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EFL TEACHERS' ATTITUDES TOWARDS THE USE OF AI GENERATED LESSON PLANS IN KAZAKHSTAN

Abstract. Prolific advancements in the sphere of Artificial Intelligence in Education and Artificial Intelligence, in general, beg the questions of how these technologies could be implemented in the English as a Foreign Language sphere and what English as a Foreign Language teachers' attitudes towards Artificial Intelligence-generated lesson plans are. In this research paper, the attitudes of Kazakhstani secondary school English as a Foreign Language teachers towards the use of Artificial Intelligence-generated lesson plans have been explored. Through analyzing responses from an online survey, the study identifies several prominent themes that reflect the overall attitudes of teachers towards Artificial Intelligence-generated lesson planning. The study employed qualitative research design and involved 27 participants. Their attitudes were collected via an open-ended questionnaire and analyzed with thematic analysis. The results indicate that AI-generated lesson plans can have a positive impact on student learning outcomes, with the guidance and adjustments made by teachers. However, concerns about automation bias and the lack of personalization in the plans are also identified. The benefits of lesson planning generated by Artificial Intelligence include efficiency, customization, and innovative ideas, while drawbacks include inflexibility in unanticipated situations and a lack of specificity in students' needs. The study concludes that teachers express overall positive attitudes towards the use of Artificial Intelligence-generated lesson plans. According to the results, English as a Foreign Language teachers believe that they offer a range of benefits for teachers and can potentially enhance student learning outcomes when used in conjunction with teacher modifications and adjustments.

Key words: English as a Foreign Language, Artificial Intelligence, Lesson plans, Attitudes, Kazakhstan, Teachers.

Introduction

Digitalization and technological innovations in education in Kazakhstan

After the COVID-19 pandemic, many educational institutions have increased the implementation of technologies and innovations in their teaching and learning policies. Following the stages of the governmental program “Digital Kazakhstan” that was first launched in 2006, the process of digitalization is gradually gaining momentum, providing more money from the budget for education and technological equipment in schools, colleges, and universities (Dinis Sousa et al., 2020). Apart from using and enhancing distance learning tools and utilities, more contemporary and advanced technologies such as Artificial Intelligence (AI) and Machine Learning (ML) have been used to facilitate the process of education. Our Republic's education was set to expand and develop multilingually (Kazakh, Russian, English), technologically, and culturally (Poslanie Prezidenta Respubliki Kazakhstan N. Nazarbaeva, 2012).

Although many developed countries are attempting to discover new ways of AI utilization in different educational contexts, its ways of utilization appear to be obscure for many Kazakhstani educational institutions. Some educational institutions and teachers are not even aware of the existence of such tools, which can be a non-obvious barrier to the process of digitalization. The capabilities and primary purpose of any AI are to analyze large amounts of data, categorize, label them, recognize patterns, and learn. After digesting the information, it is accordingly able to make

predictions and create human-like text (Generative Pre-Trained Transformer) based on the same data that it previously consumed. The relevance of digitalization has increased with the emergence of a more advanced and ubiquitously accessible AI - OpenAI ChatGPT (Generative Pre-Trained Transformer). The number of tasks this AI is able to perform ranges from creative text writing: essays, lesson plans, and poems, to recognizing mistakes in the programming codes. However, it is important to notice that the data on which this model was trained is up to 2021, which limits its knowledge of the events after the year 2021 (OpenAI, 2023).

ChatGPT and its relevance in education

According to Halaweh (2023), ChatGPT developed by OpenAI has the potential to revolutionize the education sector in several ways.

Firstly, if the lesson objectives are clearly defined, ChatGPT can provide personalized writing guidance to students based on their individual needs and progress. This can significantly enhance the teaching process. Additionally, ChatGPT's ability to automatically grade essays by identifying key features can save considerable time that would have been required for manual grading. Since ChatGPT is a generative model, it can also be used to develop bilingual systems, making it a valuable tool for language translation.

Furthermore, the conversational agent based on ChatGPT can serve as a virtual tutor, which provides written responses, for those seeking to learn English as a second language. This platform can enable students to ask questions and receive correct and reliable responses from ChatGPT. Lastly, ChatGPT's ability to analyze, evaluate large amounts of text, and provide students with the new undiscovered information on a desired topic, can enhance students' researching skills and provide new ideas.

Overall, ChatGPT has immense potential to transform the education sector and facilitate the learning process for students in numerous ways. Although the capabilities of ChatGPT are astounding and can be creatively used in a variety of contexts, questions about its practical and ethical implementation caused mixed feelings among pedagogical and academic communities as a question of originality and plagiarism arose. As students who can resort to the usage of ChatGPT may not critically and thoughtfully analyze the feedback given by the AI, and simply copy the generated information without referencing the source.

We aim to investigate the attitudes of Kazakhstani secondary school EFL teachers about the utilization of AI in lesson planning, and most importantly, their willingness to implement this technology in their teaching practices.

The following research question of this investigation is hereby stated:

- What is the overall attitude of secondary school EFL teachers towards the use of AI-generated lesson plans in their teaching practices?

Lesson plans are considered to be important roadmaps that guide the teacher throughout the lesson and help with: 1) anticipation of the possible lesson problems; 2) defining a set of certain lesson objectives; 3) consideration of students' interests, background knowledge; 4) providing a direction for a substitute teacher. They provide a clear set of actions, so an educator doesn't get lost before, during, and after the lesson (Farell, 2002). Despite the proven benefits lesson plans pose, the perception of the necessity of lesson planning in schools differs from the way it is perceived in higher education. State schools require teachers to provide lesson plans for every lesson they conduct as part of the course curriculum and Ministry of Education requirements.

