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**INVESTIGATING TEACHERS' AND STUDENTS' PERCEPTIONS AND  
EXPERIENCES WITH CHATGPT**

Master's Thesis

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## **Abstract**

Artificial Intelligence (AI) is increasingly integrated into educational practices, with tools like OpenAI's ChatGPT offering significant potential to improve teaching and learning processes. This study investigates the perceptions and experiences of middle and high school teachers and students regarding ChatGPT's use in ESL classrooms. Employing an exploratory research design, qualitative data were collected from fifteen English teachers and thirty-four students from two schools in Tallinn. Findings indicate that teachers view ChatGPT positively for creating lesson materials and facilitating personalized learning despite concerns about academic integrity and over-reliance on AI. Students reported improvements in writing skills, vocabulary, and engagement. However, challenges include writing effective prompts and ensuring AI-generated content accuracy. The study emphasizes the need for teacher training on ethical AI integration.

**Keywords:** Artificial Intelligence in Education, ChatGPT, ESL Learning, Students' and Teachers' Perceptions, Teacher as Researcher

## **Introduction**

Artificial intelligence (AI) is transforming education technology by enhancing teaching and learning methods. Tools like OpenAI's ChatGPT are gaining attention because they can create text similar to human writing, making them useful in educational settings (Luckin, Holmes,

Griffiths, & Forcier, 2016; Holmes, Bialik, & Fadel, 2019). As schools look for new ways to support educators and engage students, AI offers significant potential.

Despite the increasing integration of AI into educational practices, there is a significant lack of understanding about how these technologies are perceived and may be effectively used in secondary education settings. While several studies have looked into AI's role in higher education, the specific challenges and opportunities in middle and high school settings are relatively unexplored (Hinojo-Lucena et al., 2019). Furthermore, major educational stakeholders' attitudes toward AI technologies like ChatGPT can have a significant impact on their successful implementation and efficacy in educational systems (Beetham, Sharpe, & Freitas, 2007).

Recent literature highlights various applications of AI in education, including personalized tutoring, intelligent support for collaborative learning, and intelligent virtual reality environments (Luckin et al., 2016). AI literacy is becoming increasingly important, with AI education being integrated into K-12 settings to prepare students for a technology-driven future (Sánchez-Prieto et al., 2020). Studies indicate that AI tools like chatbots can significantly improve learning outcomes, engagement, and personalized learning experiences (Kohnke et al., 2023; Fuchs, 2023). However, challenges such as ensuring the accuracy of AI-generated content, managing ethical considerations, and preventing over-reliance on technology remain critical (Xiao & Zhi, 2023; Cassidy, 2023).

This research aims to fill this knowledge gap by investigating the perceptions of middle and high school students and teachers in integrating ChatGPT into their educational practices, with a special focus on its use in classroom learning and the creation of teaching materials. The significance of this study lies in its potential to improve understanding of AI's role in education, guide the effective implementation strategies, and support the development of practices that align with the needs and preferences of both students and teachers. By doing so, this research aims to contribute to more informed and effective use of AI in education, eventually improving the learning outcomes and teaching efficiency.

## **1 Theoretical Overview**

### **1.1 Artificial Intelligence in Education**

Artificial intelligence (AI) has entered our daily lives in a variety of ways, including web search engines, mobile apps, and healthcare systems (Sánchez-Prieto et al., 2020). The rapid development of AI technologies has significant consequences for learning and education. In fact, AI-enabled instruction is projected to alter education (Zawacki-Richter et al. 2019).

Artificial Intelligence (AI) is used in various educational technologies, including chatbots, intelligent tutoring systems, and automated grading (Clark, 2020; Heffernan & Heffernan, 2014). These tools offer multiple opportunities for everyone involved in education (Chen et al., 2020).

According to Chen et al. (2020), AI applications in education include student and school assessments using adaptive techniques, grading with visual recognition, personalized teaching through data analysis, and remote learning supported by virtual assistants and real-time data.

AI is increasingly common in educational settings, improving personalized learning through data-driven insights. This technology is not about replacing teachers with robots but rather about supporting educational processes and prompting important discussions about the future of teaching and learning (Holmes et al., 2023).

### **1.2 Usage of ChatGPT**

According to Kasneci et al. (2023), in recent years, significant progress has been achieved in natural language processing (NLP) through the development of large language models like GPT. Trained on extensive text datasets, these models excel in producing text that resembles human writing, responding to queries, and successfully performing various language tasks with remarkable precision. The application of large language models in education has garnered attention as a promising area of exploration, given their wide array of potential uses. By leveraging these models, there is a chance to enrich learning and teaching experiences across all educational levels, from primary and secondary to tertiary education and professional development. It can be used for middle and high school students (large language models play a crucial role in language learning and mastering writing styles across various subjects such as mathematics, physics, language, literature, and more). They can generate practice exercises and quizzes to aid students in better understanding, contextualizing, and retaining the material they are studying. Additionally, these models contribute to the development of problem-solving skills

by offering explanations, step-by-step solutions, and engaging questions that encourage analytical thinking and creativity.

### **1.3 Teachers' Perceptions of ChatGPT in ESL Learning**

The conversation regarding the influence of artificial intelligence (AI) on all aspects of human lives has gained momentum, particularly with advancements in conversational AI. Starting from late 2022, AI-driven technologies like ChatGPT, its upgraded version GPT-4, and comparable large language models have made a significant impact globally (Li, 2024).

Adiguzel et al. (2023) conducted a review of studies from 2015 to 2023, revealing that teachers generally hold positive attitudes towards the utilization of AI, especially AI-powered chatbots, in teaching and assessment. They highlighted that these chatbots could assist teachers in monitoring student progress, providing immediate feedback, and offering teaching evaluation models or suggestions for teaching practices. However, there are also concerns and challenges related to teachers' perceptions of AI in education. Some of these include questions about the role of teachers and the impact on the job market for educators, the potential lack of human interaction leading to a reduction in the quality of the educational experience for students, over-reliance and dependency on technology, and concerns about intellectual property rights.

According to Nguyen's (2023) study in Vietnam, the teachers demonstrated a certain level of knowledge about ChatGPT, albeit incomplete. Specifically, they confused the functions of other applications with those of ChatGPT. This limited understanding of ChatGPT could potentially impact their perceptions and practices. Furthermore, participants held conflicting views on the benefits and challenges of integrating ChatGPT into teaching and assessment, with more concerns than advantages regarding this AI-powered tool.

In Sweden, a study on the use of artificial intelligence in the ESL was conducted by Mohammad Ali, A. (2023). The study results indicate a positive influence on teachers' perceptions of utilizing ChatGPT for personalized learning. Moreover, it also proved that ChatGPT is good at creating personalized tasks and adapting to students' needs.

Based on the findings made by Ali et al. (2023), integrating ChatGPT into English language programmes is recommended to improve learners' motivation for autonomous learning under teachers' guidance. Teachers are advised to demonstrate to students the positive benefits of ChatGPT instead of being apprehensive about its potential negative impacts.

The exploration of ChatGPT in ESL learning shows both opportunities and challenges. Based on the findings, integrating ChatGPT into English language programmes can boost learners' motivation.

#### **1.4 Students' Perceptions of ChatGPT in ESL Learning**

The popularity of AI in language learning is on the rise due to its effectiveness and convenience. With the widespread use of smart devices and the Internet, students now have easy access to various language learning methods. AI language learning tools assist students in saving time by handling specific tasks for them and providing a personalized learning experience tailored to their individual needs and progress (De la Vall & Araya, 2023).

ChatGPT, an intelligent chatbot developed by OpenAI, has brought a wide array of possibilities and obstacles in the realm of language education. Its exceptional capacity to produce various types of text, respond to inquiries, and offer translations rapidly has positioned ChatGPT as a significant tool in the age of advanced AI technology. However, the extent to which ChatGPT can aid students in accomplishing language learning assignments remains largely unexplored (Xiao & Zhi, 2023). According to research made by Xiao & Zhi (2023), students perceive ChatGPT as a peer tutor to provide individualized assistance and a source of generating new ideas.

The students have positive views of ChatGPT within the educational setting, suggesting that they recognize the advantages and value of using it in their educational endeavors. Furthermore, the students positively perceive the ease of use of ChatGPT (Yilmaz et al.,2023)

The perceived ease of use and perceived usefulness of ChatGPT significantly shape students' attitudes toward the tool. A positive correlation exists between these perceptions and students' acceptance of ChatGPT when students find ChatGPT easy to use and beneficial, their overall attitude toward the tool is likely to be positive (Albayati,2024).

#### **1.5 Opportunities**

Personalized learning in education strives to customize instruction based on the distinct requirements, interests, and capabilities of each learner. Language models play a crucial role in enabling personalized learning by examining students' language usage, feedback, and progress to develop personalized learning strategies comprising tailored content, tasks, and evaluations that

cater to each student's specific needs. This personalized approach has shown to significantly improve student outcomes. When students receive material that aligns with their interests and skills, they are more inclined to actively engage with the content and cultivate a profound comprehension of the subject matter (Fuchs, 2023).

AI-powered chatbots can conduct formative evaluations and provide fast feedback, both crucial for successful language acquisition. Also, they have the capacity to offer linguistic input and facilitate daily conversational practice (Huang et al., 2022).

