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Szakdolgozat

Mezőfi Rebeka

Angol nyelv és kultúra

tanára -

Könyvtárostanár

Osztatlan tanárképzés

Szakdolgozat

A természetes nyelvfeldolgozó modellek használatának kihívásai és lehetőségei az angol mint idegen nyelv tanításában

Challenges and Opportunities of Using Natural Language Processing
Tools for Teaching English as a Foreign Language

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have faithfully and exactly cited all the sources I have used, including books, journals, handouts

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Abstract

ChatGPT 3.5 has started a paradigm shift in English as a Foreign Language (EFL) teachers' roles and their methodology. This thesis aimed to unveil English language teachers' perceptions of ChatGPT's roles in language teaching and its effect on their roles. Furthermore, this study investigated how ChatGPT can help in lesson planning and assessment, how it can develop language skills, and the imposed challenges teachers encounter while interacting with the Large Language Model (LLM) based chatbot. In this current research, 52 EFL teachers completed an online questionnaire from among whom 6 teachers (both teacher trainees (TR1, TR2) and inservice teachers (T1-T4) were selected randomly for in-depth interviews. The interviews were analysed qualitatively, using the constant comparative method, supported with quantitative data from the questionnaire to answer the research questions. The results indicate that the role of ChatGPT role is mostly limited to being a content provider and resource, it is not acknowledged by teachers as a tutor due to its disposition to 'hallucinations'. Ensuring the ethical usage of ChatGPT has become teachers' most prominent role regarding the use of this technology in the classroom, along with supervising the content it produces and ensuring students' emotional well-being. EFL teachers believe ChatGPT is perfect for providing ideas for lesson plans, but they resent using it for assessment or giving feedback. ChatGPT is the most useful for improving reading and writing skills, and the greatest challenges they identified are the ethical issues (plagiarism) and filtering false information in ChatGPT's output. These results imply that EFL teachers are strongly encouraged to use ChatGPT for background work and to stay the 'human-in-the-loop' as experts to explore more possible implementations teachers have not yet exploited.

Keywords: ChatGPT, teacher roles, lesson planning, assessment, language skills development, Large Language Model

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1 Introduction

In November 2022, the public release of ChatGPT 3.5 caused excitement in various fields that saw limitless potential in the Large Language Model (LLM) (Stojanov, 2023). Open AI (Artificial Intelligence) has since affected every field of expertise from the economy to healthcare. Education also had to face the challenges this new situation created. On the one hand, accessibility to Natural Language Processing (NLP) tools, like ChatGPT, seemed to make writing assignments pointless for skills development as learners started to use it for generating texts for their home assignments and submitting such texts as their own essays. On the other hand, the role of teachers in foreign language teaching has also been jeopardized, fundamentally questioning their methodological approaches (Mollick & Mollick, 2023). Therefore, teachers of English as a Foreign Language (EFL) are supposed to acquire new roles and methodologies in order to teach students 21st-century skills and keep their posts solid. By being the 'humanin-the-loop' (see Kostka & Toncelli, 2023; Mollick & Mollick, 2023; Wu et al., 2022), which refers to the necessity of involving human expertise for the integration of AI in education, teachers' presence in language education remains unshakeable as they remain the decisionmakers. Nevertheless, AI-generated opportunities in foreign language teaching entice the field of education to revise and reshape its concept of methodology. Rather than fighting a tug-ofwar with technology on who is going to win students over, teachers should harness its powers and use it to bring their language teaching into the 21st century with modern teaching methods by using AI.

Ever since ChatGPT (Chat Generative Pre-trained Transformer) – a text-based AI application that interacts with users in a conversation manner and generates human-like texts (Huang & Li, 2023) – was launched on the market and was made accessible for both teachers and students, I have been eagerly keeping track of its effects on language teaching and its impact on language teachers' work. This new technological advancement has questioned the roles of teachers in the classroom, since AI can cover all the areas teachers were needed for. The first wave of apprehension started to calm down once it became obvious that ChatGPT could not substitute educational professionals due to its many errors and lack of validity. However, AI-powered tools are not only threats to language teaching but also beneficial in many ways. NLP tools process human language by analysing and generating written or spoken texts (Meurers, 2021); therefore, are capable of communicating with the user, giving feedback and improving

learning strategies. Moreover, they can also assist teachers in their work by generating lesson plans and brainstorming ideas – which in themselves are already time-consuming procedures. LLMs (advanced versions of NLPs, trained on billions of human texts and capable of engaging in a human-like conversation with the user or generating high-quality texts) being merely human-made tools, are not superior to the human resource, alias teachers. Technology can never prevail on its own, but only in cooperation with human intelligence and supervision. That is what the term 'human-in-the-loop' (see Kostka & Toncelli, 2023; Mollick & Mollick, 2023; Wu et al., 2022) implies. Teachers still have a pivotal role in language teaching as facilitators (Meyers, 2008) who encourage students and provide feedback to support their progress. Teachers can support students best by setting a good example and becoming efficient learners themselves. They should be the pioneers in experimenting with NLP tools to explore the limitations and benefits they have. Teachers' responsibility in this new era of foreign language teaching is to serve as models who use critical thinking and other strategies when interacting with AI. It has become crucial for teachers to be involved at all levels of AI implementation and use, from curricular, and instructional planning to decision-making and assessment design (Kostka & Toncelli, 2023).

Covid-19 was a period in history when technology proved to be intertwined with education. During the pandemic, teachers were forced to cope with different online platforms to manage students' learning. This was a crash course for teachers and learners as well. Such resilient and adaptive, open-minded attitude is what is needed in the OpenAI era in language education. Teachers should use it and adapt it to their teaching to make language learning more effective and reduce their workload (Jeon & Lee, 2023).

This paper intends to give a general overview of the opportunities and challenges of integrating ChatGPT in EFL teaching. First, the review of the literature on the teaching-related applications of the LLM focuses on four main aspects of teaching: (1) the roles of ChatGPT along with the forms of chatbot-teacher collaboration and its challenges; (2) how teachers can use ChatGPT from planning to assessment; (3) how ChatGPT can improve the four macro skills and intercultural competence; and finally, (4) the limitations of ChatGPT. The empirical research part of this paper (from Section 3) focuses on the four research questions based on which the relevant literature was reviewed:

- 1. How do teachers perceive the role of ChatGPT and its effect on their roles in teaching foreign languages?
- 2. How can ChatGPT help teachers in planning and assessment?

- 3. How can ChatGPT support EFL teachers in improving students' foreign language skills?
- 4. What challenges does ChatGPT impose on EFL teachers?

A total of 52 EFL teachers in Hungary participated in the questionnaire survey part of the current exploratory study. In-depth interviews were conducted with 6 teachers to support the interpretation of the data from the questionnaire. The overall aim of this exploratory study is to reveal how teachers can integrate ChatGPT in education and still stay the human-in-the-loop.

Only a few educational features of ChatGPT have been investigated by some earlier research studies, but the degree to which ChatGPT could be integrated into education, and its effect on teachers' roles have not yet been thoroughly examined. The question of how helpful ChatGPT is as a tool for EFL teachers, or whether its early stage of development hinders teachers in their efficacy remains unanswered. The pedagogical use of ChatGPT in language teaching is still under-researched, so this study aims to contribute to filling this gap. The results aim to provide EFL teachers with practical information – and inspiration – on how to use ChatGPT for language teaching and overcome the challenges by seeing how their teacher colleagues apply it. Reading about the struggles they encounter will help other teachers rethink their roles in teaching and acquire new strategies to try to integrate as many uses of ChatGPT as possible.

2 Review of the literature

The first chapter explains how NLP tools function, with a special focus on ChatGPT – a general-purpose chatbot powered by LLM and defines the most important terms used throughout the paper. (Section 2.1). After that, the following aspects will be elaborated further on:

- (1) the major challenges and risks of ChatGPT will be discussed, with a special focus on issues that might hinder teachers' efficiency (Section 2.2);
- (2) the roles of ChatGPT in language teaching (Sections 2.3);
- (3) how teachers use ChatGPT from planning to assessment (Section 2.4);
- (4) finally, how ChatGPT can be used to improve the productive and receptive skills and intercultural competence (Section 2.5).

The review of the literature will end with the anticipated outcomes of this current research (Section 2.6).

2.1 Natural language processing tools

Natural Language Processing (NLP) "is a subfield of computer science and artificial intelligence (AI) that enables computers and digital devices to recognize, understand, and generate texts and speech by analyzing human language" (Holdsworth, 2024, par. 1). The term "natural" (Kalyanathaya, et al., 2019, p. 199) implies human-like input and output as NLP tools study millions of texts – words, sentences, and paragraphs – written by humans and can provide human-like responses. Chatbots are one of the well-known application areas of NLPs (Kalyanathaya, et al., 2019).

Large Language Models (LLM) are upgraded versions of NLP tools with access to a larger set of data; therefore, these two terms will be used interchangeably throughout this paper, mostly in association with ChatGPT, a generative AI chatbot, powered by LLM (Jeon & Lee, 2023). LLMs are trained on billions of human-generated texts, are able to predict the next word in a given sequence, and for human queries, they generate coherent and contextually appropriate texts (Bonner et al., 2023). Retrieving information is possible due their "neural networks" (Bonner et al., 2023, p. 28) that organize immense amounts of information – similar to the human brain – into categories based on their relationships with each other. As a result, it maintains natural discourse, aiding language acquisition through diverse and authentic contexts (Zhang, 2024).

NLP tools are capable of two types of self-learning. One is called "machine learning" (Sharma et al., 2021, p. 24), when a computer learns from experience through its statistical learning algorithm. The other is "deep learning" (Sharma et al., 2021, p. 24) meaning that the program is developed in a way that it is capable of self-improvement to an extent that communicating with an NLP tool is "as easy as talking to a human being" (Kalyanathaya, 2019, p. 200).

Large AI systems have been using the 'trial and error method' to develop a programming language (algorithms) that should make it easy to integrate changes in the system (Loomis, 1987). In such a system mistakes may appear, but they do not result in the collapse of the whole system, rather, they foster stepwise refinement. This programming language functions through "automatic memory allocation" and "garbage collection" (Loomis, 1987, p. 221), which makes the system self-improving, able to detect any changes made during program execution and frees memory areas. Furthermore, there is also interactivity embedded in these languages that aids human-machine interaction. A specific programming language used in NLP tools is the PROLOG. This language with its grammar formalisms and logic-based semantic representations expands the question-answering feature of the software, establishing its interactive feature. Nadkarni et al. (2011) add that programming languages evolved from a programming language syntax called CFG (Context-Free Grammar) based on Chomsky's theoretical language analysis of grammar (Chomsky, 1956). NLP tools use this "regular grammar" (Nadkarni et al., 2011, p. 544) to specify text-search patterns.

The section above explains how NLP tools work. On the other hand, teachers do not need to be experts in the programming language of LLMs in order to use it appropriately. OpenAI's LLM-based ChatGPT 3.5. is seemingly the most promising tool among NLP-powered chatbots, as it is trained on vast amounts of texts – textbooks, journals, encyclopaedias, the internet, blogs, and many other types of resources (Stojanov, 2023) – and its interactive feature with immediate feedback and response can make learning more engaging. Similar to a flipped classroom, Stojanov's (2023) autoethnographic study – taking the dual role of a learner and a researcher – used ChatGPT 3.5 to examine through initial inquiry-based learning how it aids the learning process as a tutor, asking information about its functionality. ChatGPT can fill in the gaps in the learners' knowledge fast through back-and-forth interaction, keep learners focused on the activity, and also stimulate the affective level of involvement with its constant positive feedback. However, after assessing the ChatGPT-given summary about how it works with a human expert, it was claimed not scholarly enough regarding details. There will always be a need for human supervision of AI-generated texts. ChatGPT scaffolds learning on a general

level, but it also gives biased and false information, which makes it necessary to first examine "how educators perceive and understand ChatGPT before rushing to use it in teaching" (Stojanov, 2023, p. 10). It justifies the premise that AI cannot substitute human experts in different fields, especially teachers. Kostka and Toncelli (2023) also claim that ChatGPT can support instruction in language teaching, but students should be trained to use critical analysis to evaluate the AI-generated output. Students need teachers' navigation in the information flood and be taught all the necessary skills to be the 'human-in-the-loop' (see Kostka & Toncelli, 2023; Mollick & Mollick, 2023; Wu et al., 2022) and use the AI as a supportive tool for their research, not a replacement.

ChatGPT is a general-purpose LLM-powered chatbot that can provide a personalized learning experience as a tutor, generate any kind of text, and assist in the research process. It uses reinforced learning to train itself through human feedback. It is capable of answering follow-up questions, admitting its mistakes, challenging incorrect premises, and rejecting inappropriate queries (Zhai, 2022; Jeon & Lee, 2023). However, teachers need to be aware of its disposition to give false and biased information and teach their students to analyse the ChatGPT output critically. The following section describes the potential challenges ChatGPT might impose on teaching.

2.2 Challenges and potential risks of using ChatGPT

The first most common risk that needs to be considered by teachers when using ChatGPT is the confabulation risk – or hallucination risk – which is most common with prompts that ask for quotes, sources, citations, or other detailed information (Mollick & Mollick, 2023). Such misleading output seems insightful and helpful, but the AI tool makes up 'facts' seemingly plausible and presents them woven into its output. ChatGPT's software "has not (yet) been updated with data after 2021" (Lo, 2023, p. 10); therefore, its knowledge is limited and not always reliable. Even though GPT-4 has low confabulation risk, since it is a premium service of OpenAI, it is more likely that people resort to using the free version (GPT-3.5) which is more prone to errors and providing false information, or contradictive statements that undermine consistency. Stojanov (2023) adds that the misleading output of ChatGPT-3.5 demands the user to obtain previous knowledge of the topic before researching, as beginning learners might not possess the required skill and critical thinking to evaluate the output and tend to trust the engine without concern, they need more support from teachers.