This study sheds light on the attitudes of EFL teachers towards the use of AI-generated lesson plans, which is an emerging area of research. As the use of AI in education becomes more widespread, it is important to understand the perceptions and attitudes of teachers towards this technology. The study is particularly relevant in the context of Kazakhstan, where the government has made significant investments in technology in education (education funding from the government in 2019 was a record 19% of the national budget and 3.62% of the GDP) (International Trade Administration, 2022). Understanding teachers' attitudes towards the use of AI-generated lesson plans can help inform policy decisions and improve the implementation of technology in education in Kazakhstan. Our study can

help inform educators, stakeholders, policymakers, and authorities who want to professionally develop EFL teaching and teaching in Kazakhstan and other countries. By understanding the attitudes and perceptions of teachers towards the use of AI-generated lesson plans, it is possible to design training programs that meet the needs and preferences of teachers, and that help them effectively incorporate this technology into their teaching practice.

The Potential of AI in Education

Artificial intelligence (AI) has become increasingly prevalent in various sectors of education such as engineering, information technology, mathematics, foreign language, business, history, and more (Zhang & Aslan, 2021). AI has the potential to transform the way education is delivered, from personalized learning experiences to intelligent tutoring systems. One application of AI in education is the development of AI-generated lesson plans. AI-generated lesson plans have the potential to streamline the lesson planning process, improve the quality and consistency of lesson plans, and allow teachers to focus on other aspects of teaching.

However, the factors such as job dissatisfaction, lack of recognition, poor remuneration, and loss of autonomy lead to the tremendous issue concerning teacher and even educational field applicants' shortage in the educational system which is now highly discussed among educational stakeholders, economists, and the government itself. As such, Edwards and Cheok (2018) cited the statistics to illustrate how far the problem goes. In addition, the project developers could come up with a possible solution to this problem. One of the statistics that is represented in this article shows that 46% of teachers in the United States are under the category of a teacher who "moves and leaves" during the period that lasts for 5 years, and 17% out of which are those who totally stopped teaching. Moreover, over the period between 2008 and 2013 the number of teachers who attend teacher preparation programs dwindled by over 30%. Curiously, the severity of the state is growing because of the increasing number of primary and secondary school students by 0.4% from 1999 to 2011, and an approximate growth by 5.2% from 2011 through 2023. Grave implications, including non-accessibility for primary school education for most people, emanate beneath this problem. Hence, Edwards and Cheok (2018) noted that "novel ways of delivering formal instruction are needed, thereby the growing focus on the use of Artificial Intelligence in Education (AIED)" (p. 14).

When it comes to the AIED as a possible solution for the absenteeism of teachers as instructors and guides in the educational path, Edwards and Cheok (2018) have already created a robot powered by AI by the name "Sato" capturing the three dimensions of the learning such as "cognitive, psychomotor, and affective domains" (p. 15). Sato has already shown its capabilities in lesson planning, also in synthesizing the recorded voices and appropriately replying to questions, and implementing different approaches. All of these Sato can do by considering and using all data about students and considering classroom proxemic (the study of spatial factors in social relationships) and being a "good" robot-teacher in all parameters. Therefore, the usage of AIED in substituting the real teachers, and fulfilling vacant places is a de-facto possible thing, according to the authors.

Promises of AI in foreign language teaching

In the following study, Pokrivcakova (2019) illustrated the potential benefits of AI integration in various spheres of foreign language teaching. The main root and the backbone of all AI-powered tools is CALL (computer-assisted language learning), which has developed in recent years into ICALL (Intelligent CALL) with the advances in technologies and the rise in student-technology interactions. Natural language processing (NLP) is one of the main components of ICALL development. It focuses on enabling AI to process, interpret, and generate human-like texts. The applications of AI used in foreign language education consist of:

- a) **Differentiated learning materials.** Materials that were specifically designed with the consideration of personalized learning adapt their content according to the individual needs of each student. This way all the materials are not generalized to the common masses, but rather customized and adapted to each learner.

- b) **Machine translation.** Machine Translation (MT) is the process of translating text from one language to another with the use of computer software. It relies on artificial intelligence algorithms that analyze and interpret the meaning of the message, then generate a corresponding translation of it. Examples: Google Translator, Context Reverso, Foreign Word.
- c) **AI-assisted writing tools.** With the help of AI, these tools analyze, detect, and correct any contextual and grammatical errors they find in the process of writing. These programs can help students improve their writing skills and elevate the whole process with instant feedback and suggestions. One of the most prominent examples: Grammarly, ProWritingAid, White Smoke.
- d) **Chatbots.** Chatbots are computer programs designed to simulate conversations with humans, usually through messaging. They are based on machine learning (ML) and natural language processing (NLP). They are usually but not limited to being used in customer service to provide quick and automated feedback or interactions. They can also be used in EFL learning as an alternative to live conversations with real humans. Examples: ChatGPT, Mitsuku, LivePerson.
- e) **Language learning apps powered by AI.** Except for the implementation of AI and ML in text generation, speech recognition, and writing improvement, many online language learning applications integrate these features to ease and gamify foreign language learning.

So, with the rapid development of the technological sphere, many AI-powered tools get integrated into education and foreign language learning specifically, which makes this process more adaptive and individual for everyone, saving a lot of time not only for teachers but also for the learners. They have opened up new opportunities for personalized learning.

To exemplify AI tools like IBM's Teacher Advisor mechanism are designed to help teachers create personalized lesson plans for students with varying skill levels in the same class (Castro & New, 2016). By analyzing Common Core education standards and student specs, this tool can develop effective lesson plans that cater to each student's individual needs. As a result, traditional and static lesson plans can be replaced with personalized ones, making teaching more effective. IBM's Teacher Advisor has been available to third-grade math teachers since 2016, and it has been expanded to cover other subject areas and grade levels. This tool can also be used by EFL teachers to produce time-saving lesson plans, which will allow them to focus more on improving the quality of the lesson itself. This study also examines another AI tool, Duolingo, a learning software program that uses AI to examine customers' activity and progression to create personalized lesson plans. Duolingo structures lesson plans differently for different users, and it uses the most effective strategies to help users learn. The authors point out that AI tools can be very useful in education for developing personalized lesson plans, identifying at-risk students, and improving curriculum validity. Teachers can save time by using these tools and focus more on improving the quality of their teaching.

