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# EXPLORING THE POTENTIAL OF CHATGPT FOR TRAINING FUTURE FOREIGN LANGUAGE TEACHERS

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The article is aimed at analyzing the use of ChatGPT in foreign language teacher education and its potential for advancing educational development at the university level. This article explores the transformative potential of Artificial Intelligence (in particular, ChatGPT) in foreign language teacher education by analyzing its impact on student learning outcomes. Through a comprehensive literature review, the article synthesizes current findings on the integration of ChatGPT in educational settings, examining both the benefits and challenges it presents. The study explores into ChatGPT's role in personalizing studying experiences, enhancing student engagement, and improving academic performance. The authors demonstrate the potential of ChatGPT in teaching disciplines related to studying foreign languages and the methodology of teaching foreign languages. The article emphasizes the importance of formulating clear and precise prompts as well as providing feedback for ChatGPT. The authors also suggest tasks with the use of ChatGPT that are appropriate for the professional training of future foreign language teachers (in particular, teachers of English in primary school). The article provides the examples of using the tasks mentioned above in the process of training students of specialty 013 "Primary education" (the educational and professional programs "Primary Education" and "Primary Education and English Language"). The authors illustrate ChatGPT prompts and its responses during practical classes of the courses "English for Professional Purposes", "Innovative Technologies of Teaching English" and "Methodology of Teaching English in Primary School". This research also suggests avenues for future inquiry, contributing to a deeper understanding of how ChatGPT can be effectively and responsibly integrated into foreign language teacher education, in particular, into training future teachers of English in primary school, to optimize students' success.

**Keywords:** Artificial Intelligence (AI) technology, ChatGPT, future foreign language teachers, professional training, primary school.

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## ДОСЛІДЖЕННЯ ПОТЕНЦІАЛУ СНАТСРТ ДЛЯ ПІДГОТОВКИ МАЙБУТНІХ УЧИТЕЛІВ ІНОЗЕМНИХ МОВ

#### О. А. Зимовець, Є. М. Карпенко

Метою статті є аналіз використання ChatGPT у підготовці вчителів іноземних мов та його потенціалу для сприяння розвитку освіти на університетському рівні. Стаття досліджує трансформаційний потенціал штучного інтелекту (зокрема, ChatGPT) у підготовці вчителів іноземних мов через аналіз його впливу на результати навчання студентів. Через всебічний огляд літератури стаття синтезує сучасні висновки щодо інтеграції ChatGPT в освітні середовища, розглядаючи як переваги, так і виклики, які він представляє. Дослідження заглиблюється у роль ChatGPT у персоналізації навчального досвіду, підвищенні залученості студентів та покращенні академічних показників. Автори показують можливості ChatGPT при викладанні дисциплін, пов'язаних з вивченням іноземних мов та методикою викладання іноземних мов. У статті наголошується на важливості конкретно та чітко формулювати запит до ChatGPT та надавати чату зворотній зв'язок. Автори також пропонують завдання з використанням ChatGPT, які доцільно використовувати у процесі професійної підготовки майбутніх вчителів іноземних мов (зокрема, вчителів англійської мови у початкових класах). У статті надаються приклади використання вишезазначених завдань у навчальному проиесі студентів спеціальності 013 "Початкова освіта", які навчаються за освітньо-професійними програмами "Початкова освіта" та "Початкова освіта та англійська мова". Автори ілюструють запити та відповіді ChatGPT під час проведення практичних занять з дисциплін "Англійська мова за професійним спрямуванням", "Інноваційні технології навчання англійської мови" та "Методика навчання англійської мови в початкових класах". Стаття також пропонує шляхи для подальших досліджень, сприяючи глибшому розумінню того, як ChatGPT можна ефективно та відповідально інтегрувати у підготовку вчителів іноземних мов для оптимізації успішності студентів.

**Ключові слова:** технології штучного інтелекту (ШІ), ChatGPT, майбутні вчителі іноземних мов, професійна підготовка, початкова школа.