Mollick and Mollick (2023) highlight the risk of biases in the provided information. Due to the vast amount of text ChatGPT is trained on and the additional training from humans, the generated texts can contain biases that can "range from gender and racial to biases against particular viewpoints, approaches, or political affiliations" (p. 5). The other bias to avoid is from the perspective of the user, the risk of anthropomorphizing bots like GPT-3.5, meaning during interaction one might "perceive animacy where it is not present" (Stojanov, 2023, p. 12), attributing characteristics to ChatGPT it does not have, only an imitation of those. It is a bias that has evolved from the constant positive feedback ChatGPT provides. This bias of thinking about ChatGPT as a 'human' may lead to the feeling of alienation in the classroom, as students might develop an unrealistic expectation to always receive the same individualized focus and objective they get from ChatGPT, and expect a constantly supportive stance from others. Although ChatGPT can display empathy through its interaction, it is still a technology, with no heart to feel real emotions and ears to listen to the problems students share. Therefore, teachers need to focus more on the social and emotional needs of students (Amin, 2023).

LLMs also have a convincing nature with strong viewpoints they believe to be true. This fosters the third type of risk, the "instructional risk" (Mollick & Mollick, 2023, p. 5) in case teachers decide to use ChatGPT as a private tutor. This means that ChatGPT might teach material that is not part of established curricula, undermining classroom learning. In Stojanov's (2023) study, ChatGPT-3.5 proves to be a direction-giver learning tool – just like Wikipedia – to obtain basic, general knowledge "but it is less valuable for more specific or advanced knowledge" (p. 11). Consequently, human-machine interaction generates fast comprehension which must be refined by human experts.

The fourth risk is the "privacy risk" (Mollick & Mollick, 2023, p. 5) and ethical problems. Since the chatbot relies on vast datasets to function properly, any personal data entered into ChatGPT in the prompt (instruction) is used by the company to train the AI and make its system more effective. Therefore, privacy and data security remain a concern (Amin, 2023; Halaweh, 2023; Kostka & Toncelli, 2023). Another ethical challenge is the question of intellectual property and authorship (Kostka & Toncelli, 2023). Many students undermine academic integrity by using ChatGPT for cheating, and committing plagiarism, which results in the diminishing of critical and creative thinking of students (Halaweh, 2023; Lo, 2023; Barrot, 2023).

In the above section, four main risks were identified: (1) confabulation risk, when ChatGPT gives false but seemingly plausible information, (2) the risk of bias both in the information provided by ChatGPT and the human nature the user might assume behind the

chatbot, (3) the instructional risk that happens when ChatGPT is used for tutoring and teaches other material than the established curricula and finally (4) the privacy risk and ethical issues, regarding ChatGPT using provided personal data, and the arising issue of plagiarism.

The next section focuses on what roles teachers should have when using ChatGPT, and what roles can be shared with ChatGPT to assist learning and avoid most of the abovementioned risks.

2.3 Roles of teachers and ChatGPT in foreign language teaching

Many teacher roles in language teaching are being redefined and expanded as technological tools are getting integrated into teaching (Huang & Li, 2023). ChatGPT can take on a number of roles from teachers; therefore, a pedagogical shift has started towards enhancing the facilitator role of teachers, who prioritize students' social and emotional development (Amin, 2023). ChatGPT can boost the behind-the-scenes work of teachers by creating tasks and helping them with different instructional phases, giving them more opportunities to focus on building connections with their students.

Table 1 below summarizes the main roles of EFL teachers, based on Harmer's (2015) nine, Ur's (2024) eight, and Scrivener's (2011) three identified teacher roles. The table also indicates which roles can be transmitted to ChatGPT, based on Mollick & Mollick's (2023) and Jeon and Lee's (2023) research findings and other related literature. These shared roles imply that AI and teachers' pedagogical expertise are most efficient if they complement each other (Abramson, 2023; Jeon & Lee, 2023; Zhai, 2022). Several sample prompts are available for teachers, instructing ChatGPT to act in a required role, for instance, "as an additional language teaching assistant" (Vinkler, 2024, p. 4). Before using ChatGPT for a role teachers should give it a trial run to check for possible errors (Mollick & Mollick, 2023).

This section discusses which roles can be shared with ChatGPT in language teaching.

Table 1
Teacher roles that ChatGPT can acquire

Authors Teacher roles		roles	Related roles or tasks ChatGPT can take over	
Harmer, J. (2015, pp. 116-117)	Controller: the teacher is in a lecturing mode; giving explanations, and organizing drills. As a 'sage on the stage' focuses on transmitting knowledge.	2. Monitor: when students are involved in communicative tasks, keep an eye on students whether they do what they are supposed to		
	3. Editor: as an editor, she gives feedback (suggests changes to) on student writing or presentations they are preparing to write or speak better.	4. Evidence gatherer: gathers information about what students are saying to decide how much feedback to give them.	Evaluator & mentor ~ evidence gatherer & editor: providing feedback to students' oral or written production	
	5. Prompter: encouraging them to keep going and suggesting what to do next.	6-7. Resource & tutor: provides information or guidance, and directs students to resources to look up information themselves. As a tutor, she helps individuals in one-to-one teaching.	personalized explanation and feedback, and helps in	
	8. Organizer/task-setter: engages students with the tasks and explain what they have to do. Decide when to stop an activity and give feedback on the activity. Provides materials.	Facilitator: helps students to achieve their goals by coaching them, teaching them or tutoring them.	 Content provider ~ task-setter, resource: creates customized, authentic materials and recommend other sources. Provides cultural knowledge. 	
Ur, P. (2024, pp. 16-18)	I. Instructor: the teacher provides information about the language (its sounds, letters, words, grammar, and communicative use) and clear explanations.	2. Activator: provides tasks that activate students to engage with the forms, meanings, and uses of the language.	4. Content creator ~ activator: gives resources and generates tasks for the lessons.	
	3. Model: the teacher represents a prototype of the English speaker which students will imitate.	4. Feedback provider: provides correction and feedback to help students improve	5. Simulator, interlocutor ~ model: practices with students by taking a role in a role-play scenario, acting as a person from another culture	
	5. Supporter: encourages students, suggests resources and learning strategies to form autonomous learners	 Assessor: collects information on students' present achievements formally (graded classroom tests), or informally (quizzes) 	6. Evaluator ~ assessor : providing grades on students' works and creating testing materials.	
	7. Manager: organizing and managing classroom activities: bringing the class together, organizing group activities, and making sure that students participate appropriately.	8. Motivator: encourage and support students throughout the learning activities with interesting and stimulating tasks.	7. Teammate/devil's advocate ~ manager: challenges underlying concepts and develops collaborative skills within groups in project works	

Authors	Authors Teacher roles		Related roles or tasks ChatGPT can take over
Scrivener, J.	 Explainer: the teacher is lecturing, 	2. Involver: through appropriate and interesting	8. Knowledge transmitter ~ explainer: explaining
(2011, pp. 17-	transmitting knowledge mostly in frontal mode	activities, the teacher tries to involve students	simple concepts and providing information
19)		actively in the learning process while having	Activity designer ~ involver: generating engaging
		clear control over what happens in the	activities and tasks to involve students and evoke
		classroom	their interests
	3. Enabler: creates a good atmosphere, shares		
	control with the students, and makes decisions		
	with them. The teacher creates the conditions		
	in vehicle students leave for themselves		

in which students learn for themselves.

Note. Roles of ChatGPT are contrasted and compared with (~) the teacher roles defined by Harmer (2015), Ur (2024) and Scrivener (2011). Related roles are summarized based on Mollick and Mollick (2023) and Jeon and Lee (2023).

Harmer (2015), Ur (2024) and Scrivener (2011) describe the different roles that teachers may undertake focusing solely on teachers' presence and guidance, without considering the implementation of ChatGPT. Based on the literature, nine roles can be imparted to or shared with ChatGPT, as illustrated in Table 1. Some of these roles are discussed in more detail below.

Teachers do not have to be "resources" (Harmer, 2015, p, 117) as ChatGPT can act as a "content provider" (Jeon & Lee, 2023, p. 15882), or activity designer. It can generate tasks – dialogues, short stories, sample words, and sentences – and recommend materials. Teachers can use it to customize course materials: summarize or create level-appropriate texts, or narrative prompts for writing tasks, and provide cultural knowledge. ChatGPT can generate or brainstorm lesson plans and create assessment tasks (Bonner et al., 2023; Lo, 2023).

For longer work, teachers can share their role as managers with ChatGPT, assigning it the role of a "teammate" (Mollick & Mollick, 2023, p. 25) or the "devil's advocate" (Mollick & Mollick, 2023, p. 26), guiding students along their group work and improve their collaborative skills by making sure students participate appropriately during project works.

ChatGPT can act as a "tutor" (Mollick & Mollick, 2023, p. 11) and prompter, offering personalized language instructions tailored to students' proficiency level, keeping them challenged and motivated throughout language learning (Al-khresheh, 2024). This role enhances learners' autonomy while they use the chatbot for self-study (Lo, 2023; Stojanov, 2023), or "flipped learning" (Lo, 2023, p. 10) when they study pre-class materials to prepare for the lessons. For instance, students can ask ChatGPT to explain the use of Present Perfect, thus there would be more time for group discussions, making the lessons more dynamic. Though ChatGPT can build general knowledge, its answers can be wrong when explaining the technical details of a topic.

Teachers can share their role as feedback providers, as well. ChatGPT as a "mentor" (Mollick & Mollick, 2023, p. 6) can give feedback on students' oral and written language productions. Giving personalized feedback to each student is rather time-consuming, hence imparting some of that work through these roles to ChatGPT can take the burden off the shoulders of teachers.

Ur (2024) mentions EFL teachers as "models" (p. 17) of the language that students imitate. ChatGPT can take a "simulator" role (Mollick & Mollick, 2023, p. 36) and act as a native speaker to prepare students for real-life scenarios. As an "interlocutor" (Jeon & Lee, 2023, p. 15881) who engages in role-plays, students can improve their communication skills as ChatGPT gives them feedback on grammar, pronunciation and vocabulary (Huang & Li, 2023).

Teachers can transmit their "assessor" role (Ur, 2024, p. 17) to ChatGPT, if they wish. In addition to giving initial grades on students' papers, ChatGPT may support teachers by designing test materials and providing feedback on students' written and oral productions. These are all possible areas for ChatGPT as an "evaluator" (Jeon & Lee, 2023, p. 15884). However, scoring and feedback should not be taken over by ChatGPT completely, only in case of low-stake tests and for initial grading. Seeing students' common mistakes and progress determines what to teach next; therefore, human evaluators are still needed and should have the last word in determining the final feedback and grade (Barshay, 2024).

These possible implementations of ChatGPT in teaching, however, implies an active use of ChatGPT during the lessons. The Hungarian school system does not usually provide students with the necessary ICT tools, and no research has emerged yet about the conditions influencing EFL teachers to utilize ChatGPT's roles in the lessons.

This section (2.3) elaborated on some of the roles ChatGPT can share with EFL teachers (content provider, teammate, tutor and prompter, evaluator and mentor, simulator, and assessor). The next section will focus on some 'new' teacher roles that have emerged due to the integration of ChatGPT.

2.3.1 New roles of teachers in the 21st century EFL classrooms

In the 21st century, teachers become facilitators who promote life-long-learning, master and implement ICT (Information and Communication Technology) in their teaching, and flexibly adapt to the changes technology brings (Lee & Tan, 2018).

According to Lee and Tan (2018), two new roles emerge for teachers who use advanced technology to cultivate twenty-first-century skills: "knowledge broker" (p. 22) and "pedagogical weaver" (p. 23). Brokers in a way that they connect with key external expertise – learning scientists, researchers, and software engineers – who would design, implement, and document computer-supported techno-pedagogical innovations, fostering twenty-first-century competencies. Gore and Begum (2012) define this kind of role as someone who "negotiates with trade unions or other stakeholders" (p. 4). Weavers (Lee & Tan, 2018) refer to the capability to blend various pedagogical repertoires to suit learners:

- sage (information provider),
- guide (instructor and activator of the learning stages),
- meddler (active participants in the learning process),
- broker (connecting with external expertise) (Lee & Tan, 2018).

The broker role, however, seems to be a utopian prediction that would involve external expertise in the educational context.

In their exploratory study, Jeon and Lee (2023) also conclude that ChatGPT reshapes teacher roles. They define three main teacher roles teachers take while using ChatGPT in the classroom. They remain organizers but not ultimate content creators (lesson planning can be done by AI). "Orchestrating different resources" (Jeon & Lee, 2023, p. 15885) via ChatGPT gives teachers more control over creating and organizing materials and lesson plans (Jeon & Lee, 2023; Huang & Li, 2023; Bonner et al., 2023). On the other hand, this kind of decisionmaking needs adequate holistic pedagogical knowledge to make the right judgments on which materials should be brought to the lessons – knowledge of students and their needs is something AI does not have much information on. For this reason, teachers remain instructional decisionmakers (Kostka et al., 2023). The second role of teachers is to "make students active investigators" (Jeon & Lee, 2023, p. 15885) by modelling questions to ask ChatGPT. The third role teachers take while using ChatGPT is the "ethical supervisor" (Jeon & Lee, 2023, p. 15886) - in this role they raise awareness of the risks LLMs bring with themselves (see Section 2.2), one of which is the ethical issues of using ChatGPT. Teachers can, ideally, create a transparent atmosphere in which they can lead an open discussion about the results students receive from the chatbot and discuss the degree to which they can rely on the chatbot's output (Jeon & Lee, 2023). They teach students how to use ChatGPT ethically.

Section 2.3 reviewed some of the teacher roles defined by Harmer (2015), Ur (2024) and Scrivener (2011) that can be transferred to ChatGPT, though it cannot take them over completely. New teacher roles emerge from this AI-teacher collaboration: teachers will be orchestrators of resources, models of human-AI interaction, and guardians of ethical usage. In the 21st century, they need to be 'knowledge brokers' who connect with external expertise to develop technology for language teaching purposes and 'pedagogical weavers' who bend different pedagogical repertoires.

The next section will focus on how teachers can use ChatGPT in their teaching, from planning to assessment.

