interests and needs. Also, as mentioned by Ausat et al. (2023), the role of teachers as mentors and role models cannot be replaced by AI technology. Lastly, teachers should strive to cultivate not only their proficiency in English but also their AI technology literacy in order not to fall behind students who "are often digital natives who use technology more effortlessly and intuitively than their teachers" (Rudolph et al., 2023).

TABLE 9. Anticipated Changes in Teacher Roles

Views	N
Teachers get to put more effort into providing personalized education tailored to individual students' interests and proficiency.	4
Students are becoming less reliant on teachers, and teachers will take on the role of facilitators.	3
Teachers will be responsible for warning and rectifying potential inaccuracies when students use AI technology for learning.	2
Teachers should pay more attention to students' affective factors.	1
Teachers will need to demonstrate strengths in lesson design considering social contexts, student needs, etc.	1
Teachers will need to strive to cultivate both English proficiency and AI technology literacy.	1

EFL Secondary School Teachers' Learning Needs of ChatGPT

Teachers' Confidence in Utilizing ChatGPT in Teaching-Related Activities

Table 10 presents teachers' self-reported confidence in utilizing ChatGPT in teaching-related activities. Surprisingly, a notable proportion of teachers reported a moderate to high level of confidence in using ChatGPT in their teaching practice. This suggests the potential for effective utilization of AI technology in language education. However, considering the fact that the proportion of respondents who reported slightly confident (Rating 2) and moderately confident (Rating 3) constitutes 61%, systematic support and training seem necessary.

TABLE 10. Self-Reported Confidence in Utilizing ChatGPT in Teaching-Related Activities

1	2	3	4	5	M	Me	SD
0	9	16	12	4	3.27	3	0.91
(0)	(22)	(39)	(29.3)	(9.8)			

Note. M = mean, Me = median, SD = standard deviation. 1 = not at all confident, 5 = very confident.

Previous Training Experience on ChatGPT

When asked about their professional training in incorporating ChatGPT into teaching practices, 73.2% of the respondents indicated no prior training, while 26.8% reported having received training (see Table 11). Among those with training experience, developing assessments using ChatGPT was reported as the most useful content of the training (see Table 12).

TABLE 11. Previous Training Experience on ChatGPT

Experience	N (41)	%
Yes	11	26.8
No	30	73.2

TABLE 12. The Most Useful Content from Previous Training

Content	N
How to use ChatGPT in developing assessment	5
How to use ChatGPT in a writing class (brainstorming, grammar checker, etc.)	2
How to use ChatGPT in grading	1
How to write a prompt effectively when asking questions to ChatGPT	1
Exchanging experience of incorporating ChatGPT into lessons among teachers	1
General knowledge about ChatGPT	1

Areas of Interest for Future Training and Preferred Training Methods

In order to offer valuable guidance for future training, participants were asked to identify their top three choices from a list of topics. Table

13 displays the outcome, with "brainstorming creative language activities" emerging as the most favored area of interest. This indicates a strong inclination among teachers to create a more engaging and diverse learning environment. Additionally, topics such as "grading students' writing assignments" and "customizing learning materials" were also highlighted. These tasks demand considerable time and effort from educators. Therefore, if there is training available on how to enhance the efficiency of these tasks using AI, it could significantly improve teachers' productivity in their work.

TABLE 13. Areas of Interest for Future Training (Select three)

Types of Usage	N (41)	Rank
Creating lesson plans	1	15
Creating sample sentences for vocabulary or grammar teaching	7	10
Creating a reading passage	5	11
Creating a listening/speaking script	4	12
Creating a rubric	8	8
Grading students' writing assignments	16	2
Creating assessments	13	5
Creating assignments	8	8
Creating effective prompts	9	6
Brainstorming creative language activities	18	1
Addressing concerns related to privacy, bias, and responsible AI usage	9	6
Understanding the basics of artificial intelligence and natural language processing	4	12
Customizing learning materials: Tailoring learning materials based on student's specific needs and levels	16	2
Providing cultural insights and background knowledge about the passage to students	4	12
Implementing diverse in-class activities using ChatGPT	14	4
Other	1	15

Teachers' preferred training methods, as shown in Table 14, reveal a preference for in-person workshops, followed by online webinars. This emphasizes a preference for interactive formats, indicating teachers' desire to engage and share their knowledge and experiences with fellow teachers.

TABLE 14. Preferred Training Methods (Select all that apply)

Mode of Training	N (41)	Rank
In-person workshops	20	1
Online webinars	17	2
Video tutorials (one-way)	12	3
Written guides (manual, book)	11	4
One-on-one coaching	5	5

Participants' General Feedback on ChatGPT Utilization

In the last item of the questionnaire, participants were invited to share any concerns, experiences, and suggestions regarding the use of AI tools, such as ChatGPT, in teaching. Their comments, quoted in Table 15, predominantly reflected concerns, with a recurring worry about students overly relying on AI tools and potential negative impacts on their English writing skills. Issues of information security, the diminishing role of English teachers, and students' limited ability to discern inaccurate information were also expressed. Additionally, it is also noteworthy that questionnaires and discussions of this kind can enhance teachers' awareness and motivation regarding the use of AI tools in educational settings, as mentioned by Participants 29 (P29) and 15 (P15).