Introduction of the issue. Artificial Intelligence (AI) is rapidly transforming various sectors including education. As AI technologies continue to develop, their potential to reshape the educational sphere becomes increasingly apparent [1; 3]. AI offers unprecedented opportunities to optimize teaching methods, personalize learning, and enhance student outcomes [2; 4]. For example, chatbots may improve students' foreign language especially their writing and speaking skills, for instance by providing automated corrective feedback [4; 5]. It can also assist prospective teachers in preparing lesson plans, searching for appropriate teaching aids, grading of pupils' papers etc. [7]. On the contrary, however, the use of AI tools can pose certain threats and risks, such as misuse of personal and private data or incorrect information [6]. This is especially true for the very recent AI tool, the ChatGPT, which was introduced on November 30, 2022, and amazed the world with its extraordinary ability to perform extremely

complex tasks [9]. The advantage of ChatGPT lies in its ability to interact through natural conversation, which includes a series of questions from the user and feedback from the application. ChatGPT stimulates а continuous dialogue, creating a different thus experience than using other search engines [10]. ChatGPT is capable of generating informative responses that integrate and preserve the topic and history of the conversation. In the field of teaching and learning, the emergence of ChatGPT has caused a stir among educators because its potential could revolutionize existing educational approaches [9]. While some educators have expressed concern about ChatGPT's impact on learners and the potential for cheating on their assignments [11], other educators believe that incorporating of AI chatbots into the systems and educational domain should be seen as an opportunity for progress, rather than as a source of concern [12-14].

Current state of the issue. Various aspects of using artificial intelligence (AI) in education can be found in research works of such Ukrainian and foreign scholars Zhyhadlo O., as Zaiarna I.. Binytska K., Bakher S., Kraler K., Shcherbiak Yu., Klimova B., Pikhart M., Kacetl J.. Kooli C.. Rospigliosi P.A., Baidoo-Anu D., Owusu Ansah L., Smutny P., Schreiberova P., Naidu A., and others. The ChatGPT is a form of AI designed to engage in turn-by-turn conversations with human users, it could help students and teachers with both educational questions and routine tasks [1; 9]. Therefore it is among the most important emerging AI technologies in language education, or at least it may be. Prospective foreign language teachers could use it as a support tool in their own personalized process of studying a foreign language (studying grammar, vocabulary, improving speaking and writing skills) [4; 8] and use it in preparing their own lesson plans, searching for appropriate teaching aids for their lessons, etc. Even though all of these advantages and even more are stated by studies, many of them also draw attention to their risks and drawbacks, as answer accuracy, cultural prejudice, cheating [7; 8]. All these drawbacks and risks encourage closer attention to their use in educational settings and require additional research to ensure the AI technology is used with utmost caution and responsibility in educational contexts. In spite of the increasing interest in research of AI for teaching purposes, its role in training future foreign language teachers is covered insufficiently.

Aim of the research is to consider the possibilities of integrating AI technologies, in particular, ChatGPT into the process of professional training of future foreign language teachers. The objectives of the article are: 1) to explore and synthesize existing literature on the impact of ChatGPT on student learning outcomes; 2) to identify the benefits and challenges associated integration with the ChatGPT in educational settings; 3) to the role of ChatGPT personalizing learning experiences and its

effectiveness in improving student engagement and academic performance; 4) to identify gaps in the current research on ChatGPT in education and suggest potential areas for future study; 5) to give examples of integrating ChatGPT into the process of professional training future teachers of English in primary school.

Results and discussion. ChatGPT promotes language learning by accurately simulating real-world interactions. It can interpret the meaning of a word in light of its context, write texts of various genres (including emails, stories, and recipes), clarify grammatical mistakes, annotate texts, make guizzes, and offer dictionary definitions, translations and model sentences, create pictures according to the description, write dictations, make presentations, write essays, stories, poems, dialogues, explain grammar material, etc. As prospective foreign language teachers, students may use ChatGPT as a training and support tool.

We suggest the following tasks for prospective foreign language teachers:

- 1. Ask ChatGPT to be an expert EFL teacher who knows everything about blended learning.
- 2. Ask ChatGPT to create a lesson plan and then adjust it to your learners' needs.
- 3. Ask ChatGPT to create assessment exercises (various types of tests etc.).
- 4. Ask ChatGPT to design a syllabus for an online course teaching business English to high school pupils.
- 5. Ask ChatGPT to generate a glossary for an online course in business English for high school pupils.
- 6. Ask ChatGPT to generate learning objectives for a 45 minute lesson for A1 primary school pupils on the topic "Professions". You can also improve it by asking ChatGPT to adjust the verbs of the learning objectives it created using Bloom's Taxonomy and refer directly to the learners.
- 7. Ask ChatGPT to create differentiated tasks (for example on present perfect for two groups of learners: for those with strong understanding of this grammar material and for those, who are still struggling with the topic).