So, with the rapid development of the technological sphere, many AI-powered tools get integrated into education and foreign language learning specifically, which makes this process more adaptive and individual for everyone, saving a lot of time not only for teachers but also for the learners. They have opened up new opportunities for personalized learning.

Overcoming Educational Disparities During the Pandemic with AI-Powered Tools

In the Japanese study that was conducted by Kang (2021) two AI-assisted educational tools were created with the purpose of giving automated feedback to students, highlighting their strengths and weaknesses while reviewing their overall comprehension. It was proven to be very effective as the group of students who studied with the help of these tools managed to finish the math course almost twice faster than the traditional group. They had a better understanding of the material and higher overall performance. However, the author also noticed that the sudden changes and implementation of IT tools have a number of drawbacks such as 1) high cost, 2) lack of motivation, and 3) educational disparity caused by the digital divide.

In Kang's study, the author examines the impact of the COVID-19 pandemic on education and how schools and universities have had to adapt to remote and online learning. One of the key

challenges highlighted in the study is the need for technological infrastructure and innovation to support remote learning, particularly in disadvantaged areas where students may not have access to reliable internet or technology, which creates huge problems for quality education.

Kang's study provides valuable insights into the challenges and opportunities that have arisen as a result of the pandemic and highlights the need for innovation and investment in technological infrastructure to support remote learning. By incorporating AI-powered education tools into remote learning strategies, schools, and universities, and alleviating teachers' load can help ensure that students receive the best possible education, regardless of their circumstances.

Overall, this research article is an important resource for educators, policymakers, and anyone interested in the future of education. It highlights the need for innovation and adaptation in the face of unprecedented challenges and emphasizes the role that AI can play in providing students with a quality education.

Main challenges and concerns about AI in education

Another study, conducted by Vincent-Lancrin and Van der Vlies (2020) reviews the overall usage and integration of AI into the educational sphere. One potential application of AI in education that the authors touch on is the generation of AI-generated lesson plans. This could potentially offer several conveniences, such as saving time for teachers, providing consistency in content delivery, and adapting lesson plans to individual student needs. However, the authors caution that there are several challenges that need to be addressed before AI-generated lesson plans can be implemented effectively and ethically.

The authors also include a discussion of the ethical and social implications of AI in education and provide recommendations for policymakers, educators, and developers on how to ensure the responsible and ethical use of AI in education.

One of the key challenges discussed in the study is the potential for bias in AI-generated lesson plans. If the algorithms used to generate lesson plans are not properly designed or trained, they could perpetuate existing biases in the education system. Another challenge is the need for transparency and accountability, as teachers and students need to understand how AI-generated lesson plans are created and how they are being used.

Supporting and extending the topic of ethical issues in AIED (Artificial Intelligence in Education), Holmes et al. (2022) review the attitudes of 17 leading researchers in this sphere. They argue that there have been no deep studies and investigations of ethical concerns in AIED. Almost all participants agreed that the ethical considerations may be neglected and are not paid enough attention in the field of AIED. According to the study, these researchers consider data ownership and control, limitation of data, bias, transparency, and intelligibility of decisions the most important ethical issues in AIED. A lot of these factors could potentially affect both teaching and learning processes for educators and students by "shaping what the education will look like for the next generation of students" (p. 511). This also raises the question of switching to education fully provided by machine tutors and complete teacher replacement.

The more recent concerns were raised by the former board member of OpenAI Elon Musk who has signed an open letter calling for the suspension of ChatGPT development as it claims ChatGPT and similar types of AI Chatbots pose high risks not only for its users and developers but to the humanity in general. They develop at a rapid speed and cannot be fully controlled by the developers (Vallance, March 30, 2023). Even more recent concerns about the integrity of users' data, and a high increase in cases of cheating and plagiarism have caused the ban of ChatGPT in Italy and some higher education institutions (Browne, April 4, 2023; Intelligent, 2023).

In spite of that, some measures opposed to plagiarism are already being taken. The recent report of the plagiarism checking program Turnitin informed that they are currently working on a feature that will allow the identification of AI-generated text (Shea, 2023).

All of these concerns beg the question of establishing a set of ethical and moral regulations that will control the fair use of AI in every sphere of human life, ensure transparency of the AI algorithms, and provide enough training for the educators and researchers who want to work with AI.

While AI-generated lesson plans could offer several conveniences, it is important to ensure that they are designed and implemented in a way that is fair, transparent, and accountable. By addressing these challenges, AI-generated lesson plans could potentially offer a valuable tool for educators in delivering high-quality and personalized education to students.

Exploring Teachers' Attitudes Toward AI-generated lesson plans

However, the use of AI-generated lesson plans in secondary schools is a relatively new area of research, especially in Kazakhstan, and there is a limited understanding of secondary school EFL teachers' attitudes toward this technology. In a study conducted by Nazaretsky et al. (2021), the attitudes of science teachers toward AI-based educational technologies were studied. The main attitudes of teachers appeared to be mixed, and their willingness to use AI-based educational technologies was affected by their attitudes. They consider AIED as a very innovative and valuable tool, however, they question their competence in implementing and adjusting this technology to their teaching. In spite of taking into account the results of this study, the overall attitudes of EFL teachers towards AI-generated lesson plans may differ.