2.4 Using ChatGPT in foreign language teaching

OpenAI developed a Large Language Model that can generate human-like responses based on given prompts. Ever since released on November 30, 2022, ChatGPT-3.5 has stood in the

spotlight of all walks of life, from which education is no exception. This section first discusses the main pedagogical implications of ChatGPT in EFL teaching. After that comes a review of how teachers can use ChatGPT from planning to assessment.

2.4.1. ChatGPT's essay on using itself in education

Zhai (2022) was curious about what ChatGPT could say about the possible implementations of itself in EFL teaching. The instruction was to write an essay on "Artificial Intelligence for education". The ChatGPT-generated essay was rather comprehensive and informative and was capable of explaining constructs coherently and (partially) accurately. According to ChatGPT, there can be three types of applications of AI in education: (1) personalizing learning by tailoring educational content to individual learners' interests and needs and providing personalized lesson plans, (2) automating administrative tasks like grading and assessment, course scheduling and student record management, (3) tutoring and mentorship by providing personalized instruction and support.

As most classes are heterogeneous, teachers' generic instruction might not resonate with all students, but ChatGPT provides more versatile explanations of the course material, acting as a personal tutor, tailoring instruction to the student's proficiency level, interest and cultural context (Al-khresheh, 2024).

Assigning administrative tasks to AI, however, would be unethical by giving AI access to students' data. Grading and assessment require great pedagogical insight; therefore, ChatGPT should not give final grades to students' performance.

2.4.2. Assisting teachers from planning to assessment

ChatGPT saves time by generating customized lesson plans that align with curriculum goals, materials, and exercises tailored to students' interests (Al-khresheh, 2024; Amin, 2023; Bonner et al., 2023; Huang & Li, 2023). Teachers can brainstorm topics and ideas with ChatGPT but it does not substitute their insight into educational methodology, pedagogy, or classroom management (Bonner et al., 2023; Harmer, 2015; Ur, 2012; Scrivener, 2011). Teachers should give informative and specific prompts – which can be re-modified various times to meet the teachers' learning context and needs: topic of the lesson, students' interests and needs, and the CEFR (Common European Framework of Reference) level on which ChatGPT should plan course materials (Bonner et al., 2023; Huang & Li, 2023). ChatGPT's efficacy depends on how

the teacher uses it: ChatGPT can improve skills, but it can also hinder students' achievements if not integrated carefully (Abramson, 2023).

The second main domain in which ChatGPT can assist teachers is assessment in two ways: (1) generating assessment tasks - quizzes, multiple-choice tests - and (2) evaluating student performance - using the data supplied by ChatGPT to keep an eye on students' progress and pinpoint areas students are having difficulty with to modify teachers' approaches and further learning activities accordingly (see Lo, 2023; Kostka & Toncelli, 2023; Zhang, 2024). Although several NLP tools are trained to score essays and carry out summative assessments, ChatGPT is a general-purpose AI, not trained specifically for assessment (Gardner et al., 2021; Jeon & Lee, 2023). Therefore, ChatGPT-suggested assessment tasks might not cover all targeted learning objectives. Teachers should only use it as an initial feedback provider and test creator rather than for grading high-stakes tests (see Barshay, 2024; Jeon & Lee, 2023; Lo, 2023).

2.5 Skills development with ChatGPT

Section 2.5 focuses on five language skills teachers can develop in their students through interaction with ChatGPT. The twenty-first-century EFL classrooms apply student-centered approaches and methods that enable students to polish their language skills through e-learning activities: teachers model how to form proper prompts and find results via technology (Hadiyanto, 2019). The "question and answer" (Sithara & Faiz, 2017, p. 112) method can help teachers to arouse inquisitive minds in their students by asking higher-order questions (Bloom et al., 1956) that apart from remembering and understanding ideas require them to synthesize and evaluate information (Anderson et al., 2001; Kostka & Toncelli, 2023).

The following chapter will present possible implementations of ChatGPT for speaking, reading, writing, listening skills, and intercultural communication.

2.5.1 Improving speaking with ChatGPT

The Communicative Language Teaching (CLT) approach fosters interaction in the classroom by making students using the language through communicative, authentic activities to develop their verbal strategies and communication skills (Richards & Rodgers, 2014).

ChatGPT can participate in and produce new situations for every student in role-plays to prepare them for real-life scenarios without the pressure of failure, also providing feedback

on their performance (Mollick & Mollick, 2023). ChatGPT can generate real-life communication scenarios (e.g., ordering at a restaurant, or making a phone call). By prompting it to list phrases and expressions related to a certain topic (e.g., eating out) ChatGPT can expand students' vocabulary, improving their speaking performance (Zhang, 2024).

ChatGPT can also generate arguments and counterarguments, or brainstorm ideas for discussion, which is helpful for students who are shy or struggle to generate ideas and organize their thoughts before entering the discussion (Abramson, 2023; Stojanov, 2023; Halaweh, 2023). Teachers can also generate texts or ask their students to brainstorm topics they are interested in speaking about (Halaweh, 2023). These speaking tasks can easily be adjusted to the students' level by providing an appropriate prompt for ChatGPT.

ChatGPT can also act as an interactive game partner: playing word-guessing games with students about a specific topic, a colour-guessing game, a 20-question game, and would-yourather game (Jeon & Lee, 2023). ChatGPT can also improve pronunciation and different accents - students can ask for further examples of a word that has the same sounds, or the pronunciation of a word in a specific accent (Jeon & Lee, 2023). Once the output is given, students can try out the instructions in speaking, or provide verbal feedback on their interaction with the chatbot.

Creating presentation notes from scripts also becomes easier with ChatGPT as it can parse texts and break them down into their core elements (Bonner et al., 2023). Communication with ChatGPT is restricted solely to written forms of discourse now. Consequently, developing speaking skills with ChatGPT is an implicit process.

2.5.2 Improving reading with ChatGPT

Bonner et al (2023) claim that teachers prefer ChatGPT as a tool that expands the resource repertoire from online ready-made materials and textbooks to more authentic texts. ChatGPT can generate reading comprehension tasks with a coherent passage and several multiple-choice questions about the content, long texts (stories, news articles, poems), and question-and-answer pairs with ChatGPT (Xiao et al., 2023). However, it is still a common problem that the generated reading content is distinguishable from human-written text and the level of personalization might still fail to meet teachers' needs (Xiao et al., 2023). Even academic texts can be tailored to the level of students by inserting the text and asking AI to make a level-appropriate summary of it. The teacher must be precise with the educational level terminology in the prompt (e.g., CEFR C1, 4th grader, and so on) to receive accurate summaries (Bonner et al., 2023).

With ChatGPT, teachers do not have to spend time searching the internet for authentic texts in newspaper articles or literary works and edit those texts to suit the level of the students, but they can simply provide a few lines of specific instructions, and the text is automatically generated in seconds by the chatbot. Teachers can generate texts of any length and level, giving a list of newly learned words to be included, and with any number of comprehension questions.

On the other hand, teachers still need to critically evaluate the information provided by the chatbot and consult other sources (other LLMs or websites) to check for any inaccuracy in the content.

2.5.3 Improving writing with ChatGPT

Web-writing 2.0 - weblogs, wikis, emails, and text chats - brought the one-way interaction of texts to another level, making the writing process more interactive, and creative. These tools support collaborative, informal writing that needs considerable monitoring and moderation from the teacher to fulfil their educational aims. The technology teachers choose for writing (especially with formal style) should ensure accuracy and appropriacy (Levy, 2009).

On the one hand, the following writing production phases should be scaffolded by technology: multiple drafts, correction, peer-editing, and keeping a record of the writing process. It also scaffolds students' writing by checking it for errors and adding references (Lo, 2023) – although, ChatGPT-provided references might be wrong due to the confabulation risk –, hence students should double-check them before handing in their assignments. But on the other hand, correcting grammar mistakes is an automated process here, which would otherwise be rather time-consuming for teachers. In addition to correction, ChatGPT provides explanations as to why a certain structure or phrase is better than the ones in the provided essay. AI can be helpful in this way, correcting grammar, spelling, and punctuation errors, even spacing in students' compositions (Bonner et al., 2023).

ChatGPT should be used as a guide or springboard in writing, generating writing topics, creating a well-designed outline in the initial phases (aiding with organization of ideas), and providing corrective feedback on vocabulary and grammar at the end to enhance writing proficiency (Baskara, 2023; Allen et al., 2015). ChatGPT can aid writing constructs such as pragmatics, semantics, coherence, cohesion, conventions, language style, format, grammar, and syntax. However, capturing emotional depth, writing voice and identity and rhetorical flexibility remain a challenge to ChatGPT (Barrot, 2023). By helping in the brainstorming part, and providing model drafts, students can examine the structural features of similar texts before outlining their own essays. It can produce coherent, cohesive essays, but still cannot capture

emotional depth and writing voice. Therefore, teachers should encourage students to use ChatGPT as a writing coach that helps them out with ideas and provides corrective feedback on their drafts (Huang & Li, 2023).

LLM is good at generating ideas, so teachers can impart the exhausting work of producing narrative prompts to ChatGPT (Bonner et al, 2023). Narrative writing prompts give a focus to students and input for creative writing by defining the characters, story setting, and plot. ChatGPT can also generate a starting sentence for an essay. Bonner et al. (2023) say that instructions can be modified for different genre conventions students should practice.

Unfortunately, instead of using ChatGPT to improve their writing, the instances of plagiarism among students is escalating. Their overreliance on ChatGPT for convenience undermines the essence of writing pedagogy: creativity, develop critical thinking, and enhance ability to articulate ideas with precision and clarity (Barrot, 2023; Halaweh, 2023; Kostka & Toncelli, 2023). Teachers should bring tasks that induce creativity, and critical thinking and result in a product that presents a higher level of knowledge than merely reciting facts. This also means that task instruction regarding writing assignments should include a reference list with academic sources — ChatGPT-provided reference list often contains inaccurate and unrelated bibliographic information (Barrot, 2023; Halaweh, 2023). This way, teachers can check if an essay was written by AI or the student. Other tools teachers can use are online plagiarism detectors, such as Turnitin and iThenticate. However, in most cases, they fail to identify ChatGPT-generated texts (Lo, 2023).

Despite the plagiarism issue, ChatGPT can help students with several stages of the writing process. It can paraphrase, brainstorm ideas, and give corrective feedback by checking essays for spelling and grammar errors. Instead of preventing students from using ChatGPT, teachers need to supervise the writing process – emphasizing the development of their own writing voice and emotional depth of the texts – and utilize the chatbot in a responsible way (Halaweh, 2023).

The next part of this section focuses on listening and the reason it remains intact from ChatGPT's influence, since its new audio development (Talk.io Language Tutor) has only been released recently - no literature has been published yet about how ChatGPT alone could improve listening at the time this current research was carried out.

2.5.4 Improving listening with ChatGPT

Searching for articles about improving listening with ChatGPT did not yield any results. There were no articles on how teachers could use ChatGPT for this skill. "While ChatGPT outperforms in numerous areas, its ability to assist with oral communication and pronunciation lessons is notably limited or non-existent" (Al-khresheh, 2024, p. 7). According to Al-khresheh (2024), ChatGPT is strongly text-centric, and has no speech recognition features; therefore, it cannot expose students to various accents, dialects, phonetic nuances, speech rates, or colloquialisms, which are crucial for listening comprehension. However, this text-centric feature does not exclude ChatGPT completely from listening: it can provide listening comprehension. Twee - though not part of ChatGPT, but an LLM that is specialized in taskcreation for lessons – can also create listening comprehension tasks or warm-up questions to audio content. Only customized chatbots can help teachers directly by designing listening comprehension tasks and creating transcripts (Jeon & Lee, 2023). "Ambitious chatbots", as Levy (2009, p. 776) calls them, are advanced systems that utilize both voice recognition and synthesis, using avatars to carry out human-like dialogues with the speakers. The best paradigm for such a chatbot is ELSA Speak, designed to improve the accents of non-native speakers, assisting them in developing their speaking skills. Talking with such chatbots not only aids speaking practice but also develops listening skills simultaneously.

Only one article suggests that combining ChatGPT with Convolutional Neural Networks (CNNs), like Duolingo and IBM's Watson, is the only way to develop students' listening skills in the classroom. With the speech recognition features of CNN tools, they can recognize phonemes, words, and phrases, and generate tasks targeting problematic areas in the user's pronunciation patterns. This way students can be exposed to different accents, speech patterns, and vocabulary (Xing, 2023). The latest improvement of OpenAI, Talk.io Language Tutor, is ChatGPT's extension program that has voice feature functions and can speak to the user, exposing them to authentic language. This refutes Al-khresheh's (2024) statement about ChatGPT's non-existent assistance in listening improvement. However, since it is a new invention, presumably only a few teachers might be aware of its accessibility.

The final part of this section deals with intercultural competence and how ChatGPT can assist with that.

2.5.5 Intercultural competence building with ChatGPT

Computers have decreased the proximity between different cultures by linking information across languages and cultures, and exposing students to various cultural influences (Chun et al., 2016). "Cultural awareness and expression competence" is one of the eight identified competencies teachers should improve in their students (European Commission, 2019, p. 14). This competence includes knowledge about other cultures, the skill to express and interpret other cultural formalities, and an open attitude toward diversity, meaning when communicating with language users from different cultures, speakers must make a conscious effort to adjust, accept, and understand other people (Byram et al., 2002). Real-time communication and interaction with foreigners enable learners to acquire new knowledge of a culture. However, not every class has the chance to host international students and guarantee interaction with their local students. ChatGPT as an interlocutor can help students practice intercultural competence by providing relevant cultural aspects to authentic situations (Jeon & Lee, 2023; Mollick & Mollick, 2023; Zhang, 2024). Teachers can utilize ChatGPT as a simulator, or create role-play scenarios and texts about cultural topics.

In the prompt, the teacher can instruct the LLM to act as a real human. This means that the parameters can include the culture where the LLM has to 'come from', the level of proficiency the conversation should be at, and other specifications. This is how AI can substitute real humans in interaction when there is little chance of finding someone with a different cultural background.