According to Kohnke et al. (2023), ChatGPT helps in language learning by simulating genuine interactions. It can recognize the word within a context, correct language errors, generate texts across different genres (such as emails, stories, and recipes), design quizzes, annotate texts, and provide dictionary definitions, sample sentences, and translations. Moreover, students have the option to utilize ChatGPT for accessing dictionary definitions. For instance, it can define a word, determine its grammatical category, supply sample sentences, and present additional interpretations. Kohnke et al. (2023) suggest ten ways to improve English language skills using ChatGPT: practice English conversations, create monologues and dialogues, learn grammar and vocabulary, improve pronunciation, improve writing skills, prepare for international exams like Cambridge, IELTS, and TOEFL, prepare for a job interview, and create a study plan.

For educators, ChatGPT represents a novel approach to engaging learners and presenting them with fresh challenges (Sharma & Yadav,2022). Some potential use cases for incorporating English lessons in classrooms have been considered. By generating personalized vocabulary lists, ChatGPT helps students understand word meanings through custom sentences. It can also spark creativity in writing by providing prompts based on specific themes, thus facilitating practice in writing and creative thinking. For storytelling, ChatGPT can suggest continuations for story beginnings, improving students' narrative skills. Additionally, it supports reading comprehension by creating questions from text passages, helping students grasp and retain information. Lastly, as a language translation tool, ChatGPT offers accurate translations between languages, aiding students in reading international texts and communicating with overseas peers, eliminating the need for external translation services (Sharma & Yadav,2022).

## 1.6 Challenges

The primary challenge lies in ensuring accuracy. The system's precision relies significantly on the quality, diversity, and intricacy of the training data, along with the caliber of input data supplied by students. The system may encounter difficulties in grasping the subtleties and intricacies of human language, resulting in misunderstandings and inaccurate responses (Fuchs, 2023). Moreover, according to the research conducted by Xiao & Zhi (2023), the students had to consistently adjust the prompts to acquire valuable and precise information.

Likewise, there are inquiries regarding the authenticity of ChatGPT's responses. ChatGPT does not provide sources or references for its responses. It could be contended that its outputs are not wholly original but rather rephrased from unattributed sources (i.e., plagiarism) (Kohnke et al., 2023).

Another significant challenge that students may encounter when utilizing ChatGPT is the potential danger of excessive dependence on technology, which could hinder the cultivation of essential critical thinking skills. Despite the valuable support and personalized learning experiences these models can offer, students must be cautious not to overly rely on the system at the expense of honing their analytical and critical thinking abilities. Excessive reliance on platforms like ChatGPT may result in students becoming passive learners who unquestioningly accept the responses provided by the system without critically assessing the accuracy or pertinence of the information presented (Fuchs, 2023).

There are several debates about the drawbacks related to ChatGPT. One discussion revolves around the ethical utilization of ChatGPT in educational settings, raising concerns that it could be used for cheating (Cassidy, 2023).

It is evident that, despite its initial promise, the technology of ChatGPT is still in its early stages of development. Given that guided or supervised instruction is essential for effective learning, a harmonious coexistence between human educators and AI chatbots like ChatGPT is necessary. It is vital for students to have both human oversight and technological support during their learning process, ensuring a balanced approach. ChatGPT can indeed serve as a valuable tool for teaching and learning, however, it is imperative for both teachers and students to acquire the necessary skills to utilize this technology responsibly (Sharma & Yadav, 2022).

## 1.7 Purpose of the study and research questions

The purpose of the study is to investigate the effects of incorporating ChatGPT into ESL (English as a Second Language) teaching and learning settings. Specifically, the study aims to:

- examine ESL teachers' perceptions: understand how ESL teachers see ChatGPT's incorporation into their instructional practices;
- examine students' perceptions: understand how students see ChatGPT's incorporation into their learning practices;
- identify the challenges, opportunities, obstacles, and potential of collaborating with ChatGPT.

This thesis explores the following research questions:

**RQ1:** What are ESL teachers' and students' perceptions of ChatGPT?

**RQ2:** How do teachers and students use (integrate) ChatGPT in ESL teaching and learning?

**RQ3:** What obstacles and opportunities do students and teachers have when using ChatGPT?

Through this study, we aim to provide substantial insights into the use of AI technologies such as ChatGPT in educational settings, contributing to a better understanding of their potential to change established learning paradigms.

## 2 Research Methodology

This chapter explains the research design and methodology employed to investigate the impact of ChatGPT on ESL learning, focusing on teacher perceptions, instructional practices, and the co-creation of educational materials. First, the research design will be presented, followed by a description of the sample methodology, data collection, and data analysis used to gather and process information for this investigation.

During the thesis writing process, feedback on the content and structuring of chapter outlines, as well as on the correctness of language usage in the main text, was provided by the ChatGPT text robot. Based on this feedback, the text was refined, and language errors were corrected.

### 2.1 Research Design

The nature of the present study is exploratory research, a method used when a problem is not well-defined. It usually uses qualitative methods like interviews and content analysis to

understand issues, identify patterns, and form initial hypotheses (Stebbins, 2001). The flexible nature of exploratory research allows for adaptations as new insights emerge, making it ideal for emerging fields like in education (Reiter, 2017). Exploratory research is essential in areas where existing theories may not fully explain new phenomena, as it supports the discovery of new insights without being constrained by pre-existing theoretical frameworks (Stebbins, 2001).

Exploring the integration of ChatGPT in ESL learning is vital due to its novelty and complexity. This type of research is key in fields where existing theories may not fully explain new phenomena (Waters, 2007). It supports the discovery of new insights that are not constrained by pre-existing theoretical frameworks.

The study examines how ChatGPT affects ESL teaching strategies and students' engagement. Through this research, we seek to uncover how ChatGPT is utilized in classrooms and its implications for educational practices and theory development. The findings are expected to provide deeper insights into the practical and potential uses of AI tools in education, informing future applications and theoretical advancements.

## **2.2 Participants**

The participants in this study include two authors, a purposive sample of fifteen English teachers, and thirty-four middle and high school students ranging from 7th to 12th grades who were taught directly by the authors, all from the schools where they work. The inclusion of both English teachers and students as interviewees allowed the research to capture a wide array of perspectives on the integration of ChatGPT into the ESL curriculum. While the authors engaged directly with ChatGPT through exploration and implementation with students, the English teachers provided comparative viewpoints based on their professional experiences and expectations regarding technology-assisted language learning. The teachers offered insights into the pedagogical and professional implications of incorporating ChatGPT into teaching practices, while the students provided firsthand accounts of their learning experiences and the tool's impact on their language acquisition. See Table 1 for participants description in Appendix 1.

## **2.3 Data collection method**

This research utilized qualitative methods, including the authors' diaries, semi-structured interviews with students, and semi-structured interviews with teachers, to investigate how

ChatGPT is integrated into ESL education. These methods were selected for their effectiveness in gathering detailed insights into participants' experiences and perceptions, thus enriching the understanding of ChatGPT's pedagogical implications (Rabionet, 2011).

Semi-structured interviews, known for their flexibility, allowed participants to express their thoughts freely and provided in-depth information on specific topics related to ChatGPT (Turner, 2010). Depending on agreements with the participants, these interviews were conducted both online via Zoom and in person, ensuring a flexible and accommodating approach to data collection. Before commencing the interviews, consent was obtained from all participants, with additional written permission from parents for minors. All personal information was anonymized to maintain confidentiality.

The data collection was systematically executed to cover all research questions thoroughly. Authors' diaries were updated continuously throughout the study, complementing the data from the interviews. All sessions were recorded and transcribed verbatim to capture accurate reflections on the use of ChatGPT.

### **2.3.1 Authors' Diaries**

Throughout the study, the authors maintained detailed diaries, recording observations, reflections, and insights gained during the exploration and implementation phases of ChatGPT. See Appendix 11. These diaries served as a critical reflexive tool, allowing the authors to document the evolving understanding of how ChatGPT can be integrated into ESL teaching practices and its effects on student engagement and learning. The diary entries helped in tracking changes over time, providing a first-person narrative of the authors' pedagogical experiments and interactions with students using ChatGPT. This ongoing documentation was instrumental in identifying challenges, successes, and unexpected outcomes that informed subsequent data analysis.

### **2.3.2 Semi-structured interviews with students and teachers**

Semi-structured interviews were conducted with secondary and high school students and teachers to collect qualitative data about their perceptions and experiences using ChatGPT in their language teaching and learning processes. The interview questions presented in Appendices 2 and 3 were designed to prompt discussion on their perceptions of specific aspects of their interactions with ChatGPT, such as its usability, impact on learning and motivation, and any challenges faced.

The flexible nature of semi-structured interviews allowed the interviewees to express their thoughts in an open-ended manner while providing the researchers the ability to probe deeper into interesting or complex responses. These interviews were recorded and transcribed to ensure accuracy in data analysis. All recordings are securely stored in Google Drive, which is only accessible to authorized person involved in the research, and students and teachers were given pseudonyms to protect their privacy.

## **2.4 Data analysis**

The qualitative data from the authors' diaries and semi-structured interviews were analyzed to understand the impact of using ChatGPT in ESL classrooms. Transcripts were first coded line-by-line to identify significant phrases and form initial themes (Charmaz, 2014). This open coding allowed themes to emerge naturally.