The possible reasons for that may be the low development of technologies in Kazakhstan, lack of research on the topic, fear of technologies (fear of replacement), lack of specialists in the field, unawareness of this kind of technology, and overall concerns of educators about the trustworthiness of AI. Although all of these reasons are our own speculations about the possible attitudes EFL teachers in Kazakhstan might hold, the actual attitudes stay ambiguous to us.

Exploring the Gaps in Kazakhstan: EFL Teachers' Attitudes Toward AI-Generated Lesson Plans

Artificial intelligence has become the most attractive matter to examine for Kazakhstani researchers only starting from 2018 after being indicated in the 1st President of the Republic of Kazakhstan Nursultan Nazarbaev's message in terms of strategic goals concerning artificial intelligence systems (M. N. Kalimoldayev et al., 2018). The rapid development of AI and its implementation in education is distinctively seen in the developed part of the world. However, when it comes to Kazakhstan, the practice of using AI in lesson planning is a complete novelty. We have not found even a single study that focuses on lesson planning involving AI in EFL teaching or lesson planning with the assistance of AI tools in our region, which reveals a significant gap in this area of research in Kazakhstan. However, our lack of findings could be limited by the fact that there is limited access to some academic journals and repositories of academic works, which we do not possess. Therefore, it could possibly result in failure to find more relevant works.

Based on the literature review, it can be concluded that AI-generated lesson planning has the potential to revolutionize the way teachers plan and deliver their lessons. The use of AI algorithms can help teachers save time and effort in creating lesson plans, while also allowing for greater personalization and differentiation in instruction. Additionally, AI-generated lesson plans can adapt to students' individual learning needs and provide feedback to teachers on the effectiveness of their lessons. However, the literature also highlights several limitations and challenges in the implementation of AI-generated lesson planning. These include concerns about the accuracy and reliability of AI algorithms, the need for teacher training and support in using AI technology, and the potential for AI-generated lesson plans to perpetuate biases and inequalities. We are determined to conduct research on this topic and find out the attitudes of Kazakhstani secondary school EFL teachers toward the use of AI-generated lesson plans.

Methods and materials

Type of research

This research employs a qualitative research design to answer the research question. The question aims to explore the overall attitudes of secondary school EFL teachers towards the use of AI-generated lesson plans in their teaching practices. Given the exploratory nature of this question, a qualitative design is employed (Creswell & Creswell, 2017). This approach enables the researchers

to gather and analyze qualitative data in a systematic and integrated way, allowing for a more nuanced understanding of the research question at hand.

Sample

This study's sampling method is chosen to be non-probability snowball sampling as the most convenient way to enlist participants for researchers (Acharya et al., 2012). Some of the participants are suggested by some of the teachers whom researchers are acquainted with. The participants are enlisted in accordance with the only criterion of being a heterogeneous group of secondary school EFL teachers. As for the number of teachers, this research asked 27 secondary school EFL teachers currently working (or having had experience of working) in Kazakhstan secondary schools to contribute to our study by filling in the questionnaire. All the participants had to fill in the online questionnaire that did not require their personal presence. The researchers ensured the anonymity and confidentiality of the participants' responses by not collecting any identifying information, such as names or email addresses. Before starting the questionnaire, the participants were informed about the purpose and scope of the research, as well as their rights as research participants. They were also informed that their participation was voluntary, and that they could withdraw at any time without penalty. Due to some limitations and problems (a small sample of the desired population), our data collection process faced, the criteria for participation in our study were expanded. Senior TFL students who had previously had their educational practice at secondary schools as EFL teachers were invited to fill in the questionnaire.

Data Collection

The data collection process is conducted by using a questionnaire consisting of open-ended questions. The questionnaire includes the informed consent form where they can get familiar with the explicit description of the study, participant's rights, potential risks, duration of the questionnaire, and contact information. Informed consent is compulsory for every participant to read and agree to proceed with the questions. The questionnaire is originally created by the researchers according to the research question and consists of 2 main parts:

- 1) General information about participants - demographic info such as age (options in years: 18-24, 25-34, 35-44, 45-54, 55 and above); teaching experience (options in years: 0-2, 3-5, 6-10, 11-15, more than 15); and technological proficiency (beginner, intermediate, advanced). The levels of technological proficiency are defined as: beginner - limited experience with technology in the classroom and may require some training, intermediate - good understanding of common technology used in the classroom, advanced - very comfortable with a wide range of technology.
- 2) Attitudes towards the use of AI-generated lesson plans - 2 closed-ended and 8 open-ended questions aimed at exploring participants' attitudes. The first closed-ended question seeks to explore their previous experience with the concept of AI-generated lesson plans (yes-no question). The remaining 8 questions are open-ended, thus the participants had the freedom in describing their opinions and attitudes. There is one extra question added to receive respondents' feedback and suggestions regarding the study and procedures.

The first section of the questionnaire gives us an overall understanding of the sample's characteristics, while the second section discovers the overall attitudes of the participants.

Data analysis (Pilot Study)

In order to configure the data, this study uses thematic analysis to analyze qualitative data collected from open-ended survey questions in the direction of developing research questions. The use of open-ended questions allowed us to gather more detailed and nuanced information about the attitudes and experiences of the EFL teachers. This could provide a more comprehensive picture of the research topic and lead to more informed conclusions and recommendations.

Thematic analysis is employed to sort out all the open-ended responses that represent participants' attitudes, by virtue of coding them into codes and main themes that represent the main

idea of the respondents' answers. This research follows the thematic framework suggested by Clarke and Braun (2006) consisting of 6 steps:

1. Familiarization with the data
2. Initial coding generation
3. Deriving themes from the initial codes
4. Review of the themes
5. Themes identification and labeling
6. Report writing

All the data is inductively coded (data-driven) in order to develop themes from the analyzed open-ended data.