- 8. Ask ChatGPT to help you with the feedback for your learners. Ask it to assume a role of an EFL teacher and based on the essay of a B1 pupil highlight any grammar and spelling mistakes, insert them into a table and provide you with suggestions on how the pupil can improve their writing.
- 9. Ask ChatGPT to recommend free and mobile-friendly apps.
- 10. Ask ChatGPT to act like an EFL teacher, an expert in blended learning. Ask ChatGPT to give your ideas about Halloween activities in the classroom without access to the Internet. Ask AI to propose alternative, less common ideas.
- 11. Ask ChatGPT to create pictures according to the description for reading or listening activities.
- 12. Ask ChatGPT to make a Power Point presentation on a given topic.
- 13. Ask ChatGPT to write a dictation in English using speech recognition.
- 14. Ask ChatGPT to suggest language games for students with special educational needs (specify what SEN they have).
- 15. Ask ChatGPT to help you to create a teaching video for students (write a script, generate pictures, give links to useful educational resources and advice the digital tools for creating the video).

It is very important to teach students how to formulate prompts to ChatGPT correctly. An AI prompt is the input submitted to a large language model via a generative artificial intelligence platform, like ChatGPT. It is a question, command, statement, code sample or other form of text [15]. The more precise we formulate the promt, the more accurate will be an answer from ChatGPT. Sometimes we need several step-by-step instructions to "teach" ChatGPT how to fulfill the tasks. That is why it is reasonable to give feedback to ChatGPT in the form of giving "likes" and "dislikes", praising, thanking, approving or disapproving AI answers.

Using ChatGPT for teaching future foreign language teachers can be carried the process of students' professional and methodological training while studying such disciplines "Methodology teaching English", of "Innovative technologies of teaching "English English", for professional purposes", "Information Technologies", etc. Let's illustrate how ChatGPT can be integrated into the process of teaching students of specialty 013 "Primary education" of the Institute of Pedagogy at the Zhytomyr Ivan Franko State University while teaching some of the disciplines mentioned above.

## Example #1.

The level of higher education: the first (Bachelor), the 4<sup>rd</sup> year of studies.

Educational program: primary education.

*Discipline:* Innovative technologies of teaching English.

*Topic:* Using project technology in primary school.

Students' task: Ask ChatGPT to make a Power Point presentation about using project technology for teaching English to primary school students, give ideas of projects in primary school and create project worksheets.

Task progress: The students analyze theoretical material and make presentations in Power Point using ChatGPT. They also chose one of the projects and design the worksheets and pictures for the project.

The result of fulfilling the task: 1. The student asks ChatGPT to create a Power Point Presentation on using projects for teaching English in primary school. The student's promt and answer of ChatGPT are presented in Figure 1.

2. The student downloads the presentation created by ChatGPT (Figure 2).

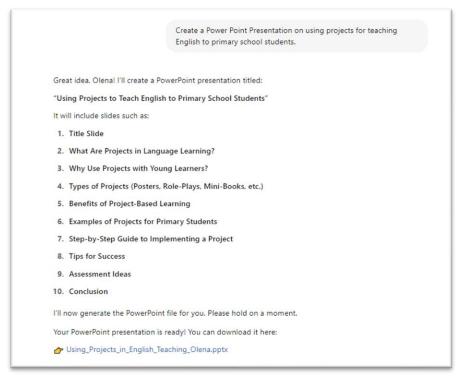


Fig. 1. The plan of the presentation created by ChatGPT and the file of the presentation

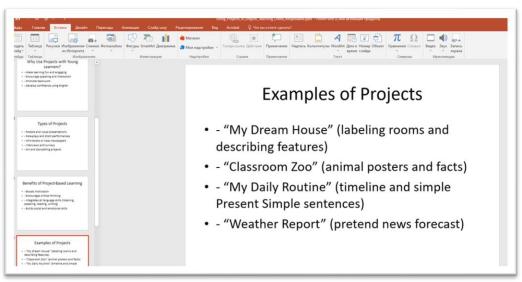


Fig. 2. Power Point Presentation created by ChatGPT

- 3. As the presentation does not contain any pictures, the student asks ChatGPT to design pictures to the slides according to the description (Figure 3) and adds these pictures to the presentation.
- 4. The student asks ChatGPT to create worksheets on one of the chosen projects (Figure 4) and print them out if necessary.