Axial coding then organized these codes into related categories, enhancing the structure and depth of the analysis by highlighting patterns and relationships (Strauss & Corbin, 1998). Selective coding further refined these into core themes that directly addressed the research questions. Inter-rater reliability checks were conducted by the two authors to ensure consistency and objectivity in the analysis of the data.

## **3 Results**

This section outlines the results from interviews with middle and high school students and teachers, along with the researchers' own experiences to provide a comprehensive view of implementing ChatGPT in ESL classrooms. The study involved semi-structured interviews with 34 students and 15 English teachers from two schools in Tallinn, Estonia, aimed at gathering detailed opinions on using ChatGPT in education. The analysis identified themes that arose naturally during discussions, focusing on the implications of ChatGPT for ESL teaching and learning.

The findings are categorized into four main themes: the perceptions of using ChatGPT in ESL education, use of ChatGPT, opportunities and challenges, and its effects on teaching and learning dynamics.

### 3.1 Exploring ChatGPT as a Teacher Researcher (Joy)

As an ESL teacher and researcher, my journey with ChatGPT began with a mix of curiosity and skepticism. At first, using ChatGPT felt overwhelming because the responses were lengthy and sometimes not helpful for my classroom needs. However, with a little research and experimenting, I found ways to make it more useful for me.

One effective strategy I discovered was assigning ChatGPT a specific role, such as an experienced English teacher, and setting clear expectation. I started giving detailed prompts for different task, whether it was helping to create activities, design quizzes, or come up with discussion points for literature classes. This approach not only increased my satisfaction with the results but also boosted my overall confidence in using ChatGPT effectively.

This strategy also improved the quality of the materials produced by ChatGPT. For example, instead of simple questions about historical events, it began to pose deeper, thought-provoking questions. A question like, “*How did the strategies employed by different leaders of the Civil Rights Movement like Martin Luther King Jr. reflect their visions for achieving racial equality in America?*” encouraged students to explore different leadership styles and their impacts, leading to a more engaging and insightful discussions. Additionally, when discussing, *Amina’s Voice* by Hena Khan, a question such as “*How does Amina’s struggle with her cultural identity reflect broader themes of assimilation and multiculturalism in the modern society?*” led students to look closely at a specific parts of the book and connect them to real-world problems. So, ChatGPT didn’t just support my existing methods, it transformed and improved the way I engaged with my students.

Teaching my students how to use ChatGPT efficiently proved to be quite valuable. I taught them how to write clear, precise prompts, which not only gave them better responses from ChatGPT but also improved their overall communication abilities. Instead of asking a vague question like “*Tell me about your time as mayor,*” I guided them to use a more structured approach. For example, first they have to give a persona that they want ChatGPT to assume, then provide a short context to set the stage, and finally, the question which should be clear and specific. Using this template, students received detailed and informative responses which improved their understanding and developed more effective communication. This example demonstrates how learning to create specific and clear prompts can improve interactions with

ChatGPT and other AI tools. For a sample students' work using this approach, please refer to Appendices 7 and 8.

To develop critical thinking, I also introduced activities where students would interview ChatGPT as a historical figure, verify its answers from reliable sources, and writing an analysis. These tasks deeply engage them with the content. Additionally, students used ChatGPT for entrance exam review by asking it to challenge them with questions or exercises about grammar tenses and identifying errors. Sometimes, students purposely gave wrong answers to test how accurate ChatGPT is. When ChatGPT mistakenly agreed with these wrong answers, It showed how important it is to always check facts to trust the information from AI systems.

ChatGPT was also helpful for brainstorming ideas for essays, helping students expand their ideas and improve their writing. For instance, when working on an essay, a student used ChatGPT to gather ideas for developing a thesis statement and creating a brief outline. The brainstorming session with ChatGPT allowed students to structure their essay effectively.

Despite all of these benefits, there are still challenges. The correctness of ChatGPT's content varies, thus I constantly double-check it before using it in my classroom. It's similar to having a new teaching assistant who needs a lot of guidance.

However, the effort has been worth it. ChatGPT has become a valuable support in my daily tasks as a teacher. It helps me quickly draft lesson plans and come up with creative teaching materials. The time I've saved lets me focus more on interacting with my students and less on the administrative aspects of teaching. For example, I used to spend several hours each week creating lesson plans and designing worksheets focusing on grammar exercises, reading comprehension questions, and essay prompts. By using ChatGPT to generate the initial drafts of these materials, I reduced this preparation time by at least two to three hours each week. This extra time allowed me to assess my students' written work and providing feedback during school hours. Previously, I often had to bring home essays to grade, which extended my workday. Additionally, I was able to give feedback on students' essays immediately, which helped them quickly understand their strengths and areas for improvement. This also allowed me to maintain a work-life balance by not taking work home.

Overall, ChatGPT has altered my teaching techniques. It took some time and patience to successfully incorporate this AI tool, but I now can't imagine my teaching toolkit without it. It's like having an extra brain in the classroom, which keeps things interesting and intriguing.

### 3.2 Exploring ChatGPT as a Teacher Researcher (Anna)

Before I became a student at Tartu University, I had never used ChatGPT for either personal or teaching purposes. When I learned from professors and my coursemates about the possibilities of ChatGPT, I was determined, professionally interested, and curious to try this tool in my teaching practice.

The first steps of communication with ChatGPT were not easy - I made too long or incomprehensible prompts, and Chat gave me not the result I hoped for. So, I realized that I have to learn how to communicate with this tool to get the results I want.

I plunged deeply into exploring various ChatGPT functionalities and dedicated myself to designing a variety of worksheets for my students. Below is a list of competencies and types of materials that I have developed through the use of ChatGPT. The examples of the worksheets can be seen in Appendices 9 and 11.

**New vocabulary practice.** I developed educational worksheets designed specifically for middle school and high school students, focusing on the practice of new vocabulary (Appendix 9). This can be any vocabulary from a new text or related to the topic of study. For example, one of the prompts I recently used to create a worksheet: *I need you to create 5 tasks for B2 level students practicing the following words Settle, otherwise, unforgiving, fertile, although, valuable, inhabit, either, therefore, agriculture, annual, layer, silt, consumption, vital, moisture, surface, droplet, particle, minute /maɪ 'nju:t/, precipitation, occur, encourage, foresee, evaporate, sufficiently, detached. Provide the answers at the end of the tasks.* The worksheets I created incorporate a variety of task types: multiple-choice questions, translation exercises, matching activities, fill-in-the-blank exercises, finding synonyms or antonyms, and answering the questions. But this variety of assignments is achieved by clarifying prompts, because without them, ChatGPT makes assignments of the same type.

**Writing skills practice.** To improve my students' writing skills, I introduced them to using Chat GPT as an educational tool to assist in their writing assignments, including essays, letters, reports, and so on. By interacting with ChatGPT in the preparation stage, students asked it to provide them with the range of words of C1-C2 level, which they could use in writing the given task. For example, the students were asked to write a report on the age and gender distribution of teachers in Estonia in 2020/2021. The request to ChatGPT included the description of the task and the following prompt: *Provide me with 20 words of C1-C2 level with definitions*

*which I can use writing this report.* This method allowed the students to expand their vocabulary resource effectively.

Furthermore, after completing the writing tasks, students used ChatGPT to replace words and expressions used by themselves with more complex and academic synonyms and phrases (Appendix 10). They asked ChatGPT, *replace the words possible in my extract with more complicated ones - C1-C2 level without changing the sentences, or the meaning, or the length. Do not change the structure of the sentences.* This practice not only improves students' writing skills but also builds their ability to think and write more critically and academically in future endeavors.

**Speaking skills practice.** To improve speaking skills, students introduced specific questions or discussion topics to ChatGPT, asking it to provide possible words and expressions that could be used in discussions on these topics. For example, while getting ready for examinational monologue, we asked ChatGPT to provide us with the words that we can possibly use to speak on the given theme: *This is the topic I have to talk about: Some people say that studying alone is much better than studying in a group. Give me 20 C1 words with definitions that I can use in my speech.* This method expands students' communicative abilities and prepares them for more complex dialogues. Moreover, students just started any random theme, like movies, for example, and kept talking to ChatGPT.

**Creation of evaluation materials.** With the help of ChatGPT, I created tests that are specifically designed to assess the vocabulary and expressions students have learned. For example, the possible prompt: *I need you to create 5 tasks for B2 level testing the following words: reveal, pleasure, decline, monk, nun, elevate, eminent, artistic truth, vivid, nevertheless, convey, thrill, relevant, irrelevant, foray, ill-fated, foreordain, so long as, solid, paramount, boast, blurb, hitherto, caveat, coincidence, evaluate, peril, cringing, hindsight, manifold. Provide the answers at the end of the tasks.* This can include multiple-choice questions, fill-in-the-blanks, translation exercises, matching activities, and answering the questions.

### 3.3 Perceptions of ChatGPT

#### 3.3.1 Teachers' Perceptions and Experiences

The diagram in Appendix 3 consists of two concentric circles; the inner circle is the 'Teachers's Perceptions of ChatGPT, while the outer circle is divided into two colored parts. The red part

represents concerns and negative perceptions expressed by teachers, while the blue part encapsulates the positive feedback.