Role-play tasks, on the other hand, should only be meant as practice materials to present the knowledge students acquired about a specific culture (Mollick & Mollick, 2023). Keeping in mind that AI can make up hallucinations and false (but seemingly convincing) facts (see Section 2.2), students need to evaluate their interaction with the AI critically.

Zhang (2024) concludes that ChatGPT may not substitute real people, but it can facilitate intercultural communication between students from different cultures by creating an immersive language learning environment.

There are also concerns regarding ChatGPT's ability to develop intercultural skills. Its content does not always give culturally relevant information, often failing to capture cultural nuances behind certain expressions, and its culturally stereotypical texts could mislead students (Al-khresheh, 2024; Huang & Le, 2023). Nevertheless, this could be avoided with prior teaching about cultural aspects, using other sources to establish a well-grounded knowledge before turning knowledge into practice.

2.6 Anticipated outcomes of the current research

This review of the relevant literature about natural language processing based on the four research questions (see Section 1) shows that used with careful consideration, ChatGPT can be a valuable tool for educators. EFL teachers should consider the challenges and risks when applying ChatGPT in language teaching (Section 2.2), how ChatGPT influences their roles (Section 2.3), in what ways ChatGPT can assist them with planning and assessment (Section 2.4), and how they can use it for language skills development – speaking, reading, writing, listening and intercultural competence – (Section 2.5).

Based on this review, the following anticipated outcomes may be formulated for the empirical part of this study. Firstly, I presume that teachers only exploit a few of the shared roles with ChatGPT (listed in Section 2.3, Table 1), namely as a content provider/resource, private tutor, mentor/evaluator and teammate. The most outstanding function, the 'simulator' role (proposed by Mollick and Mollick, 2023) might be the least utilized one, as this role requires complex work to inaugurate with the prompt. The literature also suggests that ChatGPT refines teacher roles (Amin, 2023; Jeon & Lee, 2023; Huang & Le, 2023; Kostka & Toncelli, 2023; Lee & Tan, 2018); therefore, I presume EFL teachers become facilitators who foster social and emotional connections in the classroom. In addition to that, they presumably acquire the role of ChatGPT-content supervisors, models of using AI to form autonomous learners, and most importantly, their roles of raising ethical awareness of using AI becomes the most predominant.

Secondly, for the question of how ChatGPT can help teachers with lesson planning and assessment to save time, I suppose that teachers would use it to brainstorm ideas for the lessons and create materials and task sheets. In-service teachers with more experience and pedagogical insight — compared to teachers-trainees — are probably more goal-oriented when planning lessons with ChatGPT. Although ChatGPT can give instant feedback and evaluation on students' productions, I assume it is an area teachers would not delegate to the chatbot, mainly due to ethical reasons.

Thirdly, for the question of how ChatGPT can support teachers with language skills development, I assume that except for listening (considering that only ChatGPT's recent extension, Talk.io Language Tutor, has voice integration to help listening, but ChatGPT 3.5 does not have a built-in audio function to expose students to different accents and speech rates, teachers might not be aware of this new feature), speaking, reading, writing, and intercultural skills can all be scaffolded with ChatGPT as a content provider.

Finally, for the question of what challenges ChatGPT imposes on teachers, I assume that teachers would struggle with all four main risks (mentioned in Section 2.2), among which plagiarism would stand out most, undermining academic integrity and critical thinking.

Since there has been no thorough research conducted focusing on how teachers could integrate AI in various aspect of language teaching, the above four research questions were formulated to understand more and get a holistic view of the aspects of teaching ChatGPT can influence while teachers stay the human-in-the-loop. After reviewing the literature, the current exploratory study is discussed in more detail in the Methods (Section 3) and Results section (Section 4).

3 Methods

This Methods section starts with the research approach in alignment with the four research questions, provides details about the research participants and instruments, describes the procedures of data collection and the methods of data analysis, and concludes with the ethical considerations of the current research. The replicability of this exploratory study and the transferability of the data are established through the detailed description of the participants, the research instruments, the procedures and the methods of data analysis.

3.1 Research approach of the four research questions

The previously reviewed literature gave a general understanding based on the four research questions formulated at the beginning of this current exploratory study to investigate how the collaboration with ChatGPT affects the roles of teachers and the chatbot, and what areas of teaching it can support most effectively. Table 2 (Research questions and corresponding data sources) summarizes the overall structure of this exploratory study:

 Table 2

 Research questions and corresponding data sources

Research questions Data sources 1. How do teachers perceive the role of ChatGPT and their roles in teaching foreign languages? 2. How can ChatGPT help teachers in lesson Questionnaire Interviews planning and assessment? Literature (52 participants) (6 participants) 3. How can ChatGPT support teachers in improving students' foreign language skills? 4. What challenges does ChatGPT impose on EFL teachers?

These research questions guided the review of the relevant literature, which was followed by empirical research with EFL teachers in Hungary. The online questionnaire with 52 participants aimed to provide a general overview of four main aspects of language teaching ChatGPT can influence based on the teachers' experience. The semi-structured in-depth

interviews with the randomly selected 6 participants from the online survey were designed to get a deeper insight into ChatGPT's presence in EFL teaching from the teachers' perspectives and personal experiences.

The following part (Section 3.2) describes the instruments (the online questionnaire and semi-structured interviews) and presents detailed information about the participants.

3.2 Instruments and participants

The current exploratory study used an online questionnaire, which received 52 responses (for more details about the respondents see Table 4), and six in-depth semi-structured interviews to collect information about the perspective and experience of EFL teachers with ChatGPT 3.5 (being the most accessible LLM tool) in EFL teaching (acquired roles, planning and assessment and skills development along with imposed challenges on teaching). Six teachers (two teacher trainees and four in-service teachers) were randomly selected from those in the questionnaire who gave their consent to be interviewed by providing their email addresses at the beginning. To ensure their anonymity, the interview participants are presented under pseudonyms (see Table 5).

Table 3 below represents the timeline of the procedures concerning the construction of the research instruments (questionnaire, interview guide), alongside with the participants involved.

Table 3Data sources and participants

Date	Data sources and instruments	Participants
Nov. 2023 – Jan., 2024	Review of literature	-
February, 2024	Pilot interviews	2 participants: 5 th year teacher trainees
April, 2024	Questionnaire editing	-
May, 2024	Piloting questionnaire	5 participants: 5 th year teacher trainees
June, 2024	Questionnaire (online)	52 participants
June-July, 2024	Interviews (online)	6 participants: 2 teacher trainees (one-semester
		teaching), 4 in-service teachers (20 or more
		years of teaching experience)

Note. The table presents the sources and instruments used for data collection with the teachers and teacher trainees who participated in the process. The duration of instrument construction, piloting, and actual execution are indicated as well.

3.2.1 Procedures

Since it was an exploratory study, I was somewhat uncertain about what specific questions to ask in the questionnaire; therefore, I conducted two pilot interviews with two teacher trainees in February who had experience with ChatGPT during their short-term teaching practice. As some questions did not yield adequate answers to support the purpose of the research, they needed to be altered to be more specific. Alternatives for sub-questions were designed for the participants to elaborate on the topics and to keep the interviews as structured as possible. After that, in April, the online questionnaire was constructed based on the literature and the information gained from the pilot interviews. In May, the questionnaire was piloted: first, a respondent – whose answers were not calculated towards the final results – was asked to fill in the questionnaire and provide detailed feedback on the process concerning ambiguities, understandability, and timing issues. After that, the questionnaire was sent to the two teacher trainees who had helped with the piloting interviews before and to other four fellow teacher trainees before the question items were finalized.

Finally, the questionnaire was distributed between June and early July 2024 on social media platforms and via email using the "snowball sampling" (Parker et al., 2019, p. 4) method, asking former high school teachers, mentors, and fellow teacher trainees to forward it to their acquaintances who use ChatGPT (for more information see Table 4 Basic data of respondents).

52 teacher trainees and in-service teachers completed the online questionnaire and from those who provided their email addresses at the beginning of the questionnaire, 6 respondents were randomly selected for in-depth interviews (see Table 5) on MsTeams between late June and early July. The two interviews with the teacher trainees (TR1, TR2) could be recorded via MsTeams by offering automatically generated transcripts which was later downloaded and edited. However, the other four interviews with in-service teachers (T1-T4) were voice-recorded via a phone application, which was later transcribed for coding and sent to the participants for revision.

The collected data from the questionnaire and the interviews were analysed between July and August, guided by the four research questions, using qualitative methods supported with quantitative data from the questionnaire. To aid better comprehension, the analysed data will be presented in tables and diagrams where possible.

Table 4Basic data of questionnaire respondents

Gender	Number of respondents
Woman	40
Man	8
Not stated	4
Years of teaching experience	Number of respondents
Teacher trainee (1 semester)	17
1-5 years	10
6-10 years	3
11-20 years	11
More than 20 years	11
Frequency of ChatGPT use	Number of respondents
Daily	6
Several times a week	24
Several times a month	21
Yearly	1
I don't really use it	0
I never use it	0

Note. The table presents basic data (gender, years of teaching experience and how regularly they use ChatGPT for teaching) of the 52 respondents who completed the questionnaire.

 Table 5

 Basic information of the interviewees

	Pseudonym	Gender	Years of teaching	Teaching context
_	TR1	woman	Teacher trainee (1 semester)	Private students, primary school,
				high school
	TR2	woman	Teacher trainee (1 semester)	Elementary school
	T1	woman	34 years	Vocational high school, private
				students, language school
	T2	woman	24 years	Technical vocational high school,
				college teacher
	Т3	man	30 years	Vocational school for IT, private
				students
	T4	woman	23 years	Elementary school, high school

Note. In-service teachers (T1-T4) and teacher trainees (TR1, TR2) are presented under pseudonyms along with basic information regarding their gender, teaching experience, and schools they work in.

The main goal of the interviews was to reveal how teachers from different schools and with different amounts of teaching experience use and perceive the role of ChatGPT in EFL

teaching. Out of the 6 interviewees, three (T1-T4) were in-service teachers from high schools. Two of these teachers (T1-T2) were from the same vocational school and expressed open-mindedness to include AI technology in their teaching – not just for their background work, but also for allowing their students to interact with ChatGPT during the lessons. T3 was the only participant, whose school was a technical vocational school specializing in Information Technology, where teachers are highly encouraged to implement the advances of AI into their methodology. However, he mentioned that despite AI playing a pivotal role in their school, teachers barely have the chance to use it during their lessons, as there are only two IT labs with enough computers to incorporate ChatGPT actively into in-class works. T4 was from a 'traditional' high school where strict anti-mobile policy reduced her opportunity to use ChatGPT during classes and forced her to only use it for background work (doing lesson plans and creating tasks to improve the five language skills).

All these different backgrounds of EFL teachers supported this research's goal, which was to get an overall picture of the current situation in Hungarian EFL classrooms from the perspective of Hungarian EFL teachers. Different circumstances offer different opportunities for EFL teachers to use ChatGPT in their teaching, so it revealed various aspects in which EFL teachers found ChatGPT useful for.

The following subsections give more information about the online questionnaire (Section 3.2.1) and the interviews (Section 3.2.2).

3.2.2 Questionnaire

The online questionnaire (Appendix A) had 25 closed-ended questions (including multiple-choice questions and Likert-scale questions alike) and some open-ended items to provide the opportunity for further elaboration. The online survey was divided into four sections based on the four research questions and was designed in English, based on the literature consulted before.

The first section (items 2-12) created a teacher profile by providing basic data of the respondents regarding years of teaching experience, regularity of using ChatGPT, and perceived roles of the chatbot (based on Section 2.3). Question items number 9 and 13 reveal some of the ChatGPT roles separately from the teaching phases. These roles, however, are not separable from the different teaching phases. Several questions are multi-faceted by asking for both the phases of teaching where teachers use ChatGPT and the roles of ChatGPT in these phases and skills development. Such multi-faceted question items are number 14 (ChatGPT as

a resource provider), 15 (the fifth option asks about ChatGPT as a tutor), 16 and 19 (feedback provider for essays), 22 (as a simulator) and 23 (seventh option also ask about ChatGPT as a simulator).

The second section of the questionnaire (items 13-16) focused on how EFL teachers use ChatGPT for lesson planning and assessment.

The third section (items 17-23) focused on how EFL teachers use ChatGPT to improve productive and receptive skills along with intercultural competence.

The fourth section (items 24-25) asked about the imposed challenges and drawbacks experienced by teachers when using ChatGPT.

3.2.3 Interview

Semi-structured interviews were administered with teachers of EFL focusing on the four research questions (see Section 3.1). The interviews were conducted in English, they consisted of 44 main questions and altogether 46 question options (Appendix B). Each interview lasted around 90 minutes. The six interviews yielded 59 740 words of data in total.

The semi-structured interview allowed space for newly emerging themes mentioned by the participants to elaborate on them and to reflect on the issues raised in the open-ended sections of the questionnaire by other teachers. The first four items on the list were 'warm-up questions' to get to know them better in their teacher roles and their attitude towards AI tools, including ChatGPT, in EFL teaching. Questions 5-12 asked about the perceived roles of ChatGPT, questions 13-18 dealt with ChatGPT's influence on lesson planning and assessment, questions 19-41 were about ChatGPT's influence on language skills development, and questions 42-46 asked about imposed risks and challenges.

Questions 7, 10, 11, 13 (with its third sub-question), and 43 were taken and reformulated from Xiao and Zhi's (2023, p. 11) sample interview protocol of their exploratory study on students' perspectives on ChatGPT in the EFL classroom. These questions had to be altered to make them suitable for this interview focusing more on teachers' experience and views. Question 9 was taken and reformulated from Jeon and Lee's (2023, p. 15880) sample interview questions to investigate how ChatGPT has changed lesson planning and assessment and impacted language skills development.

These questions were treated flexibly. If a teacher did not have experience in a certain area, questions concerning that aspect were disregarded to have time to elaborate on other ones.

3.3 Methods of data analysis

The data gained from the online questionnaire and interviews were analysed with mixed methods, using qualitative methods, supported with quantitative data (Creswell, 2012).

The data from the questionnaire—mostly quantitative with only a few questions orientated towards gathering qualitative data - was collected in an Excel document after the due date of the survey. The data in the Excel file was analysed using descriptive statistics, guided by the research questions and the relevant literature.