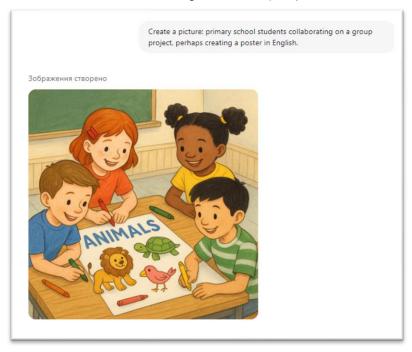


Fig. 3. A picture created by ChatGPT

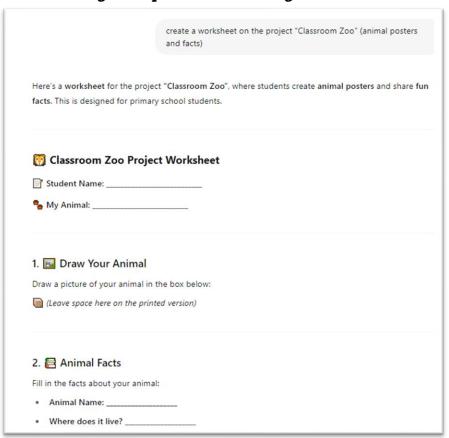


Fig. 4. A worksheet created by ChatGPT

#### Example #2.

The level of higher education: the second (Master), the 1st year of studies.

Educational program: Primary education and English language.

*Discipline:* Methodology of teaching English in primary school.

*Topic:* Formation of English lexical competence of primary school students.

Students' task: Ask ChatGPT to create a text (a story, a dialogue, a poem, etc.) for primary school pupils on the basis of some lexical units. Ask ChatGPT to generate some pictures and activities for this text.

Task progress: The students create didactic materials for teaching vocabulary to primary school students with the help of ChatGPT, demonstrate them and fulfill the tasks if necessary. They can use them during the next practical class in the

process of microteaching (acting out the fragment of the lesson aimed at teaching vocabulary to primary school students).

The result of fulfilling the task: 1. The student asks ChatGPT to create a poem for primary school pupils on the topic "My daily routine" with the words: get up, have breakfast, go to school, clean teeth, play, study, wash, come home, do homework. The student's promts and answers of ChatGPT are presented in Figure 5.

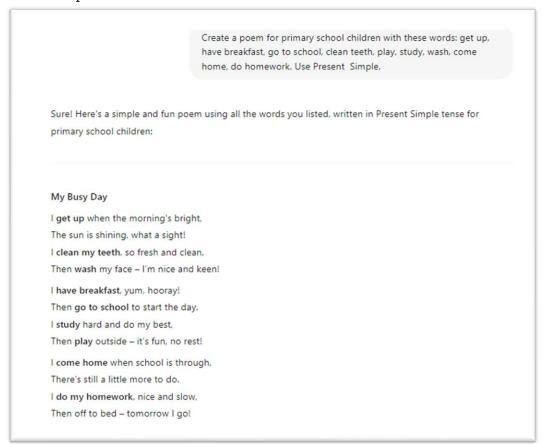


Fig. 5. The poem created by ChatGPT for teaching primary school students

- 2. Then the student asks ChatGPT to create some pictures illustrating the poem. The result of such promt is demonstrated in Figure 6.
- 3. The student asks ChatGPT to suggest some activities on the basis of the poem. The ChatGPT suggested 5 activities, 2 of the are demonstrated in Figure 7.