The first attempt to check the feasibility of our study was through the means of a pilot study. To ensure the reliability and validity of the questionnaire, a pilot study was conducted with a small group ($n = 5$) of secondary school EFL teachers. The researchers used their responses and comments to refine the questionnaire and find ambiguities within the question items.

Tools and materials used in the research

Apart from the questionnaire, other research tools were employed in this study. To help familiarize participants with the concept, an example of a lesson plan generated by OpenAI ChatGPT is presented, accompanied by prompt and key definitions and terms right in the questionnaire. All the data were collected by means of Google Forms and analyzed with Google Sheets, as they offer a wide range of statistical and analytical utilities.

Limitations

Possible limitations of this research include the generalizability to other populations, small sample size, and alternative explanations.

- 1) The generalizability of this research is limited, as it is focused on secondary school EFL teachers' attitudes towards AI-generated lesson plans.
- 2) A small sample size reduces the statistical power of the analyses and limits the generalizability of the results. A larger sample size could help to increase the precision and reliability of the findings.
- 3) Another possible limitation of this study is alternative explanations. Even if the interpretations of the researchers seem to be valid, some alternative explanations and meanings could be omitted. It is important to consider alternative explanations when interpreting the findings.

Mitigating research biases

To mitigate research biases, we as researchers took several measures throughout the research process:

A non-probability snowball sampling method was chosen to guarantee a heterogeneous group of participants. However, this method may still be subject to the vein of referral bias, where participants are more likely to be referred by people who share the same characteristics or opinions. To address this, we enlisted participants suggested by a diverse group of teachers that authors invited to participate in the study through the help of senior TFL students who had previously had an internship in secondary schools under the mentorship of EFL teachers to ensure a range of backgrounds, experiences, and perspectives. Under some limitations, the senior TFL students who worked as EFL teachers in secondary schools during their internship were also invited to participate in the study.

To ensure participant anonymity and informed consent certain measures were also taken. Needless to say, the questionnaire attendees were assured that the details of their responses were kept confidential and anonymous. Hence, the social desirability bias risks were undertaken, by giving participants a light opportunity to alter their responses.

In order to mitigate bias in terms of data analysis tools, several points were considered. As this study employs 2 types of analyses: thematic and statistical, it can face some biases related to the

limitations of these methods. Such as interpretations of all the contextual data are solely based on the subjective assessment of the researchers. Thus, the data was coded with the help of other fellow researchers to maintain objectivity in data explication. The participants could also correct their responses at any time to express their attitudes more explicitly.

Results and Discussion

General profile of participants

According to the statistical report, there were 27 participants in the study, most of whom were young EFL teachers. Specifically, 17 of the participants (63%) were between the ages of 18-24, 4 participants (14.8%) were between 25-34, 5 participants (18.5%) were between 35-44, and only 1 participant (3.7%) was between 45-55.

In terms of teaching experience, 13 participants (48.1%) had 0-2 years of experience, 8 participants (29.6%) had 3-5 years of experience, 1 participant (3.7%) had 6-10 years of experience, 3 participants (11.1%) had 11-15 years of experience, and 2 participants (7.4%) had more than 15 years of experience each.

Responding to the question about their technological proficiency, out of the 27 participants, the majority (63%) reported themselves as intermediate users, while 11.1% reported being beginners, and 25.9% of the participants reported being advanced users. Specifically, 3 participants (11.1%) were categorized as beginners, 17 participants (63%) as intermediate, and 7 participants (25.9%) as advanced users.

More than half of the participants (14 or 51.9%) have previously used AI-generated lesson plans in their teaching. Less than half (13 or 48.1%) have never used them in their teaching practices.

Deriving codes from responses

Analyzing the responses for the first question “How do you think AI-generated lesson plans can impact student learning outcomes?” we could derive the following codes (see Table 1). Most participants noted the positive impact of AI-generated lesson plans on student learning outcomes. Each number next to the theme is the frequency of this theme, appearing in responses sorted out by frequency (descending).

Table 1. Codes derived from the responses to the first question

Codes
Positive impact (11)
Need for teacher's intervention/modifications/adjustments (7)
Develops teacher's LP skills (4)
Not detailed/personalized (4)
Interesting and engaging activities (3)
Too vague/general (3)
Mixed feelings (2)
Diversify students' learning (1)
No impact (1)
Not flexible in extraordinary situations (1)

The codes for the second open-ended question “What do you think are the potential benefits of using AI-generated lesson plans in EFL teaching?” (see Table 2) represent participants’ opinion about the benefits of AI-generated lesson plans. The majority highlighted the ease and time economy that AI provides for lesson plan generation.

Table 2. *Codes derived from the responses to the second question*

Codes
Time-saving (21)
Creative ideas (11)
Materials generation (2)
Customizable (2)
Interesting and engaging activities (1)
LP is not important (1)

Third question was eliciting participants' opinions about potential drawbacks of AI-generated lesson plans. Most of the participants highlighted the negative aspects such as automation bias (high reliance on automated decision-making systems, even when these systems may provide incorrect or misleading information), too general lesson plans, lack of personalization, and lack of personal connection. The others noted that there are no drawbacks to the use of AI-generated lesson plans in the classroom. A lesser part of the respondents shared that they did not have enough experience to answer this question.

Table 3. *Codes derived from the responses to the third question*

Codes
Automation bias (7)
Too basic LP (7)
Lack of personalization (5)
No drawbacks (5)
No experience (3)
Lack of personal connection (2)
Need for teacher's intervention/modifications/adjustments (1)

Fourth question in the questionnaire was inquiring participants' opinion about the possibility of replacement of the traditional lesson planning by AI-generated lesson planning. The codes derived from their responses are presented in the table below (see Table 4).