### **Positive Perceptions**

Teachers from both schools expressed a variety of positive perceptions towards using ChatGPT. At the first school, Dan described it as *“a very useful tool for teachers and students ... it can be used as an educative tool to improve, in my case, as an ESL teacher.”* This teacher appreciated the potential of ChatGPT to improve educational outcomes through interactive and responsive teaching aids. Similarly, Zeny also praised ChatGPT for its help in simplifying the preparation of lesson materials, noting *“the structured and easy-to-use”* nature of ChatGPT’s responses, which helps in *“narrowing down answers”* and focusing on key educational content.

Furthermore, Annie valued how ChatGPT could stimulate creative thinking among students during brainstorming sessions. She noted that this feature is particularly useful in settings where student engagement might otherwise be low, suggesting that ChatGPT can serve as a motivator to improve class participation and interest. Other teachers echoed this sentiment. Zeny remarked, *“It helps you to narrow down the answers... the information from ChatGPT for me is very structured and very easy to use.”* Annie admitted, *“I was just a little bit worried that I don't know how to use it to the best possible result.”* Meanwhile, Karly noted, *“I found it an interesting tool, because you can use it for, let's say, creating tasks and brainstorming ideas.”* further underscoring its versatility in educational settings.

### **Concerns and Hesitations**

Despite the observed benefits, some teachers expressed concerns primarily centered around academic integrity and the potential for students to misuse the tool. Marie from the first school was hesitant, stating that, *“My first thoughts were not to use it because ... the students might be using it for not doing their homework.”* This concern emphasizes a fear that students might lean heavily on AI, bypassing the critical thinking process of their learning journey. Amy echoed this sentiment, remarking, *“... it looked interesting, but I could see straight away the potential for academic misconduct.”* These concerns emphasize the need for careful monitoring and guidance in the use of ChatGPT to ensure it improves rather than undermines educational outcomes.

In the second school, the apprehensions were more pronounced. Lucy expressed outright opposition due to fears that ChatGPT *“... threatens students' thinking abilities ...”* by providing easy answers without necessitating deeper intellectual engagement. This teacher worried about

the deterioration of critical thinking skills, which are foundational to student development in any educational framework.

Maya from the second school noted potential negative impacts on student learning dynamics, pointing out that reliance on such AI tools could lead students to bypass traditional learning methods that are crucial for their academic growth. This suggests that this reliance could be harmful over time, especially in contexts requiring critical thinking and independent problem-solving.

It is evident that while ChatGPT is seen as a powerful tool capable of supporting teaching efficiency and student engagement, it also poses significant challenges that need careful consideration. Teachers are aware of the need to balance the benefits of such advanced technology with the potential drawbacks, particularly concerning academic integrity and the development of student critical thinking skills.

In response to these concerns, there is a clear demand for strategies and guidelines on how to integrate ChatGPT into teaching practices responsibly. This includes developing frameworks that ensure students are using AI tools like ChatGPT to supplement rather than replace their learning processes. Thereby maintaining a healthy balance between technology use and educational integrity.

### **3.3.2 Teachers' Use of ChatGPT**

Teachers found many uses of ChatGPT in supporting their teaching practices, tailoring its application to fit different teaching needs classroom setting.

Dan, who teaches both French and English from the first school employed ChatGPT for brainstorming ideas. *“For example, in French, the student has to present to a DELF test and there is a part of this test where students have to do like a monologue. They have to speak about a minute about a topic. And sometimes the students don't have, how can I say, don't have enough ideas to talk about. And ChatGPT could be a very useful tool to get those ideas,”* he explained. This teacher utilized ChatGPT as a creative tool to facilitate brainstorming sessions within the classroom. By inputting initial thoughts or topics into ChatGPT, students could explore a broader range of ideas and perspectives, potentially leading to more enriched class discussions and project ideas. *“It helps you to narrow down the answers... the information from ChatGPT for me is very structured and very easy to use,”* said Zeny. This method not only invigorates the

classroom atmosphere but also encourages students to think outside the box, thereby enhancing their creative and critical thinking skills.

Pamela from the first school found ChatGPT useful in analysis discussions. This application involves using ChatGPT to dissect and analyze texts, likely literary works or documents relevant to the curriculum. ChatGPT could be asked to interpret themes, characterize dialogues, or provide context, which would then be discussed and critiqued by the students. *“When students analyze a literary text, I have asked them to use ChatGPT as a discussion partner;”* noted Pamela. This interactive approach to text analysis aids in deepening students' understanding and engagement with the material, fostering a more analytical mindset towards literature and text comprehension.

Jack noted the application in lesson adaption and material generation. Jack appears to use ChatGPT primarily as a tool for lesson preparation and material creation. This involves generating instructional content that is tailored to the specific needs of the students or the requirements of the curriculum. For instance, ChatGPT can be used to create customized worksheets, quizzes, or even entire lesson plans that are adaptive to students' learning levels and interests. *“It can save time, but first, you need to spend time learning how to communicate with it;”* said Karly. This not only saves time but also improves the relevance and effectiveness of educational materials, potentially leading to better learning outcomes.

### 3.3.3 Opportunities and Challenges

#### Positive Impacts

Dan from the first school noted how ChatGPT has revolutionized brainstorming activities, leading to increased student involvement and creativity, *“Using ChatGPT for brainstorming has turned our sessions into a dynamic playground of ideas. It's fascinating to see how students bounce off the ideas it generates, building a richer tapestry of discussion.”* This use of ChatGPT in brainstorming not only facilitates a broader exploration of topics but also encourages students to engage deeply, as the AI's suggestions can prompt further inquiry and dialogue among students.

Pamela from the first school described how ChatGPT improves interactive learning by provoking discussion and peer education, *“ChatGPT has been pivotal in transforming how students interact. It often plays the devil's advocate, which really fuels debate among the*

students, helping them to teach each other as they argue different viewpoints prompted by the AI." This observation highlights ChatGPT's role in enriching classroom dynamics. The AI acts as a catalyst that stimulates students' analytical thinking and communicative skills by encouraging them to defend their ideas or consider alternative perspectives.

### **Challenges and Limitations**

Lana from the second school expressed concerns about the reliability of the AI's output, *"While ChatGPT can be a great aid, we've had to 'check everything' as it can occasionally provide misleading or inaccurate responses, which is a risk in any educational setting."* These inaccuracies necessitate a vigilant approach from educators to verify AI-generated content, ensuring educational standards are met and preventing the spread of incorrect information.

Zeny raised issues regarding the variability in content quality, *"The quality of content varies, sometimes it's excellent, sometimes not. Every session with ChatGPT needs a follow-up to ensure information adheres to our academic standards."* The fluctuation in content quality demands that teachers consistently monitor and assess the appropriateness of the material generated by ChatGPT, adjusting strategies to compensate for any deficiencies.

### **Opportunities**

Marie from the first school emphasized the evolving educational environment with AI integration, *"I see my role evolving with tools like ChatGPT. It's not just about delivering content anymore; it's also about being an active moderator, ensuring the AI's contributions are accurate and valuable."* This underscores the shift in the educator's role from traditional content delivery to a more facilitative and supervisory role in an AI-improved learning environment.

Annie from the first school discussed using ChatGPT errors as educational tools, *"We've started using incorrect or dubious responses from ChatGPT as critical thinking exercises, asking students to spot and correct them. It turns potential misinformation into a learning opportunity."*

Amy discussed the integration of digital literacy tools to improve learning, *"We're looking into integrating digital literacy tools alongside ChatGPT to help students cross-verify facts. It's about teaching them not just to consume but also to question and research."* This approach fosters a more holistic educational strategy where students are taught to be critical consumers of information, enhancing their research skills alongside their use of AI tools.

### 3.3.4 Professional Development Needs

Teachers are increasingly recognizing the importance of professional development focused on AI tools in education. Jack expressed the need for professional development using AI tools stating, *"There's a real need for professional development centered on these AI tools. We need to understand not just how to use them, but how to integrate them seamlessly and effectively into our curriculums."* Similarly, Zeny understood the importance of such training, saying *"Training sessions on AI in education have become indispensable. They're crucial for helping us leverage technology like ChatGPT responsibly and effectively."* These insights emphasized the growing consensus among educators on the necessity of such training to utilize the potential of AI tools in educational settings.

### 3.4 Students' Perceptions of ChatGPT

The diagram in Appendix no 5 summarizes the students' perceptions of ChatGPT and illustrates mostly the positive attitude towards it. Maria expressed her view, saying, *"I believe it's a very good tool for learning."* Adele supported this opinion with her observation on language learning, stating, *"In terms of learning the English language and communication skills, Chat GPT is pretty useful."* Helena shared this positive outlook emphasizing, *"It definitely helps me a lot, like the learning needs help that I need."* Selina added to the praise, stating, *"I think in English we are really open to ChatGPT, and I like that because we really use it as a studying tool."*

Students also appreciated the diverse opportunities provided by ChatGPT. Khloe remarked, *"It's very nice that we're using these new tools... And we get to practice different things, not only write or learn grammar rules."*

Additionally, the tool is recognized for its time-saving capabilities and a simplifier of the studying process. Maria pointed out, *"It can save you time and your energy when you use it the right way-"* Nick echoed this sentiment, appreciating the practicality of ChatGPT by saying, *"It simplifies the work a lot."*

However, students admit that it can be used as a "cheat button." Natalja acknowledged, *"I think that most people, at least in our class and our school, maybe just want a grade because the school, the education system, is based on grades and not on knowledge; that is why they use ChatGPT."*

### 3.4.1 Students' Use of ChatGPT

The diagram in Appendix 6 summarizes the students' perceptions of ChatGPT, highlighting their positive attitudes towards it. They use it to generate ideas when writing essays, as Nick noted, *"I turn to it when I don't have any ideas about what to write about."* Adele appreciates its ability to provide a more advanced vocabulary, saying, *"It uses more advanced language than we, ordinary humans, do."* Nick also finds it helpful to find complicated synonyms, sharing, *"As I am studying English very actively, I often ask ChatGPT to provide me with complicated synonyms for certain words."* Additionally, Natalja mentioned that it helps practice vocabulary, stating, *"So all you have to do is just use the English language to communicate with ChatGPT, and this is going to be already useful in terms of learning English."*

Students frequently engage with ChatGPT to generate creative ideas for writing essays, helping them develop more complicated narratives. Julia uses it for this purpose, saying, *"I use it for ideas for my essays."* This practice allows students to explore a wider range of perspectives and add depth to their writing assignments. Moreover, some students use this tool to prepare for the Cambridge C1 level examination by practicing vocabulary for writing and speaking purposes.