For the qualitative data of the questionnaire and the six interviews, the constant comparative analysis (Maykut & Morehouse, 1994; Glaser & Strauss, 1967) was used to determine emerging themes guided by the four research questions to identify the main categories of EFL teachers' thoughts on the roles ChatGPT can take in EFL teaching and what impact it has on their roles, how can ChatGPT help their lesson planning and assessment, which skills they use ChatGPT for the most, and what challenges does ChatGPT impose on EFL teaching. Based on the earlier research of Jeon and Lee (2023) about EFL teachers' perception of the roles of ChatGPT, the analysis of this current exploratory research followed their applied principle. First, the interviews were read through to gain a general understanding of the data. After reading the first interview, initial coding was applied by breaking it down into discrete parts in which emergent themes were identified based on the relevant literature for the research questions. In the next phase, the remaining interviews were analysed with constant comparison with previously emergent instances to form categories (see Table 11 in Appendix D for the main categories emerging from the interviews).

3.4 Ethical considerations

The current exploratory study ensured that all its respondents and participants stayed anonymous during the data collection and protected their personal information. The questionnaire and the interviews only asked for neutral data that did not lead to the identification of the respondent, but was needed for the research

In the introduction of both research instruments, the participants were ensured that their data would be treated confidentially and only be used to support this research. Providing their email address was optional – indicated both in the introduction and the first question – to protect the privacy of the respondents and give them the opportunity to decide whether they want to be interviewed in the subsequent phase of the study.

Before the interviews, emails were sent to the selected participants in which they were informed about the length and language of the interview (whether they consent to use English). Furthermore, their consent was asked to be recorded.

The Results section (Section 4) will summarize the main findings of this current exploratory study based on the analysis of the interviews, supported by quantitative data from the questionnaire and the relevant literature.

4 Results

This section summarizes the main findings of the interviews and the online questionnaire regarding the challenges and opportunities of using ChatGPT in English language teaching from the perspective of English language teachers in Hungary. The findings will be discussed based on the four research questions and the relevant literature, supported by excerpts retrieved from the interviews and data from the questionnaire. New concepts that emerged during the current research will also be mentioned (Section 4.4) regarding ChatGPT's lack of emotional intelligence and the impact of poor technical facilities and strict school policies. This current research yielded many informative data, which will only partially be presented in this current paper and the rest will be discussed in future research papers.

4.1 Teachers' perception of the role of ChatGPT in EFL teaching

In-service teachers (T1 – T4) showcased higher and deeper pedagogical insight into all the aspects of English language teaching and were more critical about ChatGPT, emphasizing its limitations, and restricted opportunities in which ChatGPT can assist them. However, teacher trainees' perceptions (TR1, TR2) were more optimistic and motivational about possible future implementations of AI once they started teaching. Their experience of using ChatGPT in class was largely defined and restricted by the perception of their mentor teachers who were prone to seeing ChatGPT as a risk factor for successful language teaching.

As mentioned in the anticipated outcomes (Section 2.6), I expected teachers to take advantage of ChatGPT as a private tutor, explaining concepts and enhancing the efficacy of the mostly generalized language instruction of teachers (Al-khresheh, 2024; Stojanov, 2023). Surprisingly, teachers did not approve of the idea of ChatGPT teaching students the language.

Only the teacher trainees (TR1, TR2) highlighted that the most alluring function of ChatGPT for them is that it can provide tailored and personalized explanations to their students. In-service teachers (T1, T2, T3) disagreed with it, saying that ChatGPT can teach simple terms, but cannot adapt instructions to students' needs. Therefore, ChatGPT is mostly used as a resource and content provider.

4.1.1 ChatGPT is a perfect resource and content generator to save time

ChatGPT as a resource provider (creating reading comprehension tasks, true-or-false items, or multiple-choice questions, sentences, and providing links to videos and articles) for the lessons was unanimously agreed by all 6 teachers to be ChatGPT's greatest feature (see Table 6). However, they said these contents must be customized to match the learning goal of their lessons. For the prompt they consider and specify the learning outcomes, the level, the topic, the type of task they want to create, and also any targeted grammar or vocabulary they want to be included in the content.

Table 6Perceived roles of ChatGPT and EFL teachers

Perceived roles of ChatGPT and EFL	
teachers	Examples
	T3: "I generate content: for Field of Cultural studies
1.1 Resource provider and content generator	lessons, it's great content maker."
1.1 Resource provider and content generator	T2: "I design grammar exercises, gap-filling exercises,
	multiple-choice exercises and use it to find video links."
	T1: "If I have to, I can explain the grammar rules for a
12 P: 4 4	hundred times in different ways and approaches. ChatGPT cannot."
1.2. Private tutor	TR1: "Students might not understand a grammar part, or
	how to say something in English, so they're going to turn to
	GPT to explain it to them."
	T2: "The content always needs to be checked. I cannot
1.3. Content supervisor	even say a percentage, but I can say that probably more
	than 50% is usable as it is."
	TR2: "When you are reading a text, you get this strange
1. 4. Ensuring academic integrity	feeling it was written by ChatGPTit uses strange
	grammatical structures."
1.5. Ensuring emotional well-being of students	T2: "Emotional support belongs only to the teacher. It's
1.5. Ensuring emotional wen-being of students	not credible from the machine's part."
N	ST 4 1 4 1 (10 15) 1 1 4 4 1

Note. The first two roles (1.1 and 1.2) are related to ChatGPT, the last three roles (1.3-1.5) belong to teachers as they work with ChatGPT. For more information see the summary table in Appendix D Table 11.

Nevertheless, they praised ChatGPT-generated texts' language use to be authentic (Zhang, 2024) – since they can customize the generated output to meet curricular requirements and students' interests and levels. T3 said that ChatGPT can generate reading comprehension texts with follow-up tasks connected to a specific topic, as well as it can rephrase and reform any text to suit the learners' level. Al-khresheh (2024) also highlighted ChatGPT's greatest strength as a pivotal instrument for teachers to create individualized and versatile learning materials. Jeon and Lee (2023) and Bonner et al. (2023) also identified content generation to be one of ChatGPT's strongest features teachers can exploit, as it can generate and revise different levels and types of materials for the lessons. The data from the questionnaire, summarised in Table 7, also confirms that teachers prefer to use ChatGPT to generate different types of materials – sentences, fill-in-the-gap tasks, reading comprehension questions, speaking tasks, and so on. The interviewees also highlighted that ChatGPT reduced the amount of time they

usually spend on searching for materials and compiling tasks for the lessons. Kotska and Toncelli (2023), along with Jeon and Lee (2023) mention that ChatGPT can save a lot of time for teachers by creating teaching materials and worksheets for the lessons. Bonner et al. (2023) also say that banal tasks that once needed a human touch can now be accomplished by LLMs much faster.

Table 7Types of content teachers generate with ChatGPT

Types of content	Percentage of users (%)
1. Generate sample words, sentences	88
2. Fill in the gap tasks	79
3. Reading comprehension questions	71
4. Speaking tasks	65
5. Role-play scenarios and characters	65
6. Warmers	62
7. Narrative prompts for writing tasks	40
8. Tests	37
9. Listening tasks	29
10. Translation tasks	27

Note. Teachers use ChatGPT to create the above ten types of content. Data is based on the 52 responses from the questionnaire.

ChatGPT is also a perfect resource for students when they have to do projects, as "they learn how to ask and refine their questions to get the right information out of ChatGPT" (T3). Kotska and Toncelli (2023) call this "learning through experimentation and experience" (p. 4). Halaweh (2023) also says that ChatGPT can develop students' research skills by providing information and resources on a particular topic.

Only one teacher (T3) mentioned that he uses ChatGPT-created role-play cards with questions to create opportunity for intercultural conversation between his students and international students who come to their school. This aligned with my hypothesis that teachers still do not use ChatGPT as a simulator, but merely as a content provider of cultural knowledge. Mollick and Mollick (2023) suggest the opposite approach, claiming that allowing students to interact with ChatGPT first in intercultural simulations can help students to be prepared for real-life scenarios, as they feel less pressured but more confident after having several conversations with the chatbot. Zhang (2024), however, confirms T3's practice saying that educators could use ChatGPT to be a source of an immersive learning environment by creating a chance for students to converse with native speakers, initiating conversations on intercultural communication in the classroom. T2 mentioned that ChatGPT can also create texts about

cultural aspects to deepen students' knowledge. On the other hand, most interviewees (n=4) still do not acknowledge ChatGPT as a resource of cultural knowledge, but rather resort to textbook materials.

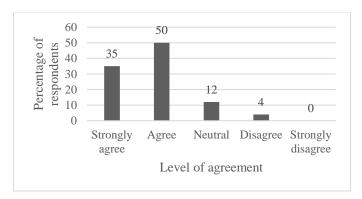
Table 6 also shows that the interviewees highlighted three main roles they possess in the EFL classroom: (1) they become supervisors of ChatGPT-generated content (checking it for grammatical mistakes, "sorting out irrelevant" (T2) and false information coming from the instructional risk (Mollick & Mollick, 2023), and also adjusting and customizing texts for students' level). Two teachers (T4 and TR1) also noted that when they ask ChatGPT for sources, many times it gives an inaccurate bibliography list (Barrot, 2023; Halaweh, 2023). Teachers also become the ones who (2) ensure academic integrity while using ChatGPT in language teaching, raising awareness of plagiarism, data security (Amin, 2023; Mollick & Mollick, 2023), maintaining transparency while setting up clear policies and rules for evaluation. Only T2 uses AI detector programs, but the rest of the teachers rely on their instincts when they try to spot AI-generated texts as they are usually above their students' level and their language use is too artificial. Lo (2023) says the same about looking out for clues that give away if an essay was written by a student or not. TR1 and TR2 want to prevent plagiarism by telling their students not to use ChatGPT for writing at all. Halaweh (2023) says this is one of the best ways to nudge students toward critical thinking and problem-solving, however, inservice teachers did not ban their students from using ChatGPT for writing an assignment, as long as they also put their work in it and are honest about it. T4 mentioned that she intends to require source indication when they hand in assignments (Lo, 2023). Finally, teachers also need to focus on (3) caring for the emotional needs of their students (Huang & Li, 2023).

4.2 Using ChatGPT to brainstorm ideas for lesson plans but not used for assessment

All interviewees (n=6) have used ChatGPT as an 'idea bank' for their lessons to save time or find inspiration with new approaches for a specific task or seek authentic materials to supplement the syllabus (Appendix D Table 11). "I always work from my basic syllabus. I know what I want and how to do it. Letting in a different perspective – like another fellow teacher – is what ChatGPT can assist me with" (T3). In the questionnaire, 50% of respondents also agreed that ChatGPT saves a lot of time with lesson planning (Figure 1). Amin (2023) also emphasizes the importance of teachers' being cautious with ChatGPT resources to meet educational standards. Al-khresheh (2024) points out that high technological expertise should align with profound pedagogical insight to ensure ChatGPT does not disrupt but complements curricular objectives. This way, they remain the human-in-the-loop, using ChatGPT as "another teacher to brainstorm creative class ideas" (Bonner et al., 2023, p. 35).

Figure 1

ChatGPT saves time with lesson planning

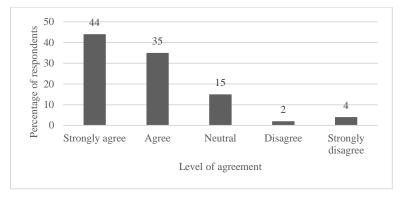


Note. Figure 1 shows in percentages how much EFL teachers agree with the statement from the questionnaire: 'ChatGPT saves my time with lesson planning'.

The brainstorming function mostly comes in handy for lesson planning, that is, ChatGPT generates ideas for various topics and allows teachers to focus on the "delivery of the lessons and caring for individual needs" (T4). T3 and TR2 say that ChatGPT is also helpful when they are out of ideas or creativity and have little time for preparation. Some feel making a whole lesson plan with ChatGPT would be "unethical" (TR1) and would not feel to be "their own" (TR1). As teachers, they know the educational goals and standards that ChatGPT cannot comprehend alone. Unlike teacher trainees, in-service teachers have initial ideas and tasks in mind for their lessons, so they only use ChatGPT to inspire them with different approaches and expand their resource repertoire. This proved my hypothesis about in-service teachers being

more goal-oriented when turning to ChatGPT to plan lessons. 44% of the respondents in the questionnaire also strongly agreed that ChatGPT is perfect as a starting point to generate ideas for the lessons (Figure 2).

Figure 2
Using ChatGPT as a starting point to generate ideas for the lessons

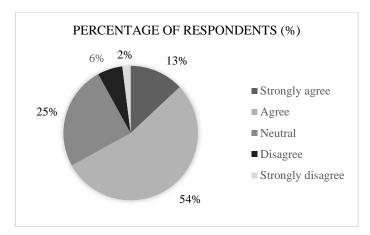


Note. Figure 2 shows that generating ideas is what ChatGPT can help teachers the most when planning lessons.

In addition, ChatGPT can also search for relevant sources which they can adjust to the learners' needs. With ChatGPT, teachers can make customized lesson plans by providing students' age, interests, and language level along with the topic of the lesson in the prompt (Kostka & Toncelli, 2023; Amin, 2023). However, they have problems with ChatGPT failing to understand the prompt: "I asked ChatGPT to create a 'funny' lesson plan, and it could not do that. I tried 6-8 times by reconstructing my prompt, but it could not execute my instruction. The plan was not 'funny' at all' (T1). Finally, she concluded that perhaps it was her prompt and not ChatGPT's fault; the word funny is vague to the chatbot, and teachers should be more specific (Amin, 2023). Contrary to T1, 54% of the respondents say they find it easy to give the right prompt to ChatGPT to generate ideas for the lessons (Figure 3). However, only 21% of the respondents agree that these lesson plans are accurate (Figure 4), which, to some extent, justifies T1's problem.