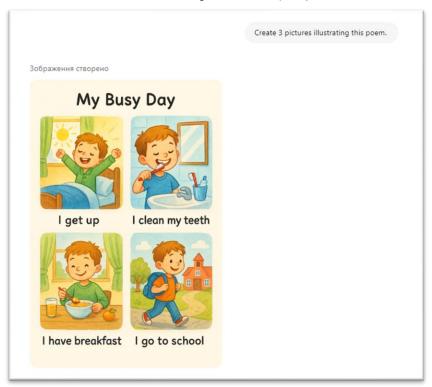


Fig. 6. The pictures created by ChatGPT on the basis of the poem

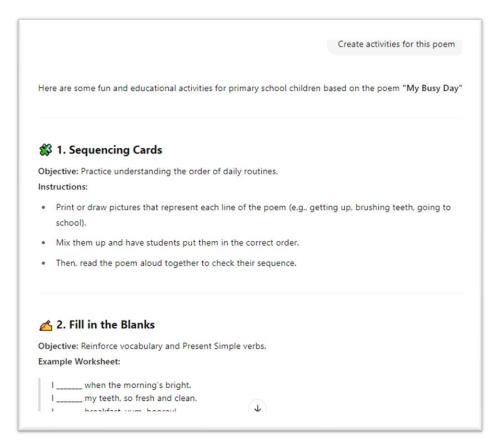


Fig. 7. The activities created by ChatGPT on the basis of the poem

#### Example #3.

The level of higher education: the first (Bachelor), the 1st year of studies.

Educational program: primary education.

Discipline: English for professional purposes.

*Topic:* Primary Education in Ukraine and in Great Britain.

Students' task: Ask ChatGPT to make a Venn diagram comparing the systems of primary education in Ukraine and in Great Britain, analyze the information given, discuss it with your partner and improve the diagram according to your own ideas.

Task progress: The students analyze the systems of education in Ukraine and in Great Britain and make a Venn diagram comparing two systems. They ask ChatGPT to help them, discuss the result with the partner and make the final diagram combining the information given by ChatGPT and their own ideas.

The result of fulfilling the task: 1. The students make a Venn diagram comparing the systems of primary education in Ukraine and in Great Britain without the help of ChatGPT.

2. The student asks ChatGPT to compare primary education in Ukraine and in Great Britain, and create a Venn diagram illustrating common features and differences in primary education of both countries. The students' promt and the answer of ChatGPT are presented in Figure 8.

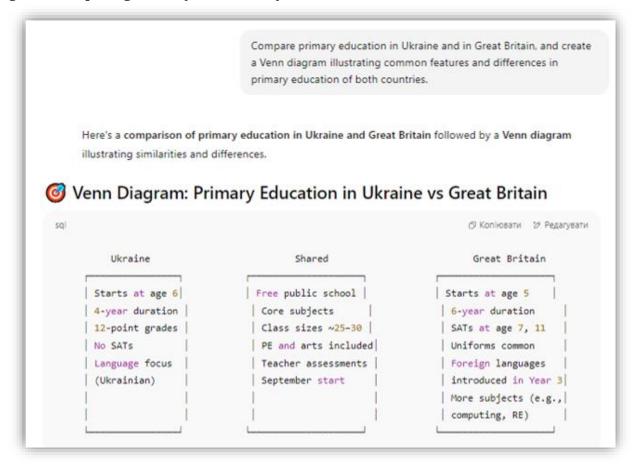


Fig. 8. Venn diagram created by ChatGPT (Version 1)

3. If the students are not satisfied with the answer of ChatGPT, they can change the promt or react to suggestions of ChatGPT (Figure 9).

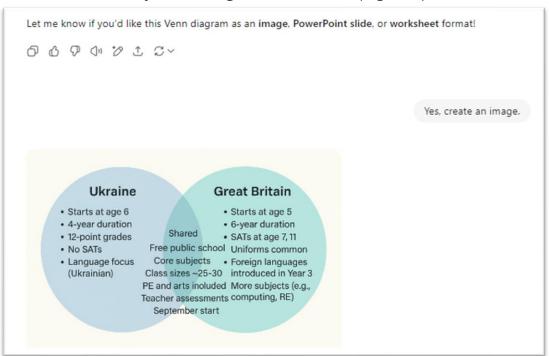


Fig. 9. Venn diagram created by ChatGPT (Version 2)

4. The students compare the Venn diagrams created by ChatGPT and their own version, discuss the both versions and make the final diagram based on the information analysis.

**Conclusions** and research perspectives. Although ChatGPT can be very beneficial for prospective foreign language teachers, it sets a challenging task for them to change the existing teaching approaches and assessments to boost learners' cognitive, creative, and critical thinking skills. In addition, both university teachers and students will have to upskill their competencies to

handle the current advancements in AI technology, such as ChatGPT. However, this article does not cover all aspects connected with the use of AI in foreign teachers' education. language prospects for our further research are using and describing other functions of ChatGPT for teaching foreign languages, as well as analyzing other AI platforms such as Google Gemini, Microsoft Copilot, Eleven Labs, etc. and the ways of their integration into the process of future foreign language teachers' professional training.

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