Additionally, students turn to ChatGPT to support their research needs, generate ideas, and fact-check. Chloe noted, *"I think it sometimes can really help you with fact-checking or just getting a new viewpoint,"* and Nick reiterated, *"I turn to it when I don't have any ideas about what to write about."* When working on research projects, students use ChatGPT as an exploratory tool to brainstorm potential topics or expand upon initial concepts. Helena mentioned, *"Mostly, I have used it for topics to research when doing presentations."*

Sometimes, students use ChatGPT as a helper in their learning needs when they face difficulties in understanding the material and need to understand their mistakes. Maria shared, *"I would say that I mostly use it as a helper. Sometimes, it helps me see my mistakes."* Additionally, ChatGPT is used to practice communicative skills through conversations about random themes. Alex remarked, *"It feels like you're talking to a real person."* Adele emphasized its conversational nature, stating, *"First and foremost, it's the language model and is meant to just communicate like*

a human." Edith added, *"I just start any random theme, like favorite movies, for example, and we talk."*

According to students, ChatGPT helps increase engagement and provides learning support. This personalized support is like having a tutor available at any time, ready to assist with any questions or challenges that arise during their studies. Maria appreciated the quick feedback, saying, *"The most important thing for me is that you can get quick feedback from GPT because your teacher can't always check your work 24 hours a day, 7 days a week."* Sheila shared, *"I think it has changed how excited I am to learn English."*

### 3.4.2 Opportunities

There are plenty of opportunities named by students to use ChatGPT for ESL learning needs. Firstly, it can save time as it provides immediate responses to inquiries. Maria noted that, *"Actually, it's not that bad because it can save you time and your energy when you use it the right way."* This allows learners to obtain information and explanations quickly. Secondly, it simplifies the work because it can explain complex concepts in more understandable terms. What is more, ChatGPT is a great tool to gain more knowledge, improve English vocabulary, and practice writing and speaking skills. Adele highlighted its usefulness, stating, *"In terms of learning English language and communication skills, ChatGPT is pretty useful."*

Additionally, it increases learning excitement, engagement, and motivation. Khloe appreciated the new tools, saying, *"It's very nice that we're using these new tools... And we get to practice different things."* Adele echoed this enthusiasm, sharing, *"I absolutely like using it,"* and *"Yeah, I can draw a conclusion that it is very good. This is super useful - 10 out of 10."* These are statements that reflect high levels of students' satisfaction. Selina further supported this, stating, *"I think in English we are really open to ChatGPT, and I like that because we really use it as a studying tool."*

### 3.4.3 Challenges and Obstacles

Despite the many advantages and opportunities, students listed the disadvantages, challenges, and obstacles of working with ChatGPT.

One of the main obstacles is writing the prompts effectively. Students often need to learn how to formulate questions and prompts that are clear and specific to get the most accurate and relevant responses from ChatGPT. This can be a challenging skill to master. Nick noted, *“I understood that the better prompts you give to artificial intelligence, the better results you will get.”* Alex shared this frustration, saying, *“Yeah, I was feeling like ChatGPT doesn't really understand what I mean. And I didn't know whose problem was it?”* (Alex) This notion is reflected by the opinion of Adele saying that, *“The devil is in details.”* Nick claimed that *“The effectiveness of using ChatGpt depends on the user's ability to interact with it effectively.”* Michael offered advice on this, suggesting, *“The clue of writing the prompts is to give to ChatGPT a simple, detailed explanation.”* Additionally, the variability in ChatGPT's responses can further complicate its use, as Jenny noted, *“Sometimes, it doesn't give you the answer you want.”*

Another major challenge and obstacle is the false information provided by ChatGPT. It can generate responses that are incorrect. This can be very problematic, and the students have to develop a critical attitude toward any information from ChatGPT and check its credibility. Julia expressed her concern stating, *“Every time while I'm doing any exercise using ChatGPT, I'm paranoid because it can show the absolutely incorrect answer.”* This saying is shared by Chloe saying, *“Sometimes I feel like when I have facts checked on ChatGPT, the internet tells me a completely different thing.”* The frustration extends to the need for constant verification, as Julia pointed out, *“I am kinda disappointed in ChatGPT because I have to double-correct the answers.”* Eugenia added, *“Yes, there was a moment of frustration when ChatGPT couldn't correct my error... it created a lot of confusion.”* Moreover, Ted noted that ChatGPT struggles with complicated or extensive information requests, stating, *“When you ask ChatGPT for too much information, it can make a lot of mistakes.”* Sandra also observed, *“Sometimes when you ask the question, it will sort of try to divert the question and like change the subject.”*

In addition, students named the problem as losing the ability to think independently while using ChatGPT. Furthermore, people may become dependent on it. It can result in a loss of critical thinking, analytical skills, and problem-solving ability. Adrian remarked, *“It will do everything by itself, and the person just does not have to do anything.”* Alex supported this sentiment, saying, *“People are losing the ability to think on their own.”* Albert added, *“Using ChatGPT, people will stop thinking by themselves.”* Additionally, Alex pointed out a troubling

trend where reliance on ChatGPT discourages active mental engagement, saying, *“I don't really like the point that people use it to do nothing - they don't use their brains.”* Ted agreed, stating, *“It's not useful to let ChatGPT work instead of you.”*

Some students worry about the ethical use of ChatGPT. These ethical concerns include the fear of plagiarism and anxiety about the fairness of using ChatGPT.

#### **3.4.4. Student Perceptions of Teachers' Attitudes Towards ChatGPT**

All of the students assume that the majority of teachers either do not know about ChatGPT or are strictly against using this tool by the students. Maria expressed, *“I believe they don't know about the existing because of the lack of knowledge about technology. Maybe they do. But they definitely never use it.”*

They name such reasons as old age and lack of knowledge about modern technologies. Jill observed, *“The old generation of teachers is fully against ChatGPT.”* Students believed that older teachers may be more accustomed to traditional teaching methods and might view emerging technologies with skepticism or distrust, primarily due to a gap in digital literacy. Michael noted, *“Teachers are against ChatGPT.”* while Eveline added, *“Most of my teachers do not fully support it...”*

Concerns that students might use ChatGPT as a “cheat button” are common among teachers. Albert said, *“They don't want the students to use it as a “cheat button.”* Natalja echoed this stating, *“Teachers see it only as a “cheat button.”* Selina added, *“Teachers are not as fond of it because they think we're cheating.”*

However, not all teachers are against it. Adele mentioned, *“Some teachers do use it, but not many.”* Eveline shared, *“Some of my teachers allow it and even encourage it, but some of them also strictly forbid it.”*

#### **3.4.5 Suggestions to Teachers**

Students shared interesting suggestions on what teachers need to do in light of using ChatGPT. In the first place, there were suggestions to organize courses or training for teachers on how to work with ChatGPT so that teachers know the possibilities and are not afraid to use it. Sarah recommended, *“Organize courses for teachers and add using ChatGPT in the curriculum.”* Jill added, *“Teachers need more training to feel comfortable using ChatGPT. If they knew how to use*

*it better, I think they'd like it more.*” Furthermore, teachers could incorporate ChatGPT into classroom activities and assign tasks related to it. Alex suggested, *“Teachers should be like aware of this thing like ChatGPT. Teachers can give tasks connected with ChatGPT.”* Jack emphasized the importance of adopting to new technologies, stating, *“The world is changing, and you need to adapt to stay relevant.”*

#### **4 Discussion**

The findings of this study provide a comprehensive look at the perceptions of students and teachers with ChatGPT, the integration of ChatGPT into ESL teaching and learning environments, and opportunities and challenges when using ChatGPT. By examining both teachers' and students' perceptions, we gain insights into the benefits, challenges, and overall impact of this AI tool in educational settings. The findings reveal different perceptions and experiences using ChatGPT among teachers and students, which we will combine with our own thoughts as teacher-researchers. This triangulation enriches our understanding of ChatGPT's impact on ESL learning.

Teachers generally hold a positive view of ChatGPT, recognizing its potential to improve instructional efficiency and student engagement. This aligns with previous research indicating that AI can support personalized learning and provide innovative instructional resources (Chen et al., 2020; Kasneci et al., 2023). For example, teachers in this study appreciated ChatGPT's ability to generate lesson materials and facilitate brainstorming sessions, which helped stimulate student creativity and participation. It echoes our own experiences, where we found ChatGPT invaluable for creating engaging educational content. Reflecting on our journey, we recall how our teaching role evolved significantly.