Figure 3

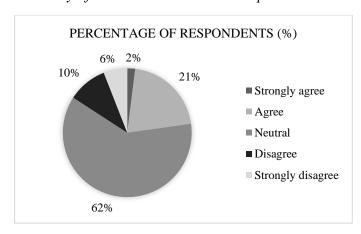
How easy it is for teachers to give the right prompt to generate ideas.



Note. Teachers' responses to how much they agree with the statement 'I find it easy to give the right prompt to ChatGPT to generate ideas for my lessons' are displayed in percentage.

Figure 4

Accuracy of ChatGPT-created lesson plans



Note. How much teachers agree with the statement 'I find ChatGPT lesson plans accurate' is displayed in percentages in the above pie chart along with the corresponding five-scale agreement levels.

Both the interviews and the questionnaire revealed that teachers are strongly against imparting assessment and feedback to ChatGPT (Table 8, Table 9). Assessment and feedback both received low scores on their level of helpfulness, indicated by the zero value of mode meaning that teachers do not use ChatGPT to perform these tasks. Five interviewees believe it is the teacher's task to give feedback. It would also undermine the teacher-student relationship if teachers imparted evaluation to ChatGPT entirely, resulting in the demotivation of students. It also aligns with my initial hypothesis that assessment is an aspect EFL teachers would keep

in their hands. Therefore, they resort to using ChatGPT to create different types of tests, prompting it to adjust text and test items to the students' level (Jeon & Lee, 2023; Bonner et al., 2023).

Table 8

How ChatGPT affects assessment

What areas of the teaching process may be affected by teachers' use of ChatGPT from planning to assessment?	Examples
2.2. Assessment	TR2: "It's strange for me as a teacher. I think only a teacher can assess the whole growth of the student." T1: "I only use it to create multiple-choice tests and reading comprehension tasks. It is full of mistakes." T3: Now, style is something ChatGPT cannot give feedback on."

Note. The table shows the interviewees' responses about how they use ChatGPT for assessment. For more information, see the full Table of 13 in Appendix D.

 Table 9

 Using ChatGPT for assessment and feedback

	Mean	Median	Standard Deviation	Sample Variance	Range	Min.	Count
Assessment	1.87	2.00	1.52	2.31	5.00	0.00	52
Feedback	1.90	2.00	1.50	2.25	5.00	0.00	52
37 501 11				~~~~			0 11

Note. The table presents how helpful teachers find ChatGPT for assessment and giving feedback.

All six teachers claimed assessment should not only be based on a single piece of work, but rather the progress the student makes, which ChatGPT cannot but teachers can see. Barshay (2024) also suggests ChatGPT should only give grades to low-stake tests, serving as an initial grade for the first drafts of students' essays, since relying too much on ChatGPT for grading does not allow teachers to see the recurring mistakes in students' writing, which is crucial to decide what to teach on the next lesson. Only TR2 admitted that ChatGPT might be good for calculating average grades for students by giving it a grading rubric with grades included. Still, she immediately said it would feel unethical, as ChatGPT would only assess based on the grades, whereas the teacher knows the progress and effort behind them. That is why she said grades might be given by ChatGPT, but teachers should always have the final word and the right to decide otherwise. T1 and T2 mentioned that since the apparition of ChatGPT and the escalating number of plagiarisms, they became suspicious about assessment. Only one teacher (T3) used ChatGPT to give feedback on students' written and oral performances based on the

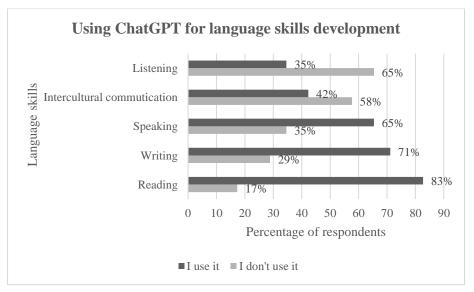
threads they sent, however, he said that ChatGPT fails to assess the style and the emotional aspects (Barrot, 2023).

4.3 Supporting the improvement of language skills

Five language skills were examined to understand how ChatGPT can support teachers in their improvement. Results from the interviews are shown in the Appendix D in Table 11.

Descriptive statistics from the questionnaire show (Figure 5) that reading (83%) and writing (71%) are the skills that ChatGPT is the most helpful with according to teachers.

Figure 5
Using ChatGPT to develop language skills



Note. Figure 5 shows the percentage of EFL teachers who use ChatGPT and who do not use it to develop the five language skills. These skills are presented in ascended order starting from the skill (listening) teachers use ChatGPT the least for to the skill (reading) they use ChatGPT the most for.

Listening (35%) and intercultural competence (42%) are the two skills ChatGPT is the least used for by teachers. This result was expected – also stated at the anticipated outcomes – as the literature also points out that due to ChatGPT's lack of audio functions and voice recognition, it cannot improve students' listening skills directly (Al-khresheh, 2024). Only other "ambitious chatbots" (Levy, 2009, p. 776) - CNN tools – with their speech recognition feature can improve listening skills by directly exposing students to different accents, but ChatGPT's text-centric feature cannot assist that (Al-khresheh, 2024; Levy, 2009; Xing, 2023). Talk.io was not released at the time of the interviews either. Three teachers (T2, T3, T4) stated

that ChatGPT can support listening only content-wise: using it as a 'search engine' to find links to videos or ask it to create listening comprehension tasks based on the provided transcript or links of videos found by the teacher. The other three teachers (T1, TR1, TR2) said they have not created any listening content with ChatGPT yet, and think it is useless for this skill. Rather, they turn to other specific-purpose AI, aimed at developing listening skills, or "come up with their own ideas for listening tasks" (TR1).

Before ChatGPT, teachers had to browse the internet for ready-made texts, now they can alter them – to include relevant grammar and vocabulary parts, suitable for the lesson topic, students' interests, and level – and create all kinds of reading tasks for them – multiple-choice, true-or-false, and gap-fill tasks. In alignment with the questionnaire, the interviewees also said that reading is the part that has become much easier and faster to develop with ChatGPT. "It gives a wider version of a variety of texts, more interesting than the ones in the textbooks" (T1). Also mentioned by Bonner et al. (2023), if students receive texts altered for their needs and level, it will be more motivating than making them read a text from a textbook. However, "students also practice reading while conversing with ChatGPT, so it changes the traditional perception of improving reading" (T3).

For writing, four teachers said in the interviews that ChatGPT eased their job to generate writing prompts – starting sentences, situations, and keywords for students to include in their essays – by only giving instructions about the style and type of text and generating creative writing tasks along with topics that pique students' interests and enhance their motivation. What they like the most about it is that it is done in seconds and the writing prompts seem authentic and resemble real-life scenarios. Three teachers said that generating sample essays with ChatGPT helps students organize their ideas and express their opinions. "ChatGPT can help students see how ideas are organized, check target vocabulary, reduce their stress, and enhance their productivity" (T1). Al-khresheh (2024) also finds ChatGPT's ability to structure thought processes one of the most important pedagogical benefits. T2 said she cannot assign essays, as students otherwise would not put effort into their writing, hence she plans writing lessons for in-class time. TR1 said she does not let her students use ChatGPT for writing, because she wants to see "what they know, not what ChatGPT is capable of" (TR1).

ChatGPT makes teaching speaking more innovative: "students can practice speaking with ChatGPT in writing" (TR2). This means that ChatGPT may not directly help in actual oral production, but rather aids communication strategies through chatting, the most authentic form of communication for teenagers. This means that most teachers acknowledge ChatGPT's role as a content creator for speaking tasks, but not as an interlocutor. Four interviewees said that

ChatGPT can support speaking skills with textual materials – mostly debate questions and roleplay scenarios. "When generating for and against arguments with ChatGPT, it is important to ask students not to repeat those ideas only, but try to rephrase them and make their own" (T2). Halaweh (2023) said that educators should make sure their students also put enough effort into developing their own ideas, not just memorizing ChatGPT-given ones. T1 and T2 use ChatGPT during the lessons to help students with argument points for debate tasks to save time, since "it is better than sitting in 2-3 minutes in silence" (T1), as students struggle to collect ideas. Though it is not exactly the teammate role Mollick and Mollick (2023) talk about, ChatGPT is more of a devil's advocate that provides alternative viewpoints. The teachers also emphasized that it boosts students' confidence: after they let their students brainstorm with ChatGPT, they were more willing to participate in the debate sessions and were less afraid to speak up (Abramson, 2023; Halaweh, 2023; Stojanov, 2023). After that, they select and discuss which arguments should be accepted, that supports critical thinking (Kotska & Toncelli, 2023). Alkhresheh (2024) calls it a reinforcement of collective classroom dynamics, supporting a confident and inclusive classroom environment. T4 said that her school's anti-phone policy is a great impediment to integrate ChatGPT as an interlocutor. Only TR1 mentioned that ChatGPT can help teach the right pronunciation by providing phonetic transcripts of words, but she said nothing can replace real human interaction when it comes to practicing speaking.

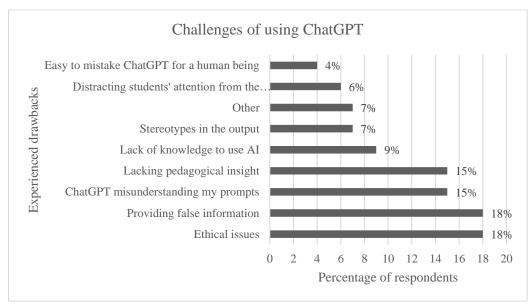
Intercultural competence remains the second least improved skill with ChatGPT. Though at the anticipated outcomes I was expecting a more immersive use of ChatGPT to impart cultural knowledge through texts, the hypothesis about using it for its simulator roleplays (Mollick & Mollick, 2023) – as the least utilized one was justified, though. "Using ChatGPT to simulate cross-cultural communication is impossible due to the classrooms' inadequate technological equipment" (T3), he said he would need an IT lab or computers to do that. Teachers prefer ChatGPT for the purpose Jeon and Lee (2023) presented in their findings: relying on ChatGPT's content provider role to create culturally relevant materials, for instance, role-plays and texts with cultural content to discuss in class. Four interviewees believe nothing – including ChatGPT – can replace interaction with native speakers and experiencing the culture firsthand. "ChatGPT does not add anything special to intercultural communication, as students can communicate with people from other countries while playing video games" (T1).

4.4 Challenges teachers experience while using ChatGPT

Challenges encountered by the participants are displayed in Appendix D of Table 11. New concepts that emerged are the emotional connections (4.1) that ChatGPT cannot assist teachers with, and the struggle to integrate AI applications into education (4.5) due to generational differences and technical facilities of schools.

The majority of teachers said in the questionnaire (Table 10 of Appendix C) that ChatGPT falters regarding 'human aspects' (affective level): building emotional connections with students, 'knowing them', and caring about their individual needs. It is strongly entrenched in their teachers' role: building "rapport" (Harmer, 2015, p. 100) with their students – forming emotional bonds and creating social contacts – is the springboard to effective teaching to keep students motivated (Amin, 2023). Apart from caring for emotional needs – that only teachers can notice – the qualitative analysis of the interviews also revealed that ChatGPT's lack of pedagogical insight, inadequate results by misunderstanding the prompts – no matter how many times they try to submit multiple prompts -, ethical issues regarding students committing plagiarism are all challenges teachers encounter. Contrary to ChatGPT, only teachers can "give detailed explanations" (T1) and "provide different approaches to a problem" (T3). However, this belief is biased, since ChatGPT can offer personalized learning by developing individualized learning strategies and help with the under-understood and forgotten parts of the material (Huang & Lee, 2023). Quantitative responses show (Figure 6) that all in all, 36% of the respondents claim that ethical issues and false information are the greatest challenges they encounter.

Figure 6
Imposed challenges by ChatGPT



Note. Data from the questionnaire regarding challenges and drawbacks are presented in percentages based on how regularly teachers encounter them. These drawbacks are presented in ascending order, from the least to the most problematic issues.

The above-mentioned results show that ChatGPT is still in its infancy. My initial hypothesis regarding potential challenges proved to be true: dealing with false information and the importance of teaching students to use ChatGPT ethically remains an ongoing battle. However, what was not anticipated is the vital part of teachers' human side in the teaching process that ChatGPT cannot take over yet: conveying emotions and establishing a good rapport to motivate students. They remain "pedagogical weavers" (Lee & Tan, 2018, p. 23). "Raising ethical awareness" (Jeon & Lee, 2023, p. 15886) also proved to be the other most prominent role of teachers triggered by ChatGPT. The other concerning issue not anticipated was the strict school policies and inadequate technological facilities to integrate ChatGPT into the classrooms (Amin, 2023; Al-khresheh, 2024). Also, the generational difference regarding the use of technology came up as a factor that might decide the future of ChatGPT in education. Differences regarding how efficiently they can use ChatGPT have not been found in this research, only their attitude was different: teacher trainees – although not used all of ChatGPT's roles -were more aware of its possible implementations and were eager to try them out in the future. In-service teachers mostly rely on ChatGPT for text generation and were more critical of ChatGPT's perceived roles.

5 Conclusions

This current research has revealed possible implementations and perceptions of the LLM by EFL teachers in Hungary, concerning certain aspects of teaching. Results from the qualitative analysis of the six in-depth interviews were supported with quantitative data from the questionnaire and discussed based on the relevant literature. This section will summarize the main findings in response to the initial research questions, offer pedagogical implications, and address the limitations of this current study with possible future investigations.

5.1 Addressing the research questions

Research question 1. How do teachers perceive the role of ChatGPT in teaching foreign languages?

Data from the in-depth interviews and the questionnaire reveal that EFL teachers in Hungary use ChatGPT as a content provider and resource – serves as an 'idea bank' for debate and projects. They generate sentences, words, and texts appropriate to their students' level and interests. In-service teachers (T1-T4) were more critical of the accuracy of ChatGPT-generated content mentioning several mistakes they noticed while using ChatGPT for task creation. According to T1, the grammar gap-fill tasks she created with ChatGPT also included tenses other than what was determined in the prompt. Teacher trainees (TR1, TR2) tended to highlight the creativity of ChatGPT more regarding task creation, appraising engaging narrative prompts and texts they can generate with the chatbot to pique students' interest. As a private tutor who transmits knowledge in one-to-one sessions, teachers unanimously agreed it is better to ask a teacher to explain concepts. They believed ChatGPT is not at the stage of personalizing language instruction yet. All in all, both the participants and the respondents acknowledged that with ChatGPT, compiling tasks became much easier and faster, but their role as supervisors of these contents became even more prominent.