Table 4. *Codes derived from the responses to the fourth question*

Codes
Can replace (10)
Cannot replace (12)
Partially (7)
Need for teacher's intervention/modifications/adjustments (3)
Uncertainty (3)

In the next question "In what situations do you think AI-generated lesson plans would be most useful?" The following codes were highlighted (see Table 5).

Table 5. *Codes derived from the responses to the fifth question*

Codes
Time-saving (13)
In any situation (8)
New ideas (4)
Materials generation (3)
For inexperienced teachers (1)
Interesting and engaging activities (1)

In the following table, respondents shared their experience of using AI-generated lesson plans in their teaching. Most of the participants did not use them in their teaching practices.

Table 6. *Codes derived from the responses to the sixth question*

Codes
No experience (14)
Time-saving (4)
Useful framework (2)
Customizable (2)
Comfortable (2)
Unclear activities (1)

The last question answers were collected regarding whether the participants have any concerns about AI-generated lesson plans (see Table 7).

Table 7. *Codes derived from the responses to the seventh question*

Codes
No concerns (10)
Automation bias (7)
No experience (4)
Need for personalization (3)
Uncertainty (3)

Review of the themes

After analyzing the coding of the responses, several prominent themes have emerged that reflect the overall attitudes of EFL teachers towards AI-generated lesson planning. These themes were mentioned frequently across all responses and can be categorized as follows:

- 1) Positive impact of AI-generated lesson plans on learning outcomes with teacher's guidance;
- 2) Benefits of AI-generated lesson planning: customizable plans that save time and suggest new ideas;
- 3) Drawbacks and concerns: automation bias and too general LP without personal connection;
- 4) Mixed views on traditional planning replacement.

Positive impact of AI-generated lesson plans on learning outcomes with teacher's guidance.

After collecting and analyzing responses to the first open-ended question, which is stated as “How do you think AI-generated lesson plans can impact student learning outcomes?”, some responses (5) were not clear nor relevant to the question, and thus are excluded from the analysis.

The majority of the participants highlighted the positive impact of lesson plans generated by AI on learning outcomes after modifications and adjustments done by teachers. As these plans cannot be fully employed due to the lack of some specifications and peculiarities that should be added by the teachers themselves. Participants shared that AI-generated lesson plans have a positive impact on students’ learning outcomes by providing a general lesson plan or basis for the actual lesson that can be further modified and adjusted by the teacher. Although AI can generate a decent lesson plan, teachers are those who actually lead the teaching and learning processes. This, in turn, can lead to better engagement and understanding of the lesson material. Some teachers even claimed that it can enhance their teaching skills, by presenting new teaching methods, techniques, and interesting activities in lesson planning.

Some of the teachers expressed mixed and negative feelings about AI-generated lesson plans as they did not see adherence to lesson plans as a very important part of their teaching practices. Moreover, they saw no significant impact of AI-generated lesson plans on student learning outcomes, as it, again, depends on the teacher. The other flaws mentioned that can negatively impact student learning outcomes were lack of flexibility in extraordinary situations, where teachers should quickly change the pace of the lessons or adapt to some unexpected situations during the lesson; lack of personalization and specifications in lesson plans created by AI; lesson plans are too general or vague.

Overall, to conclude their opinions, AI-generated lesson plans positively impact student learning outcomes in case the teacher is the administrator and moderator of the lesson plan, bringing changes accordingly. Otherwise, the machine may not understand all the peculiarities and students’ needs in the teaching and learning process, by neglecting some important specifications, which can negatively impact the student learning outcomes.

Benefits of AI-generated lesson planning: customizable plans that save time and suggest new ideas.

The research results showed that efficiency was the most frequently mentioned benefit, with teachers noting that they save a significant amount of time compared to traditional lesson planning methods. This finding is particularly important given that many teachers struggle to find sufficient time for lesson planning amid their other responsibilities. According to the respondents, the reduced workload associated with using AI-generated lesson plans was found to be especially beneficial for those teachers who are new to the profession or have limited experience in lesson planning.

Customization was another benefit, with teachers reporting that they appreciate the ability to easily modify and adapt the plans to meet the needs of their students. This level of customization can help teachers to create more personalized learning experiences that better meet the needs of their students.

Innovative ideas were the third most frequently mentioned benefit by the teachers. They reported that these plans suggest new and creative ideas for lesson activities, which can improve student engagement and motivation. Which can potentially result in higher student performance.

Teachers who have previously used AI-generated lesson plans in their teaching expressed overall satisfaction with their lessons, mentioning the achievement of the main objectives of the lessons and their simple structure. However, they also expressed a wish for more detailed steps of lesson procedures with a clear description of each stage of the lesson.

Overall, this theme suggests that AI-generated lesson plans offer a range of benefits for teachers, including efficiency, customization, and innovative ideas for teaching. By automating certain aspects of lesson planning, these plans can help to reduce the workload of teachers and enable them to focus on other important tasks. Additionally, the customizable nature of these plans can help to create more personalized and effective learning experiences for students.

Drawbacks and concerns: automation bias and too general LP without personalization.

The study has revealed that the majority of participants emphasized that the integration of Artificial Intelligence in lesson planning could potentially impair the educators' expertise by limiting their capacity for creativity and preventing them from demonstrating their true qualifications as instructors. The aforementioned issue leads to the automation bias when educators rely only on AI in developing lesson plans, which can result in overreliance on technology that is not infallible and can be biased or make mistakes and errors.

Based on the responses, it is evident that the implementation of AI to create lesson plans presents a significant downside in the fact that they lack specificity in terms of students' needs, and personalizations. Therefore, AI-generated lesson plans still necessitate teachers' intervention, modifications, and adjustments. Another respondent stated that such plans may be inflexible in unanticipated circumstances.