However, teachers also expressed significant concerns about the ethical implications and potential misuse of ChatGPT. The risk of academic dishonesty, where students might use ChatGPT to complete assignments without genuine effort, was a prevalent worry. This echoes concerns raised in the literature about AI tools potentially undermining academic integrity (Cassidy, 2023; Sharma & Yadav, 2022). Teachers also pointed out the variability in the quality of ChatGPT's responses, requiring continuous oversight to ensure accuracy and appropriateness. This need for critical evaluation of AI-generated content reflects the findings of Xiao and Zhi (2023), who noted the necessity for students and teachers to develop strong critical thinking skills

to effectively use AI in educational contexts. As teacher-researchers, these problems have highlighted the dual function that modern educational settings require: not just facilitation and inspiration but also critical evaluation and guidance on the ethical use of technology.

Students generally perceive ChatGPT positively, particularly for its utility in enhancing writing skills, expanding vocabulary, and providing quick feedback. These findings are consistent with previous studies that have demonstrated the benefits of AI in supporting personalized and interactive learning experiences (Fuchs, 2023; De la Vall & Araya, 2023). The students in this study valued ChatGPT's role as a supplementary tool that can provide immediate assistance, thereby increasing their engagement and motivation to learn. From our perspective as educators and researchers, observing these positive student interactions with ChatGPT, we see the need to incorporate sophisticated AI technologies into educational contexts. It has helped us realize the potential of ChatGPT to not only to supplement but also improve established educational paradigms by making learning more accessible, personalized, and engaging for students.

However, students also acknowledged the potential drawbacks, such as the risk of over-reliance on the tool, which might impede the development of independent thinking and problem-solving skills. This concern is in line with the findings of Fuchs (2023), who emphasized the importance of balancing AI use with the cultivation of critical thinking abilities. It echoes the teachers' opinions, as well as ours, showing the importance of balancing between technological integration with critical oversight. Additionally, the challenge of writing effective prompts to receive accurate and useful responses from ChatGPT was highlighted, underscoring the need for users to develop strong communication skills to interact effectively with AI (Kohnke et al., 2023). It's exactly the same as our path as teacher-researchers - we realized that we have to learn how to communicate with this tool to get the results we want.

To effectively leverage AI tools in education, there is a clear need for professional development that focuses on both the technical and pedagogical aspects of AI integration. Teachers require training to understand how to use AI tools like ChatGPT effectively and responsibly, ensuring that they can maximize the benefits while mitigating the risks. This aligns with the recommendations of Kasneci et al. (2023) and Chen et al. (2020), who advocate for comprehensive professional development programmes to support the adoption of AI in educational settings.

## **Limitations and Recommendations**

The study has several limitations that need to be considered. First, the sample size was small, including only 15 teachers and 34 students from two schools in Tallinn. This sample size limits how broadly we can apply the findings to other settings. Second, the data relied mainly on interviews and diaries, which are subjective and may not capture all viewpoints. Additionally, the participants had different level of technological skills which could have affected their experiences with ChatGPT. Lastly, the study was also conducted over a short period, so we couldn't examine long-term effects of using ChatGPT in ESL learning.

To address these limitations, future research, include a larger and more diverse sample of schools, teachers and students from different schools to provide a broader perspective. Combine methods surveys and experiments with interviews to get a better understanding of ChatGPT's impact. Long-term studies are also recommended to see the lasting effects of using ChatGPT in education. Additionally, it is important to provide training for teachers to improve their technological skills and understanding of AI tools like ChatGPT. Creating clear ethical guidelines for using AI in education is also important that would focus on academic integrity and data privacy. Finally, teaching students how to use AI tools effectively, including writing good prompts and critically evaluating AI-generated content will maximize the benefits of ChatGPT while maintaining academic standards.

## **Conclusion**

This study shows that ChatGPT can improve ESL teaching and learning by providing personalized, interactive and engaging learning experiences. However, it also points out significant challenges that need to be addressed to fully benefit from these advantages. These challenges include the need for thorough monitoring of AI tools to make sure they are used properly, the importance of high ethical considerations, and the necessity for professional development. By addressing these issues, teachers can make the most of AI to transform teaching methods and improve learning outcomes. Making sure that teachers are well-trained and follow ethical rules when using AI tools like ChatGPT responsibly is crucial for getting the best results in the classroom. This approach will not only help in language learning but also improve the overall quality of education by making it more accessible and effective.

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**Author's Declaration**

Both authors have made an equivalent contribution to the writing of this thesis and contributed evenly to the design of the study, theoretical overview, data collection, data analysis, and interpretation.

*We hereby declare that we have written this thesis independently and that all contributions of other authors and supporters have been referenced. The thesis has been written in accordance with the requirements for graduation theses of the Institute of Education of the University of Tartu and is in compliance with good academic practices.*

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## Appendices

### Appendix 1

Table 1. Participants Description

	Number of English Teachers	Number of Middle School Students	Number of High School Students	Total Number of Students
Anna	8	0	17	17
Joy	7	17	0	17

## **Appendix 2**

### **Interview Questions for Teachers**

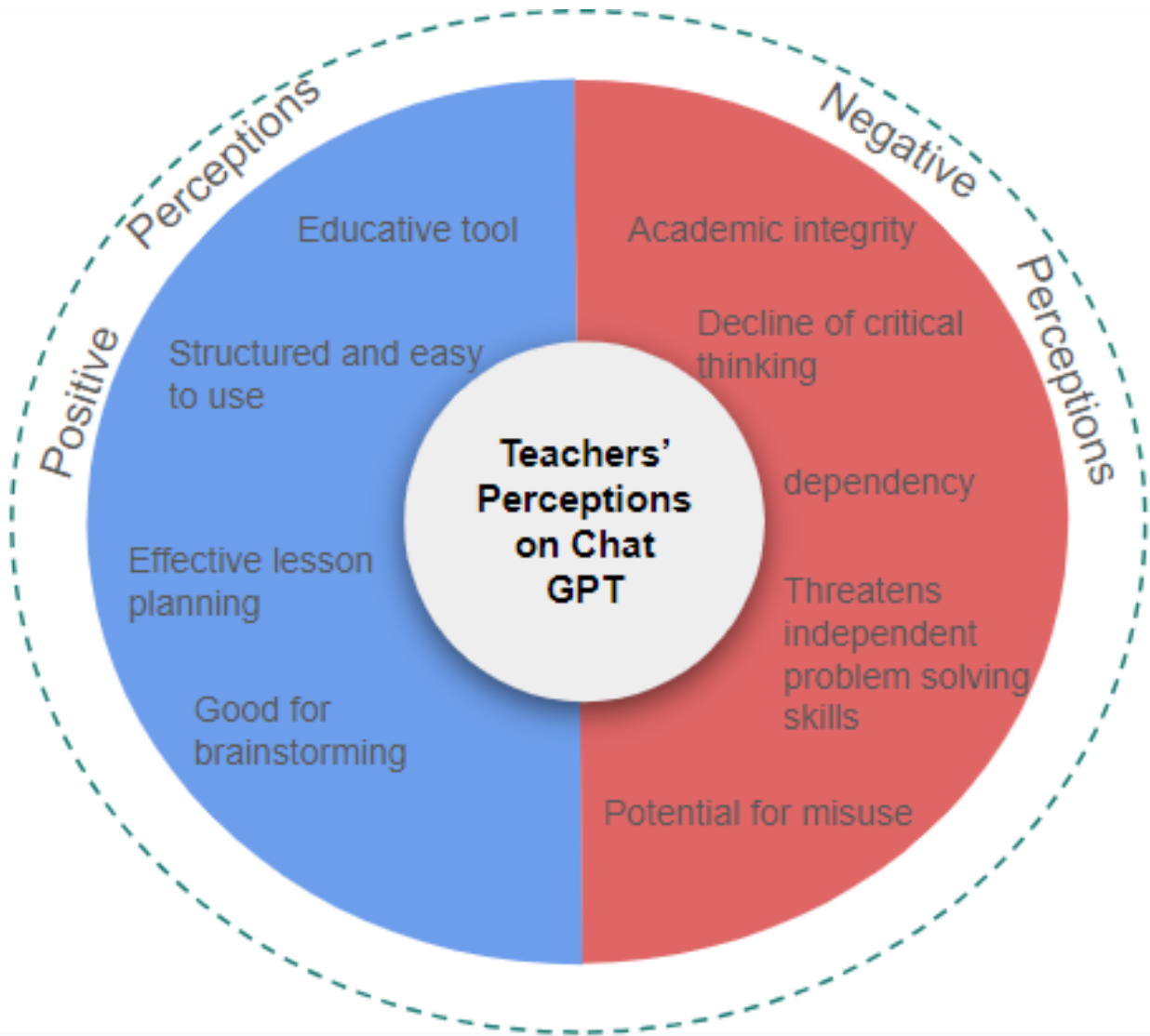
1. What were your initial perceptions of integrating ChatGPT into your ESL teaching, and what motivated you to start using it in your classroom? Can you make an example?
2. Can you describe how you have integrated ChatGPT into your ESL lessons? Can you make an example?
3. In what ways has ChatGPT affected student engagement and collaboration in your ESL classroom? Can you share any specific examples or outcomes?
4. What challenges have you faced while using ChatGPT in teaching, and how have you addressed them? Can you make an example?
5. Can you describe how your students use ChatGPT in their learning process? Can you make an example?
6. What kind of professional development or support do you believe is necessary for teachers to effectively integrate ChatGPT into collaborative ESL learning environments? Can you make an example?