The questionnaire and the interviews revealed that the escalating instances of plagiarism necessitate teachers to raise ethical awareness about using ChatGPT purposefully. T4 also said that teaching students to use ChatGPT ethically has become the most important role for teachers. Another paradigm shift in teacher roles is being facilitators of learners' goals and supporting students' emotional needs.

Research question 2. How can ChatGPT maximize lesson planning and assessment?

The majority of respondents said they use ChatGPT as a 'starting point' to generate ideas for their lessons. They also said that ChatGPT saves a lot of time with lesson planning, but the tasks are not always accurate. Interviewees all agreed that it is the best feature of ChatGPT to assist teachers with. However, in-service teachers prefer using ChatGPT to give them different perspectives and expand their resource repertoire, while teacher trainees had more time when they were out of ideas for the lessons and that is why they turned to it. T1 had more problems giving the right prompts compared to the others, and the respondents from the questionnaire. Her example showed that it is not ChatGPT's fault, but the more specific the instruction is, the better the outcome will be.

Assessment is an aspect teachers unanimously reject to use ChatGPT for but use it for creating test materials. It seems unethical for them to impart assessment to ChatGPT, as it cannot assess a students' overall progress, only momentary work. Only T3 used ChatGPT to give feedback on binary aspects of students' writings, but he also emphasized that grading should not be imparted on ChatGPT.

Research question 3. How can ChatGPT support EFL teachers with language skills development?

Based on the interviews and the questionnaire, it can be stated that teachers mostly use ChatGPT to develop reading and writing with customized sample texts; level, age, and topic appropriate. Teachers use ChatGPT-generated texts and sample essays to show them how to structure ideas.

The interviewees said ChatGPT can also develop communication strategies while students interact with it, and is perfect to generate ideas for debate sessions.

According to the results, teachers do not use ChatGPT to develop listening and intercultural competence. ChatGPT, as an interlocutor or simulator for role-plays, has not yet been exploited. T3 and T4 said it is because of the inadequate technological supplies of the classrooms.

Research question 4. What challenges does ChatGPT impose on EFL teachers?

Ethical issues (cheating and plagiarism), along with reoccurring false information were the issues the majority of the respondents were concerned about. The interviewees also mentioned these challenges and also emphasized that ChatGPT lacks pedagogical insight (does not know students as much as their teachers) based on which it could make decisions regarding lessons. Emotional aspects and the poor technological facilities of schools, along with generational differences are newly emerged challenges that emerged from the open-ended question of the survey and the interviews.

5.2 Pedagogical implications

Based on the findings, ChatGPT can be applied in various phases of language instruction by teachers. Especially helpful as a content provider for teachers to save time by compiling tasks for the lessons, offering creative ideas and authentic texts that can be adjusted to the students' level, relying on the teacher's pedagogical insight. Although most teachers do not trust ChatGPT as a tutor able to personalize language instruction and identify gaps in students' knowledge, teachers can also rely on ChatGPT to explain simple concepts. Above all, teachers should teach students to think critically to use ChatGPT correctly. Raising ethical awareness, and supervising content for possible errors are the most important roles for teachers in the AIera. They also need to foster emotional connection in the classroom, since ChatGPT cannot show real emotions. Therefore, teachers should put more emphasis on the 'human' aspect of teaching. Teachers should use ChatGPT only to brainstorm ideas for the initial phase of lesson planning, and give initial feedback on students' performance.

It has also been proved that teachers can use ChatGPT to develop reading, writing, and speaking with customized texts and brainstorming ideas. The texts are authentic and interesting; therefore, teachers can engage students more in the learning process, enhancing their motivation. ChatGPT can also offer sources for listening and links to videos that conform to educational goals. With role-plays, it can also create the circumstance for students to practice their intercultural competence by engaging in different cultural topics.

Finally, teachers should train themselves more to improve their expertise about using ChatGPT. I suggest collaboration among EFL teachers in schools to share their experiences and support each other to become better prompters. Furthermore, they should connect with external expertise.

5.3 Limitations of this research and directions for future research

This current study was a small-scale study with 52 respondents in total. Therefore, the results cannot be generalized to all the EFL teachers in Hungary. There was no uniform distribution of the teaching experience of the interviewees to conclude generational differences in the use of AI. It would be worth considering choosing participants from various age groups to investigate digital divide in depth and the challenges of integration of AI into language teaching.

Furthermore, future lesson observations might yield a more comprehensive outlook on how teachers could stay the human-in-the-loop and provide a first-hand experience of the possibilities and challenges of applying ChatGPT in EFL teaching, during the lessons. I also suggest that future research should focus more on using ChatGPT to develop language skills, especially intercultural competence in simulation.

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7 Appendices

Appendix A - Questionnaire

Using ChatGPT in English Teaching

Dear Respondent! My name is Rebeka Mezőfi and I am writing my thesis about how ChatGPT helps EFL (English as Foreign Language) teachers in their teaching. I would like to find out more about ways English language teachers use ChatGPT from planning to assessment.

The survey is anonymous and can be cancelled at any time! Any data provided in this questionnaire will be treated confidentially and presented in my thesis only to support my research. This survey has 4 sections and takes about 10-12 minutes to complete!

In case you are willing to be interviewed about your experience using ChatGPT as an English teacher, please, provide your email address at the beginning of this survey!

Should you have any further questions, I am available on the following email address: mezofi.rebeka@gmail.com

Thank you for contributing to my research!

Section 1

E-mail address

1. E-mail addresses will only be used for possible future interviews regarding using ChatGPT in EFL teaching. 1 E-mail address (optional)

Section 2

Teacher profile

The following questions will be asking about your teaching experience and your opinion of ChatGPT.

- 2. What is your gender? *
 - Woman
 - Man
 - I don't want to answer

55

- 3. How long have you been teaching? *
 - I am a teacher trainee (at least 1 semester of teaching experience)
 - 1-5 years
 - 6-10 years
 - 11-20 years
 - more than 20 years
- 4. Where do you teach? (More answers are possible!) *
 - Elementary school (5-8 graders)
 - High school (9-13 graders)
 - I have private students
 - Language school
 - Other
- 5. Does ChatGPT make your teaching easier? *
 - Yes
 - No
 - I don't know
- 6. Which version do you use as an English language teacher? (more answers are possible) *
 - ChatGPT 3.5
 - ChatGPT 4.0
 - I use other AI (Artificial Intelligence)
- 7. In case you chose "other AI" what platforms do you use?
 - Leonardo AI
 - Copilot
 - AI Chatting
 - Memrise
 - Gemini
 - Twee
 - Other
- 8. How often do you use ChatGPT in your teaching? *
 - Daily
 - Several times a week
 - Several times a month

- Yearly
- I don't really use it for my lessons
- I never use it for my lessons
- 9. What do you use ChatGPT for? (More answers are possible!) *
 - To make my work faster
 - Brainstorming
 - Creating materials for the lessons
 - Personal interaction (chat about feelings, thoughts; check concepts...)
 - As a dictionary (checking words)
 - Reflecting on my lessons
 - Have ChatGPT in the role of a one-to-one consultant during the lessons
 - Other
- 10. Do you assign ChatGPT tasks for your students in the lessons? *
 - Yes
 - No
- 11. Do you think ChatGPT can replace English teachers? *
 - Yes
 - No
 - Maybe
- 12. If you said "no", why do you think teachers cannot be replaced by ChatGPT?

Section 3

General Usage of ChatGPT in English Language Teaching

The following questions will be asking about how you use ChatGPT specifically in your language teaching (from planning to assessment).

13. On a scale of 1 to 5 how helpful do you find ChatGPT in the following areas?
1= Not helpful at all 2= Slightly helpful 3= Somewhat helpful 4= Very helpful 5= Extremely helpful *

	1	2	3	4	5	I don't don't u th
Generating ideas for the lessons	0	0	0	0	0	(
Creating materials for the lessons	0	0	0	0	0	(
Generating texts for students	0	0	0	0	0	(
Explaining language concepts	0	0	0	0	0	(
Giving feedback on student's assignments	0	0	0	0	0	(
Translating	0	\circ	0	\circ	0	(
Assessment	0	\circ	\circ	\circ	0	(
Role-plays	0	\circ	0	\circ	0	(
Interactive language games (e.g., word guessing, would-you- rather game)	0	0	0	0	0	C
Self-reflection (reflecting on your lessons with ChatGPT, asking for advice)	0	0	0	0	0	(
Classroom management	0	0	0	0	0	(
Teaching grammar	0	0	0	0	0	(

14. The following statements will be in connection with lesson planning. Rate the following statements on a scale of 1 to 5 based on how strongly you agree with them!
1= Strongly Disagree 2= Disagree 3= Neither Agree nor Disagree 4= Agree 5= Strongly Agree *

	1	2	3	4	5
I love using ChatGPT for lesson planning.	0	0	0	0	0
I find it easy to give the right prompt to ChatGPT to generate ideas for my lessons.	0	0	0	0	0
ChatGPT makes lesson planning easier.	0	0	0	0	0
ChatGPT saves my time with lesson planning.	0	0	0	0	0
I find ChatGPT generated lesson plans accurate.	0	0	0	0	0
Lesson plans created by ChatGPT need only a few adjustments.	0	0	0	0	0
I prefer doing lesson plans on my own in order to feel it "mine".	0	0	0	0	0
I only use ChatGPT as a "starting point" to generate ideas for my lessons.	0	0	0	0	0
I use ChatGPT to recommend me materials I can use for my teaching.	0	0	0	0	0

15. This part of the questionnaire focuses on ChatGPT as a content provider. Indicate whether you use ChatGPT to create the following materials for your lessons or not! Each line needs a response! *

	I don't use it	I use it
Dialogue scripts	0	0
Short stories	0	0
Sample words, sentences	0	0
Role-play scenarios and characters	0	0
Concept explanations/de finitions (e.g., replacing textbook explanations)	0	0
Warmers	0	0
Fill-in the gap tasks	0	0
Tests	0	0
Narrative prompts for writing tasks	0	0
Reading comprehension questions	0	0
Listening tasks	0	0
Songs, poems	0	0
Translation tasks	0	0
Speaking tasks	0	0

16. How useful is		_		ring student p	erformance	es on a scale of
`		to be answere				
-		Slightly helpfu	1 3= Some	ewhat helpful	l 4= Very h	nelpful 5=
Extremely he	lpful *					ı don t
	1	2	3	4	5	haven't yı
Essays	0	0	0	\circ	\circ	(
Vocabulary knowledge	0	0	0	0	0	C
Grammar	0	0	\circ	0	0	(
Factual knowledge	0	0	0	0	0	(
Understanding more complex concepts	0	0	0	0	0	C
Speaking performance (presentations, dialogues)	0	0	0	0	0	C
Listening skills	0	0	\circ	\circ	\circ	(
Section 4						
Using ChatGPT for t	he 5 skills.	This section of	ontains qu	uestions relat	ed to using	ChatGPT to
develop writing, read	ling, listeni	ing, speaking a	and intercu	ultural skills i	in students.	
17. Which of the	following	skills can you	teach/dev	elop with Ch	atGPT? (A	ll rows need to
be answered!)					
1= I can't/don	t use it for	this skill 2= I	use Chato	GPT to devel	op this skil	l in my
students *						
		1 (I don't use it)		2 (1	use ChatGPT to	develop this skill)
Writing		0			С)
Listening		0			0)
Reading		0			0)
Speaking		\circ			C)
Intercultural communication	\ 1 .	0		(CDT 1	0)

18. Which skill(s) can be improved the best with ChatGPT based on your experience? Why?

- 19. How do you use ChatGPT to develop writing! (More answers are possible!) *
 - Generating narrative prompts
 - Assessing students' writing
 - Provide feedback on students' writing
 - Check grammar mistakes
 - Improve vocabulary
 - Check for syntactic mistakes
 - I don' use ChatGPT for this skill
 - Other
- 20. How do you use AI (using ChatGPT) to develop listening? (More answers are possible!) *
 - Listening comprehension tasks (e.g., fill in the gaps, multiple-choice, etc..)
 - Simulate real-time conversation
 - Dialect-based written texts (vocabulary, grammar, pronunciation)
 - Providing phonetic transcriptions
 - I don't use ChatGPT for this skill
 - Other
- 21. How do you use ChatGPT to develop reading? (More answers are possible!) *
 - Generate comprehension questions
 - Create authentic texts (stories, poems, songs, etc...)
 - Making texts shorter
 - True-False tasks
 - Vocabulary-check task
 - Open-ended questions
 - I don't use ChatGPT for this skill
 - Other
- 22. How do you use ChatGPT to develop speaking! (More answers are possible!) *
 - Simulate conversations
 - Create discussion topics
 - Create debate questions
 - Improve pronunciation (providing phonetic transcription, information about different accents)
 - Create presentation notes

- Use ChatGPT to ask leading questions about literature
- Simulate intercultural communication on the lesson
- Improve vocabulary by checking the chat history
- I don't use ChatGPT for this skill
- Other
- 23. How do you use ChatGPT to develop intercultural communication? (More answers are possible!) *
 - Create role-play scenarios
 - Create role-play characters
 - Simulate conversations on the lessons (using ChatGPT to impersonate someone from a different culture)
 - Provide cultural information
 - I don't use ChatGPT for this skill
 - Other

Section 5

Drawbacks of ChatGPT

The following questions will ask about the risks and limitations of using ChatGPT in language teaching

- 24. What drawbacks/limitations have you experienced with ChatGPT in your teaching? (Multiple answers are possible!) *
 - ChatGPT misunderstanding my prompts
 - Lack of knowledge to use the AI
 - Ethical issues (cheating, plagiarism)
 - Providing false information
 - Easy to mistake ChatGPT for a human being (relying on it for emotional support, personal advice...)
 - Distracting students' attention from the purpose of the lesson
 - Lacking pedagogical insight (doesn't know the students or their teachers)
 - Stereotypes in the output
 - Other
- 25. What are the areas ChatGPT cannot support your teaching with?