Altogether, the teachers consider that the utilization of AI in lesson planning has both advantages and disadvantages. While AI-generated lesson plans can save the time and effort spent on lesson plan development, they lack the specificity and personalization required to meet the unique needs of students.

Furthermore, respondents suppose that high reliance on AI-generated lesson plans could potentially limit teachers' creativity and prevent them from showing their expertise as instructors. Therefore, it is essential to keep a balance between using AI technology and maintaining the teachers' role in lesson planning.

Mixed views on traditional planning replacement.

The replacement of traditional lesson planning methods with AI-generated lesson plans has sparked a debate among educators. While the advantages of automation and flexibility are undeniable, many teachers still hold onto the belief that their expertise and personal touch are essential to the teaching process. Most of the respondents consider it impossible to replace traditional lesson planning, due to the fundamental role that the teacher plays in lesson development and automation bias that can weaken the teacher's role and lead to many problems in decision making.

Some educators are open to the idea of using AI-generated plans, acknowledging that they could offer fresh ideas and save time. However, they also express concerns about the potential for automation bias, which could lead to an overreliance on technology and a lack of critical thinking in decision making.

Others take a more moderate stance, suggesting that AI-generated plans could be a useful addition to traditional planning methods in certain situations. They believe that technology can enhance the planning process, but it should not completely replace the teacher's role in designing and implementing lessons.

Finally, there are a couple of respondents who are uncertain about the idea of replacing traditional planning methods. They may have reservations about the reliability of AI-generated plans or simply need more information before forming an opinion.

In summary, the results reveal that the use of AI-generated lesson plans is a topic of mixed stances among educators. While some see it as a positive innovation, others remain cautious about its impact on the teaching process. Finding a silver lining between automation and the personal touch of a teacher is likely to be an ongoing challenge in the field of education.

Discussion

The goal of this study was to determine the overall attitude of EFL teachers toward the use of AI-generated lesson plans. Keeping this in mind, we tried to present a comprehensive analysis of the EFL teachers' attitudes concerning this topic. The majority of the teachers expressed a positive overall attitude towards the willingness to use AI-generated lesson plans in their teaching practices. However, some concerns that teachers express are essential to highlight. Some teachers were cautious about the use of these plans in their teaching practices, sharing concerns about their implementation, lack of personalization, details, and sophistication. So, the uncertainty and the lack of knowledge about this new technology might have served as the reason for their hesitation. There were a couple of teachers

who expressed strong unwillingness to use AI in lesson plan generation, by stating that the lesson plans do not play a significant role in their teaching processes. All in all, most of them asserted that innovational lesson planning with the use of AI technologies could elevate and ease the process of teaching and reduce the burden of plan creation. These ideas match with the prospects reflected in the study by Kang (2020). Although the attitudes regarding the replacement of traditional lesson planning are mixed, and some teachers do not welcome the full replacement, more than half of them are still positive about the idea of renovating this issue even partially.

When it comes to the benefits and concerns, we can see the most mentioned benefits were save of time, easy customization, and creative ideas. While concerns that appeared across many questions were automation bias, which limits teachers' creativity and involvement, lack of personalization, and vague lesson plans. These findings align with the results of the studies by Vincent-Lancrin and Van der Vlies (2020) and Nazaretsky et al. (2021) as they highlighted similar benefits of AI and concerns expressed by teachers. It is important to mention that some teachers expressed no concern about it. However, the reason for this could be a lack of knowledge and experience.

Another interesting point of our research is the unexpected finding that was discovered through our study. Before the initial process of collecting data, it was anticipated that the younger generation would be more prone to using AI in lesson plan generation. However, the outcomes have shown quite the opposite, older generations are more willing to implement this technology in their teaching practice, while younger EFL teachers are dubious about the novelty of AI-generated lesson plans, and raise some critical concerns about AIED ethics.

Analysis of the data revealed that teachers are willing to implement AI-generated lesson plans in their teaching; however, it is important to understand that their opinions slightly differ, due to the possible misunderstanding of the concept of AI or different teaching experiences. This could result in missing some alternative meanings and explanations behind the responses. Hence, it is important to address this gap in future, larger-scale research. Moreover, these findings reveal the necessity to provide teachers professional development and training, particularly on the effective use of AI in education. This could increase awareness about AI tools and empower teachers to implement AI features into their teaching practices without concerns and ambiguity. Overall, this research fulfilled its aim to explore current teachers' perceptions of AI-generated lesson plans. It also opens doors for longitudinal research and inquiries about the interrelations between technological innovations, teacher agency, and teaching integrity in the age of AI.

Conclusion

There have been no explicit studies conducted on the topic of EFL teachers' attitudes towards the use of AI-generated lesson plans in the Kazakhstan region. So, this research is one of the first steps in investigating this issue further on. It is important to learn about the views of educators, who extensively use lesson planning in their teaching practice and experience massive working overload and drop-outs, to make this process easier and more effective. Overall results are indicating that they are welcome to integrate and implement a brand-new method of lesson planning based on the help of AI. Nevertheless, some concerns need to be raised as the AIED, and ChatGPT, to be more precise, are not properly regulated and can produce bias, and are an object of debate among educators. The simplicity of lesson plans ChatGPT creates makes it unfavorable to some teachers, forcing them to put some effort to refine them according to the students' needs. So, educators raise the question of whether they can use the readymade material suggested by ChatGPT, and if it will be really efficient on its own without altering some parts of the lesson plan. Most of them believe that AI-generated lesson plans still need a touch of a teacher to be efficiently and beneficially used.

This study is not free of limitations and, thus, these limitations need to be addressed. As a qualitative study in design, it cannot be generalized to the general population, due to the small sample of the population, which is also very specific (Kazakhstani secondary school EFL teachers). In order to portray a deeper understanding of the attitudes of the population, more extensive research with representatives of the wider population is needed. Another limitation is the only tool used in this

research - the questionnaire. Other data collection methods could be used to triangulate the data. At last, the reason why teachers expressed negative and positive attitudes were not properly investigated.