## **Appendix 3**

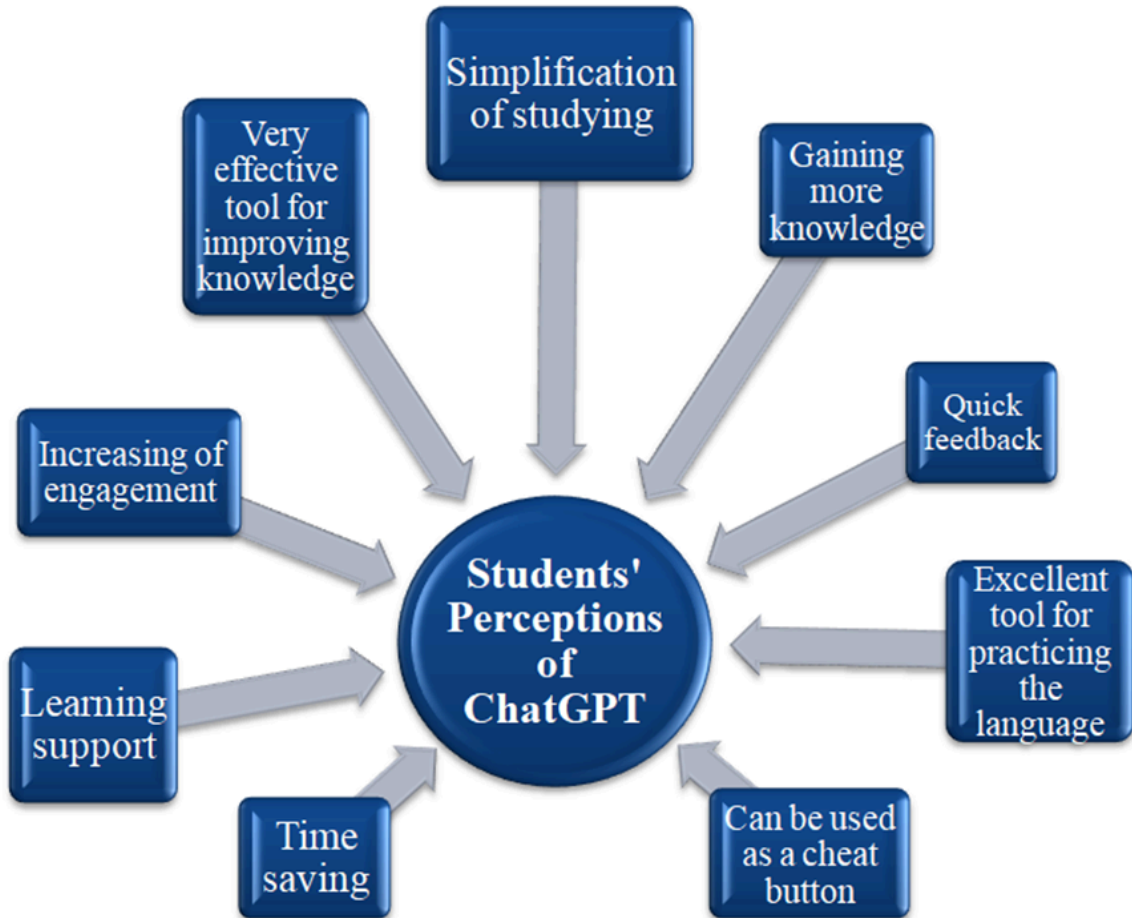
### **Interview Questions for Students**

1. What were your initial perceptions of using ChatGPT as a learning tool? Can you make an example?
2. Can you describe your first experience using ChatGPT for learning English? How did you feel about it?
3. In what specific ways have you used ChatGPT to help with your ESL studies? Can you give examples of activities or tasks?
4. Has using ChatGPT affected your enthusiasm to learn English? "How has interacting with ChatGPT influenced your feelings about learning English? Are there moments when using ChatGPT made you more excited or perhaps frustrated about your English studies? Please share any specific experiences."
5. Have you faced any challenges while using it for your ESL studies? Can you make an example?
6. How do your teachers support and guide your use of ChatGPT in the classroom? Do you feel comfortable approaching them with questions about using ChatGPT? Can you make an example?
7. How well does ChatGPT meet your learning needs? Can you make an example?

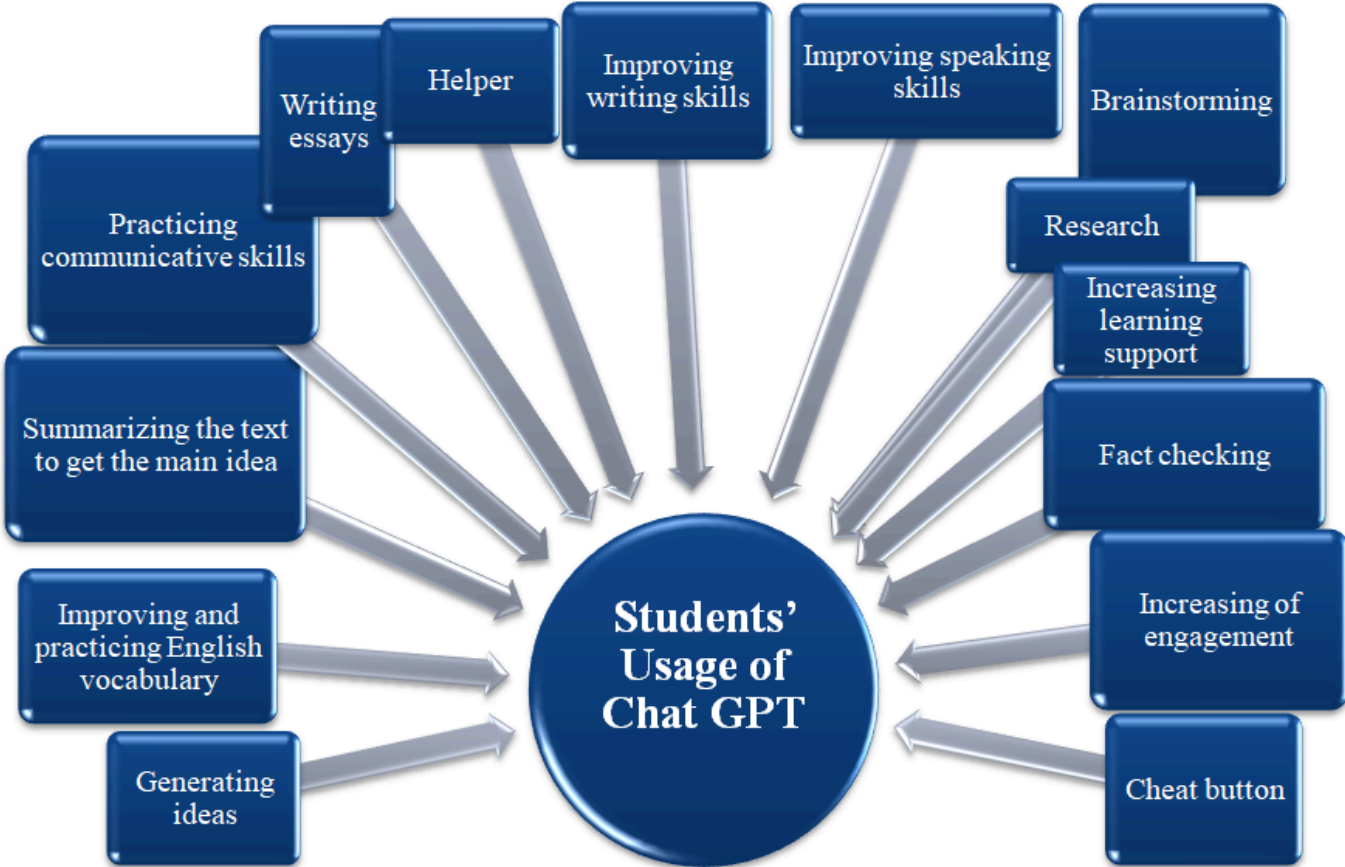
**Appendix 4**  
**Teachers' Perceptions of ChatGPT**



**Appendix 5**  
**Students' Perceptions of ChatGPT**



**Appendix 6**  
**Students' Usage of ChatGPT**



# Appendix 7

## Sample Students' Prompt and Acitivity with ChatGPT 1

**Interview with Mayor Edward I. Koch of New York.**

1. What factors encouraged you to become the mayor of New York?

2. What changes do you want to see implemented in New York while you are a mayor?

3. How many inhabitants of New York are you responsible for?

4. How did you connect with the people of New York?

5. How many people are represented in the U.N. and do you believe there should be more?

6. In which aspects do New Yorkers differ and how exactly?

7. Do you consider New York to be a melting pot? What factors support your opinion?

8. What are your opinions on people who tried to forget and erase their heritage in order to become Americans?

9. Why did some immigrant groups attempt to change their names to be more Americanized?

10. Can you give some examples of how awareness of ethnic traditions?

**Prompt:**  
Hello! Assume the identity of Mayor Edward I. Koch of New York and answer my questions as an interviewee.

1. I was motivated to become mayor of New York by a deep love for the city and a desire to address its challenges. The opportunity to make a positive impact on the lives of New Yorkers and contribute to the city's growth and development drove my decision to enter public service.