Appendix B - Interview questions

(semi-structured interview: questions were selected according to participants' fields of interest)

- How long have you been teaching?
 (teacher trainee) Do you have plans to continue working as a teacher after you graduate?
- 2. What do you like most about being a teacher?
- 3. What do you think about applications similar to ChatGPT?
- 4. What is your approach to technology?
- 5. How easy was it for you to adapt to the changes ChatGPT caused in education?
- 6. What is your overall impression of ChatGPT?

 How do you perceive the role of ChatGPT in teaching foreign languages?
- 7. How could you describe your role in language teaching? (Can you give some examples?)
 In what ways does ChatGPT challenge teachers in their role?
- 8. In your opinion, in what ways does ChatGPT influence or reshape teaching? How can ChatGPT make language teaching even more effective?
- 9. Are there any potential drawbacks? Mention some examples!
- 10. How should teachers teach their students to use ChatGPT ethically?
- 11. In your experience, how widespread is ChatGPT among English teachers?
- 12. Can you provide specific examples of how you have used ChatGPT in your classes? What opportunities are there in your school for using ChatGPT during lessons? What kind of tasks/activities do you design with ChatGPT? How do you judge if the resources provided by ChatGPT are accurate or applicable for your classroom?
- 13. How do your students respond to the use of ChatGPT in learning activities?
- 14. How has the use of ChatGPT affected your lesson planning?
 - Do you find it easier or more challenging to incorporate ChatGPT into your lesson plans? Why?
 - Do you find it easier or more challenging to incorporate ChatGPT into your lesson plans? Why?
 - How do you plan lessons with ChatGPT? Mentions some examples!
- 15. In what ways has ChatGPT influenced your teaching methods during class?
 Can you describe a lesson where ChatGPT played a significant role?

- 16. What skills can you improve with ChatGPT the most? What skills cannot be improved with it?
- 17. How does ChatGPT impact your assessment strategies?Do you use ChatGPT for formative or summative assessments? If so, how?
- 18. What techniques/strategies do you use to incorporate ChatGPT in skills development?
- 19. When do you try to avoid using ChatGPT? Which skills do you find ChatGPT unhelpful for?
- 20. How can you develop reading skills with ChatGPT? (share some experience!)
- 21. Can you share any specific activities or tasks you have created with ChatGPT for reading comprehension?
- 22. How did ChatGPT make teaching reading skills easier?
- 23. What are its limitations in teaching reading skills?
- 24. How do you use ChatGPT to develop writing skills? (share some experience!)
- 25. What is your opinion about students using ChatGPT for writing assignments? How do you call their attention to the fallacies of AI?
- 26. How do you find teaching writing skills after the introduction of ChatGPT?
- 27. What types of writing tasks do you design with the help of ChatGPT?
- 28. How do you detect if students used ChatGPT for their writing assignments?
- 29. How do you use ChatGPT to develop speaking skills? (share your experience)
- 30. Can you give an example of a speaking activity facilitated by ChatGPT?
- 31. How useful do you find ChatGPT as a conversation partner?
- 32. Does ChatGPT make developing speaking skills easier? How?
- 33. How do you use ChatGPT to develop listening skills? (share your experience)
- 34. Can you mention any exercises or materials you have created using ChatGPT for listening?
- 35. What other alternatives (generative AI) do you use to develop listening skills?
- 36. How do you develop intercultural communication/competence with ChatGPT? (share some experience)
- 37. Have you used ChatGPT to create tasks that involve cultural exchange or knowledge? If so, how?
 - Can it convey cultural differences appropriately? (Mention some examples)
- 38. Do you use ChatGPT to simulate real-life conversations for your students with people from different cultures? How? Why not?
- 39. How do you use ChatGPT to help students practice cultural competence? (~37)

- 40. How effective do you find ChatGPT-generated role-plays/materials in developing intercultural competence?
- 41. What are some areas or aspects of teaching where you find ChatGPT cannot provide adequate support? (Can you tell examples of your own experience?)
- 42. Can you elaborate on any specific challenges or limitations you have encountered?
- 43. Are there any skills or competencies in foreign language teaching that you believe require more human intervention despite the use of ChatGPT?

 Why do you think these areas are less suited for ChatGPT's involvement?
- 44. Do you use other generative AI tools next to ChatGPT to ensure credibility? If yes, which ones?
- 45. Other:

Appendix C - Areas ChatGPT cannot support teachers with (questionnaire results)

Table 10 *Areas ChatGPT cannot support teachers with*

Challenges	Examples
	R5: "The human factor = my emotional connection with the students, my
	spontaneity, how I make decisions.
	R12:" I think assessment is completely subjective, maybe ChatGPT can
	offer a score or a mark for a test, but cannot give a final grade if I'm
	interested in how a student grows during the semester. Or he cannot give
	a mark in case of an oral examination"
4.1. Lack of emotional intelligence	R52: "It does not have humor"
	R20:"Personalized lessons for my students. ChatGPT is absolutely
	fantastic as a tool, but I'm the one who knows my students, I decide what
	works for each of them and what doesn't."
	R35:" Only I can feel and adjust to the dynamics of my lessons and feel
	my class's energy. I know what kind of route we should take to achieve
4.2. Lack of pedagogical insight	our goal."
	R6: "Being more creative than its input - it mostly creates "traditional"
4.3. Cannot provide innovative lesson plans	lesson plans. I wish for innovation!"
4.4. Cannot improve listening	R25: "I do not know how I could use it for listening."
4.5. There are no areas ChatGPT could not	
support me with	R19: "There's no such area ChatGPT could not be helpful"
	R28: "As teachers we develop a lot of soft skills as well, and that can't be
4.6. Cannot develop soft skills	replaced by AI"
4.8. No multi-modal features	R31: "Providing pictures, videos or listing other useful sources."
	T39: "I feel like assessing students' work should be the job of the teacher.
4.9. Should not be involved in assessment	I just don't trust machines to evaluate a student's essays."

Note. The table presents the responses of 25 teachers from the questionnaire (R stands for respondent and their corresponding numbers) for the open-ended item from the questionnaire. Nine categories of challenges were identified.

Appendix D - Main categories from the interview

Table 11 *Main categories from the interview*

1.Perceived roles of ChatGPT and EFL teachers	Examples
1.1 Resource provider and content generator	T3: "I use specific expectations to ChatGPT to generate reading comprehension text for me with multiple-choice task items or T/F items based on an authentic text and ask it to rephrase and reform the old text according to my expectations. I often give mini-project work for students to use ChatGPT for organizing a trip to somewhere. They use it to gather information and get help in designing a route. I can also create role-play cards that ask questions that HU and International students have to answer on the lessons." T2: "I design grammar exercises, gap-filling exercises, multiple-choice exercises and use it to find video links. It can find you a video on Youtube on any given topic — TedEX are short 2-3-minute videos — and it can create questions and provide answers for you, so you don't have to think or do the exercise".
1.1 Resource provider and content generator	T1: "If I have to, I can explain the grammar rules
1.2. Private tutor	for a hundred times in different ways and approaches. ChatGPT cannot. TR1: "Students might not understand a grammar, or why English says that, so they're going to turn to GPT to explain it to them." T3: "You can ask AI to explain simple IT terms in a non-professional way and then ask students to paraphrase them"
	T2: "The content always needs to be checked. I cannot even say a percentage, but I can say that
1.3. Content supervisor	probably more than 50% is usable as it is."
1. 4. Ensuring academic integrity	TR2: "When you are reading a text, you get this strange feeling it was written by ChatGPTit uses strange grammatical structures"
1.5. Ensuring emotional well-being of students	T2: "Emotional support belongs only to the teacher. It's not credible from the machine's part." T4: "Many of my students have unfortunate family background. So I and my colleagues have to be there for them instead of their families."
2. Teachers using ChatGPT for planning and	J J
assessment	Examples
2. 1. Lesson planning	T4: "ChatGPT gives me ideas, so I do not have to look for ideas in books" T3: "I know what I want so I don't ask ChatGPT what kind of tasks to do, it's always the how – I don't let ChatGPT make decisions. I always work from my basic syllabus. I know what I want and how to do it. Letting in a different perspective – like another fellow teacher – is what ChatGPT can assist me with." T2: "When I ask it to plan a complete lesson, you just need to give the level and the topic" T1: "I asked it to create a lesson plan on a funny topic and it couldn't do that. It only gave 3 tasks which were created. They weren't enough for 45 min. lesson."

	TR1: "If I'm absolutely out of ideas and mostly it happens with me with warmers, so I ask ChatGPT: "give me a warmer about this topic. And it would give me ideas."
	TR2: "It's strange for me as a teacher. I think only a teacher can assess the whole growth of the student. The version I use do not show signs of learning, so it didn't learn where the student was previously. I think it cannot track the improvement, because it did not learn where the student was and it can only see the momentary task." T1: "I only use it to create multiple-choice tests and reading comprehension tasks. It is full of mistakes." TR2: "For example, I can write the student's grades into this little box and make a prompt to give a final grade. But I don't think it's a good thing." T3: "I always give feedback on content, grammar, vocab and style. Now, style is something ChatGPT
2.2. Assessment	cannot give feedback on. I use ChatGPT for written and oral production transcribe, when I want to evaluate those. I have it recorded, transcribe and give it to ChatGPT for a feedback." TR1: "I haven't used it for giving feedback yet, really should start using it." T4: "I don't use ChatGPT to give grades on students' work."; "For assessment, I don't use ChatGPT at all, because it's me, who assesses the students."; "I am more careful with assessment after ChatGPT was released. I always evaluate the effort, even for lesser work, I give full score."
3. ChatGPT supporting teachers with language skills development	Examples
skins acverophicht	L'AGIIIVICS
	T2: "You can also give a starting sentence, so you can give key words by which they have to go by: write an email to a friend, mention something that has happened to you." T1: "You can ask it to create two or three or more essays, as many as you want but then students should try to follow the script!" T4: "Even if students only copy and remember how ChatGPT writes an exact word or essay, it's
3.1. Writing	T2: "You can also give a starting sentence, so you can give key words by which they have to go by: write an email to a friend, mention something that has happened to you." T1: "You can ask it to create two or three or more essays, as many as you want but then students should try to follow the script!" T4: "Even if students only copy and remember how ChatGPT writes an exact word or essay, it's effective since they practice." T4: "I try to generate reading tasks that suit the age-group. So it's age, topic and grammar dependent." T3: "I always give these authentic texts (news reports) and sources and ask it to change the level, change the vocabulary set, sometimes even the content"
3.1. Writing 3.2. Reading	T2: "You can also give a starting sentence, so you can give key words by which they have to go by: write an email to a friend, mention something that has happened to you." T1: "You can ask it to create two or three or more essays, as many as you want but then students should try to follow the script!" T4: "Even if students only copy and remember how ChatGPT writes an exact word or essay, it's effective since they practice." T4: "I try to generate reading tasks that suit the age-group. So it's age, topic and grammar dependent." T3: "I always give these authentic texts (news reports) and sources and ask it to change the level, change the vocabulary set, sometimes even the

	T4: "After reading about Daily Routines, we discuss in pairs or small groups" TR1: "ChatGPT can help with pronunciation in
	bracketsbut cannot replace real life experience"
3.4. Listening	T2: "For a listening task, ChatGPT provided a Youtube linkwith listening exercises." TR1: "When I used videos, I wrote up the questions and came up with my own ideas for listening activities, like: this is mine!"
J.T. Distening	T2: "I created a reading task with ChatGPT about
3.5. Intercultural competence	the 'History of Christmas' focusing on the differences between the different countries celebrate it." T3: "To practice intercultural skills in simulation, I'd need an IT lab." T1: "I don't think ChatGPT makes much of a differencekids can talk with real people on video games. So they are exposed to different cultures."
*	
4. Challenges of using ChatGPT in EFL teaching	Examples
41.1.1.6	TR1: "ChatGPT cannot replace human
4.1. Lack of emotional intelligence	connections, so it cannot support me with that."
	T2: "To explain something 6th or 7th time in a different way a material for the same student, only I
4.2. Lack of pedagogical insight	can do."
	T2: "It cannot plan for the level I want or cannot identify the textbook." T3: "Not giving the right instruction results in mistakes. It's always the teachers' fault if you have the wrong outcome." T4: "The problem is that many times it gives false information and also the tasks are full of grammar
1.2 Mistakas from misundarstanding prompts	
4.3. Mistakes from misunderstanding prompts	mistakes."
4.3. Mistakes from misunderstanding prompts	mistakes." T3: "The moment I read the 1st paragraph I can see it wasn't generated by them." TR2: "There was a student who wrote the whole essay with ChatGPT and he was so proud of it that he said he wrote with ChatGPT." T2: "I tell my students not to mention their personal data when using ChatGPT: no name, date of birth
4.4. Ethical issues	T3: "The moment I read the 1st paragraph I can see it wasn't generated by them." TR2: "There was a student who wrote the whole essay with ChatGPT and he was so proud of it that he said he wrote with ChatGPT." T2: "I tell my students not to mention their personal data when using ChatGPT: no name, date of birth as it has no data security."
	T3: "The moment I read the 1st paragraph I can see it wasn't generated by them." TR2: "There was a student who wrote the whole essay with ChatGPT and he was so proud of it that he said he wrote with ChatGPT." T2: "I tell my students not to mention their personal data when using ChatGPT: no name, date of birth
	T3: "The moment I read the 1st paragraph I can see it wasn't generated by them." TR2: "There was a student who wrote the whole essay with ChatGPT and he was so proud of it that he said he wrote with ChatGPT." T2: "I tell my students not to mention their personal data when using ChatGPT: no name, date of birth as it has no data security." T4: "I think younger teachers can exploit ChatGPT more. We, the older ones don't use it too much." T3: "Students are nativesknow how to use it. So we must keep up with students' interest and learn to use AI." TR2: "I think Hungarian education is not prepared

Note. The table shows the main categories of the six in-depth interviews, guided by the four research questions.