Further research is needed to explore the potential benefits and challenges of using AI in lesson planning in the Kazakhstani context and to identify strategies for effectively integrating AI technology into the classroom.

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ҚАЗАҚСТАНДАҒЫ ШЕТ ТІЛІ РЕТІНДЕ АҒЫЛШЫН ТІЛІНІҢ МҰҒАЛІМДЕРІНІҢ ЖАСАНДЫ ИНТЕЛЛЕКТПЕН ЖАСАЛҒАН САБАҚ ЖОСПАРЛАРЫН ҚОЛДАНУҒА ДЕГЕН КӨЗҚАРАСЫ

Аңдатпа. Білім берудегі жасанды интеллект пен жалпы жасанды интеллект сферасындағы жемісті жетістіктер осы аталған технологиялардың ағылшын тілі шет тілі ретіндегі сферасында қалай қолданыла алатыны, сонымен қатар ағылшын тілін шет тілі ретінде жүргізетін мұғалімдерінің бұған деген көзқарастары туралы сұрақтар тудырады. Бұл зерттеу ағылшын тілін шет тілі ретінде жүргізетін қазақстандық орта мектеп мұғалімдерінің жасанды интеллекттің көмегімен жасалған сабақ жоспарларына деген көзқарастарын қарастырады. Онлайн сауалнаманың жауаптарын талдай отырып, зерттеу жалпы мұғалімдердің жасанды интеллект арқылы жасалған сабақ жоспарына деген көзқарастарын білдіретін бірнеше тақырыптарды көрсетеді. Зерттеу сапалық зерттеу дизайнына негізделіп, 27 қатысушыны қамтыды. Мұғалімдердің көзқарастары ашық сұрақтардан тұратын сауалнама арқылы жиналып, тақырыптық талдау әдісімен өңделді. Алынған нәтижелер егерде мұғалімдер жасанды интеллект жасаған сабақ жоспарларын өзгертіп, бейімдесе студенттердің үлгеріміне оң әсер етуі мүмкін екендігін анықтайды. Алайда, автоматтандыру мен жоспарлардағы жекешелендірудің жетіспеушілігі алаңдаушылық тудыратыны анықталды. Жасанды интеллект арқылы жасалған сабақ жоспарларының басты басымдылығына олардың тиімділігі, идеяларының даралығы және жаңашылдығы, ал басты кемшіліктеріне күтпеген жағдайларға бейімделе алмаушылығы және нақтыланған студент қажеттіліктерінің жеткіліксіздігі жатады. Зерттеу жасанды интеллект ұсынған сабақ жоспарлары мұғалімдерге көптеген артықшылықтар береді және оқытушылардың көмегімен өзгертіліп, бейімделген жоспарлар оқушылардың үлгерімін жақсартып алады деген қорытындыға келді. Нәтижелерге сәйкес, ағылшын тілін шет тілі ретінде жүргізетін мұғалімдер жасанды интеллекттің көмегімен жасалған сабақ жоспарлары мұғалімдер үшін бірқатар артықшылықтар беретінін және оларды бейімдеу арқылы студенттердің оқу жетістіктерін арттыруға болатынын мойындайды.

Түйін сөздер: жасанды интеллект, ағылшын тілі шет тілі ретінде, оқытушылар, сабақ жоспарлары, қарым-қатынас, Қазақстан.

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ОТНОШЕНИЕ ПРЕПОДАВАТЕЛЕЙ АНГЛИЙСКОГО ЯЗЫКА КАК ИНОСТРАННОГО К ИСПОЛЬЗОВАНИЮ УРОКОВ СГЕНЕРИРОВАННЫХ ИСКУССТВЕННЫМ ИНТЕЛЛЕКТОМ В КАЗАХСТАНЕ

Аннотация. Плодотворные достижения в области искусственного интеллекта в образовании и искусственного интеллекта в целом вызывают вопрос о том, как эти технологии могут быть реализованы в сфере английского языка как иностранного и как учителя английского языка как иностранного относятся к планам уроков, созданным искусственным интеллектом. В данном исследовании рассматривается отношение преподавателей английского языка как иностранного в казахстанских средних школах к использованию планов уроков, созданных с помощью искусственного интеллекта. Анализируя ответы на онлайн-опрос, исследование выделяет несколько тем, отражающих общее отношение преподавателей к использованию планов уроков, созданных с помощью искусственного интеллекта. В исследовании использован качественный дизайн, и оно охватило 27 участников. Их ответы были собраны с помощью анкеты с открытыми вопросами и проанализированы методом тематического анализа. Результаты указывают на то, что использование таких планов может оказать положительное влияние на успеваемость студентов, если они будут модифицированы и адаптированы преподавателями. Однако выявлены также опасения относительно автоматизации и нехватки персонализации в планах. Преимущества использования планов уроков, созданных с помощью искусственного интеллекта, включают эффективность, индивидуальность и инновационность идей, а недостатки — отсутствие гибкости в неожиданных ситуациях и недостаточную конкретизацию потребностей студентов. Исследование заключает, что создание планов уроков с помощью искусственного интеллекта предлагает ряд преимуществ для преподавателей и может потенциально улучшить успеваемость студентов, если используется в сочетании с модификациями и адаптациями со стороны преподавателей. Согласно результатам, преподаватели английского языка как иностранного считают, что такие планы предлагают широкие возможности и могут повысить результаты обучения при условии адаптации и доработки со стороны учителя.

Ключевые слова: искусственный интеллект, английский как иностранный язык, учителя, планы уроков, отношение, Казахстан.

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