2. During my tenure as mayor, I aimed to enhance public safety, revitalize the economy, and improve the overall quality of life for New Yorkers. Implementing effective crime reduction measures, fostering economic development, and investing in essential city services were key priorities. I also sought to strengthen community engagement and bridge divides to create a more united and prosperous New York.

3. As of my knowledge cutoff in January 2022, New York City had a population of over 8 million people. As Mayor, I was responsible for addressing the needs and concerns of this diverse and dynamic population, working to improve their quality of life and ensure the city's continued growth.

4. I connected with the people of New York through direct engagement, regular town hall meetings, and being visible in the community. My candid and straightforward communication style, often characterized by a sense of humor, helped build a rapport with residents. Addressing their concerns, actively listening, and implementing policies that reflected their needs were key elements in establishing a strong connection with the people of New York.

5. As of my last knowledge update, the United Nations represented 193 member states. The question of whether there should be more member states depends on various geopolitical and diplomatic considerations. Expanding membership could bring more perspectives and voices to the table but also poses challenges in terms of decision-making and efficiency. As Mayor Koch, my focus would primarily be on the interests and well-being of the residents of New York City rather than specific opinions on the UN's membership size.

6. New Yorkers are a diverse and dynamic group, differing in various aspects such as cultural backgrounds, economic statuses, lifestyles, and perspectives. Neighborhoods across the city have distinct characteristics, reflecting the mosaic of cultures and traditions. Economic disparities are evident, with varying income levels and access to resources. Additionally, New Yorkers often differ in their opinions on social issues, contributing to the city's vibrant and pluralistic atmosphere. Embracing this diversity while addressing disparities has been a crucial aspect of fostering unity and understanding in the city.

7. Yes, I do consider New York to be a melting pot. The city's rich cultural diversity, with residents from various ethnic backgrounds, contributes to a unique blend of traditions, languages, and perspectives. The coexistence of different communities, the cultural events that celebrate diversity, and the dynamic mix of cuisines all support the idea that New York is a melting pot where various cultures come together to create a vibrant and inclusive urban fabric.

8. While assimilation and embracing American identity are personal choices, it's essential to respect individuals' decisions regarding their heritage. People who choose to focus on adopting American culture may do so for various reasons, including seeking economic opportunities or a desire for cultural integration. However, it's crucial to acknowledge and celebrate diversity, recognizing that preserving one's heritage can also be a source of strength and enrichment for both individuals and society as a whole. Embracing a balance that allows for cultural identity while participating in the broader American experience contributes to the richness of our society.

9. Some immigrant groups may have tried to erase or alter their heritage, including changing names to be more Americanized, as a way to assimilate into their new society. This process of assimilation was often driven by a desire for social acceptance, economic opportunities, and a smoother integration into American culture. In various historical periods, conforming to American norms was seen as a means to overcome discrimination and prejudice.

Changing names or aspects of one's identity was sometimes perceived as a strategy for achieving upward mobility and avoiding potential biases. However, it's essential to note that these decisions were influenced by complex historical, social, and personal factors, and they do not diminish the significance of the cultural diversity immigrants bring to the broader American experience.

10. Certainly! Here are some examples of the growing awareness of ethnic traditions:

- Cultural Festivals:** The city continued to host cultural festivals representing different ethnic communities, providing a platform for showcasing traditional music, dance, and cuisine.
- Community Engagement:** Mayor Koch was known for his direct engagement with various communities. This approach likely contributed to a better understanding and appreciation of different ethnic traditions.
- Neighborhood Initiatives:** Efforts to revitalize and support different neighborhoods often involved acknowledging and preserving the unique cultural aspects of those communities.
- Public Celebrations:** The city's diverse population contributed to a vibrant tapestry of public celebrations, with events and parades representing different ethnic and cultural groups.
- Educational Programs:** Schools in the city likely continued to incorporate diverse perspectives into their curriculum, promoting an understanding of the cultural richness present in New York.



## **Appendix 9**

### **Sample of Worksheet Designed for Students with ChatGPT**

**Step back in time.**

**Vocabulary practice.**

**Define the following words:**

\_\_\_\_\_ (To make something known that was previously hidden)

\_\_\_\_\_ (A feeling of enjoyment or satisfaction)

\_\_\_\_\_ (A decrease or reduction)

\_\_\_\_\_ (A member of a religious community, typically living under vows of poverty, chastity, and obedience)

\_\_\_\_\_ (A woman who has taken religious vows and lives in a convent)

\_\_\_\_\_ (To raise or lift something to a higher position)

\_\_\_\_\_ (Famous, well-respected, and distinguished)

\_\_\_\_\_ (The fundamental reality or accuracy in art or creativity)

\_\_\_\_\_ (Bright, intense, and striking)

\_\_\_\_\_ (In spite of that; however)

**What does "reveal" mean?**

- a) To hide
- b) To make known
- c) To decrease

**Which word is a synonym for "pleasure"?**

- a) Decline
- b) Eminent
- c) Joy

**What is the opposite of "relevant"?**

- a) Irrelevant
- b) Convey
- c) Manifold

**What does "elevate" mean?**

- a) To decrease
- b) To raise or lift
- c) To decline

**Which word means "famous and respected"?**

- a) Ill-fated
- b) Eminent
- c) Manifold

**"Hindsight" is best described as:**

- a) Looking forward
- b) Understanding a situation after it has happened
- c) A vivid dream

**Match the English words with their Russian translations:**

<b>Elevate</b>	<b>1. Налёт</b>
<b>Foray</b>	<b>2. Предопределять</b>
<b>Boast</b>	<b>3. Относящийся к делу</b>
<b>Coincidence</b>	<b>4. Поднимать</b>
<b>Caveat</b>	<b>5. Несчастливый</b>
<b>Convey</b>	<b>6. Совпадение</b>
<b>Ill-fated</b>	<b>7. Предостережение</b>
<b>Relevant</b>	<b>8. Яркий</b>
<b>Manifold</b>	<b>9. Передавать</b>
<b>Peril</b>	<b>10. Хвастаться</b>
<b>Foreordain</b>	<b>11. Многообразие</b>
<b>So long as</b>	<b>12. Риск</b>
<b>Vivid</b>	<b>13. Если только, при условии</b>

**Back Translation from Russian to English:**

**Она использовала своё искусство, чтобы передать глубокие эмоции своей аудитории.**

---

---

**Безопасность имеет первостепенное значение при обращении с опасными химическими веществами.**

---

---

**Некоторые люди считают, что события предопределены и не могут быть изменены.**

---

---

**Поездка на американских горках подарила ей волнение, как ни одно другое.**

---

---

**Она испытала волнение приключения в чужой стране.**

---

---

**Несмотря на предостережение, он продолжил свой план.**

---

---

**Работа художника раскрывала глубину человеческих эмоций.**

---

---

**Постепенно, она осознала важность того момента.**

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## **Appendix 10**

### **Samples of Using Chat GPT to Adapt the Student's texts.**

#### **Paragraph 1 written by the student:**

It is known that everything goes from childhood; every person's interest or disinterest in a certain topic is based on what they were taught and on their personal experience in a certain area, which person got while they were growing, so the best thing a parent can do for their child to be interested in science is to encourage their personal will to learn the subject. One of the best ways to do so is to do experiments. Children tend to enjoy the learning process when they get a lot of positive emotions connected to the subject. When children are shown that science is practical and can be much of fun, they develop a positive attitude towards the subject, which helps them to naturally get involved in a process and increase their interest.

#### **Paragraph 1 changed by ChatGPT:**

It is acknowledged that everything originates from childhood; each individual's affinity or aversion towards a particular topic stems from the education they received and their personal encounters within a specific domain, which they acquired during their formative years. Thus, the optimal action a parent can undertake to cultivate an interest in science within their offspring is to stimulate their inherent desire to explore the subject. One of the most effective methods to achieve this is through conducting experiments. Children are inclined to relish the educational process when they experience a plethora of positive emotions associated with the topic. When youngsters perceive that science is applicable and can be immensely enjoyable, they cultivate a favorable disposition towards the subject, which facilitates their organic engagement in the process and augments their interest.

#### **Paragraph 2 written by the student:**



To conclude, as a parent, it's hard to make the child like science. We just need to lead them, if they have interest, it can help them to develop their skills and make important choice in their life.

**Paragraph 2 changed by ChatGPT:**

To summarize, as a parent, it can be arduous to inculcate a predilection for science in one's child. Our role primarily entails guiding them, and should they evince an inclination, it can serve as a catalyst for honing their acumen and making pivotal determinations in their life.

**Appendix 11**

**Authors' Diaries**

<b>Joy's Diary: Tinkering with ChatGPT</b>	 <b>Tinkering Experiences with ChatGPT</b>
<b>Anna's Diary: Tinkering with ChatGPT</b>	 <b>Tinkering experiences with ChatGPT</b>

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### **INVESTIGATING TEACHERS' AND STUDENTS' PERCEPTIONS AND EXPERIENCES WITH CHATGPT**

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**01.06.2024**