TABLE 15. Participants' Feedback on ChatGPT Utilization

Themes	Excerpts
Benefits of Using ChatGPT	– I find it convenient to paraphrase sentences and to check grammar. It is quite helpful for students who can't write English sentences properly when preparing for performance tests. (P1) – Through ChatGPT or video auto-generating apps, students were able to easily prepare their presentations. (P22) – Before ChatGPT was available, I used paraphrasing tools like Quillbot extensively when creating assessments. But now, I find myself heavily relying on ChatGPT because it's very convenient and offers many useful features. I find it especially helpful when creating summative assessments and developing learning materials. (P30)

Challenges or Concerns Encountered or Anticipated	– When I asked about grammar, it still felt like the Korean grammar terminology hadn't been fully integrated, and there have been frequent instances of errors. (P2) – I'm worried that AI tools will take over people's jobs someday, especially English teachers like me. (P4) – I'd like to use ChatGPT for making test items but worry that students can get the same or similar ones and answers through ChatGPT results before taking exams. (P5) – Digital citizenship, copyright issues, etc.* (P7) – When I first decided to let students take advantage of ChatGPT in writing class, I was concerned about their ability to critically select the proper one. Most of them didn't know how to ask questions to get what they wanted. I had to teach them how to ask questions in order to induce answers for their topics. Also, some of the students copied what ChatGPT said for their writing tasks, which was embarrassing because I had no idea about filtering their tasks. (P8) – Although I said English teachers' roles would be more like facilitating than in the past, I'm afraid that English teachers' roles may be reduced to supervising the learning. Also, since ChatGPT can translate texts and respond to prompts or questions, I'm afraid that learning the subject itself would be considered less important than now. Therefore, I think English teachers should approach the question of why we are teaching English (as in understanding the diversity among different cultures). (P11) – There are growing concerns that students are excessively relying on ChatGPT to complete their assignments, leading to a decline in their motivation to create original sentences. This overreliance on tools like Papago and Google Translate has already raised apprehensions among teachers regarding the reliability of writing assignments and assessments.* (P14) – Students might be exposed to all the contents that are not filtered. (P18) – Many students in Korea are supposed to write an English essay on a given topic for a performance assessment. Now that ChatGPT is available, students are able to easily get the sample essay with just one sentence and click. How can we deal with this situation? (P19)

	– Reliability of the information provided by ChatGPT.* (P21)
	– I experienced serious unreliability of ChatGPT. Once, it said ok to something, but when I asked again, it said it was wrong. The more you are competent in English, the more you cannot trust it. That means you are vulnerable if you don't know enough. You might get the wrong information, but you will never know it. I thought it would be better to just search and determine on my own sometimes. (P23)
	– Although it is said that ChatGPT can be helpful in creating assessments, I have concerns about security. (P27)
	– I'm concerned that as students begin to use ChatGPT, not only their language skills but also their critical thinking abilities may decline.* (P36)
Recommendations for Future Use	– To effectively use artificial intelligence as a tool for teachers without becoming overly dependent on it, teachers must be expert and confident in their teaching methods and contents.* (P26)
Other	– I just need training on it. (P29)
	– This survey motivates me to use ChatGPT in my own lessons. (P15)

Note. Asterisk (*) = Translated by the author; P1 = Participant 1.

CONCLUSIONS

This study aimed to investigate the perceptions, integration, and learning needs of EFL secondary school teachers regarding ChatGPT in their teaching practices. The findings indicate that the majority of teachers perceive ChatGPT as a valuable tool with widespread potential in language education. Despite variations in familiarity and exposure levels to ChatGPT, most respondents expressed curiosity about its potential application and a desire to explore this tool.

The participants have reported significant benefits of ChatGPT, including the provision of immediate language assistance, personalized feedback, and the creation of engaging materials using diverse and authentic language resources. These advantages have the potential to significantly enhance the quality and quantity of input that students receive. However, teachers also expressed concerns regarding using

ChatGPT in their teaching-related activities. The main concern was students' overreliance on AI tools, which could impede students' writing skills and assignment reliability. However, this issue can be addressed by developing learning activities and assessment methods that focus on students' learning process, problem-solving, and critical thinking skills. There have also been concerns that ChatGPT sometimes provides inaccurate information and biased viewpoints. Therefore, it is crucial to educate students about the limitations of ChatGPT and assist them in cultivating critical literacy and AI literacy skills.

The study also examined the current utilization of ChatGPT, revealing that approximately 70% of surveyed teachers have employed it for teaching-related activities, primarily for creating sample sentences for vocabulary and grammar teaching and writing assistance. Notably, a significant proportion of teachers foresee a shift in their role. They anticipate that, in the future, educators will need to prioritize delivering a personalized learning experience tailored to the interests and proficiency levels of individual students. Teachers believe that ChatGPT, along with other AI tools, will play an active role in facilitating this transformation. As a result, students are expected to become less dependent on teachers, while educators will increasingly function as facilitators and advisors. In light of these changes, it becomes crucial for teachers to cultivate expertise not only in English education but also in AI technology literacy.

Regarding learning needs, teachers express a strong desire for training in generating creative language activities, creating customized learning materials, efficient grading methods, and in-class activities utilizing ChatGPT. They prefer interactive training formats, such as in-person workshops and online webinars.

In conclusion, teachers exhibit curiosity and recognition of the vast potential of ChatGPT as a valuable educational tool. Despite raising various concerns, they express a willingness to address these issues through diverse learning opportunities with fellow teachers and AI professionals. As educators grapple with the emerging challenges associated with its utilization, AI technology is expected to become a beneficial personal tutor and interactional partner for students, offering teachers an efficient assistant that significantly contributes to the improvement of language learning and teaching.

While this study was conducted in a Korean EFL secondary school context, the findings provide insights applicable to diverse EFL contexts

and ESL language educators. Future research endeavors focusing on the integration of ChatGPT are encouraged to present concrete classroom examples or artifacts to contribute to a more comprehensive understanding of its instructional applications. Additionally, exploring students' perceptions, their preferred types of AI tool usage, and their learning needs will also provide valuable insights into the optimal integration of AI tools into language education.

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