Technology Assisted Language Education TALE

Volume 2. Issue 4. December 2024. Pages 97 to 119.

https://doi.org/10.22126/tale.2025.11490.1080 Document Type: Research Paper

Transforming EFL Lesson Planning with 'To Teach AI': Insights from Teachers' Perspectives

Lale Mohamadi[1], Marjan Asadi[2], Rana Taheri[3]

[1] MA student of Management, Isfahan University, Isfahan, Iran, rozmary369369@gmail.com
[2]MA of Applied Linguistics, Tehran University, Tehran, Iran. Otana_as2@yahoo.com
[3]PhD in Curriculum & Instruction, Montana State University-Bozeman, USA
rana.taheri@student.montana.edu

Received: December 08, 2024**; Accepted:** December 30, 2024

Abstract

Artificial Intelligence (AI) is transforming education, but its application in English as a foreign language (EFL) lesson planning requires further investigation. Addressing this gap, this single-case study investigates the potential of "To Teach AI," an advanced AI tool, to enhance lesson planning and personalise learning experiences. The study involved 14 Iranian EFL teachers who participated in a professional development workshop on "AI Integration in Lesson Planning." Semi-structured interviews captured qualitative data on teachers' experiences and perceptions of the platform. Thematic analysis revealed that "To Teach AI" facilitated more effective and efficient lesson planning by enabling teachers to tailor instruction to individual student needs, reduce planning time, and create engaging activities aligned with learning objectives. However, challenges such as the need for teacher training, adequate infrastructure, and addressing concerns about data privacy and over-reliance on technology were also identified. These findings provide valuable insights for EFL educators, teacher trainers, and researchers. The study highlights the potential of AI to transform lesson planning while emphasising the importance of preparing teachers to integrate such tools effectively. This research contributes to a deeper understanding of AI-assisted lesson planning in EFL contexts by addressing both opportunities and challenges.

Keywords:
AI-assisted lesson planning, AI-assisted effective teaching, artificial intelligence (AI), teacher perspective, AI integration

*Corresponding Author: Marjan Asadi. **Email:** otana_as2@yahoo.com

Introduction

Effective lesson planning is a fundamental aspect of EFL teaching. It enables teachers to create captivating and customised learning experiences that fulfil students' specific needs and educational goals (Zazkis et al., 2009). However, numerous teachers encounter challenges in creating successful plans that effectively balance these elements while integrating interactive and personalised approaches (Liyanage & Bartlett, 2010). Recent studies highlight the importance of effective lesson planning in EFL classrooms (Farrell, 2013; Tsui, 2009) and its role in teacher competence (Alghamdy, 2023).

The emergence of artificial intelligence (AI) tools presents a unique opportunity to assist teachers in lesson planning. For example, "To Teach AI" is an advanced AI application designed to assist teachers in creating customised lesson plans tailored to specific student needs and learning goals. These tools have the potential to help generate interactive activities, optimise instructional strategies, and equip teachers with resources for tailored instructional materials (Asadi & Ebadi, 2024; Morris & Hiebert, 2017). However, successful AI integration requires teachers to possess a certain level of AI literacy (Moorhouse, 2024).

Despite the growing use of AI in education, research on its application in EFL teaching primarily focuses on areas such as feedback generation (Kryukova et al., 2024) and chatbot technology (Ebadi & Amini, 2024). While studies acknowledge the potential of AI tools (Alshumaimeri & Alshememry, 2023), there is limited research explicitly examining how AI tools like "To Teach AI" can support the essential task of lesson planning in EFL classrooms. This is a critical gap, as effective lesson planning is a cornerstone of teaching success (Farrell, 2002; Farhang et al., 2023), and leveraging AI for this purpose may significantly enhance instructional practices and student outcomes.

The potential benefits of AI in education extend well beyond lesson planning, offering transformative possibilities across various aspects of teaching and learning. For instance, AI tools such as ChatGPT can streamline grading processes by providing swift assessments of language accuracy, thereby saving teachers significant time and effort (Mizumoto & Eguchi, 2023). Furthermore, AI can enhance classroom management and foster inclusive learning environments by offering personalised strategies that cater to diverse student needs (Zhang & Zhang, 2024). These tools also play a crucial role in advancing digital literacy, particularly in teacher training programs, equipping educators with the skills necessary to navigate and integrate modern technologies effectively (Asadi & Taheri, 2024). Teachers can design more engaging and targeted instructional activities by leveraging AI applications like "To Teach AI" for lesson planning, ultimately improving student outcomes and overall learning experiences.

This study is grounded in a constructivist theoretical framework, which views teaching and learning as dynamic, interactive processes where knowledge is co-

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constructed (Vygotsky, 1978). Additionally, the Technological Pedagogical Content Knowledge (TPACK) framework (Mishra & Koehler, 2006) provides the foundation for exploring the intersection of technology, pedagogy, and content in the effective use of AI tools for lesson planning. Finally, the Diffusion of Innovations theory (Rogers, 2003) examines how teachers perceive and adopt AI tools in their instructional practices. Together, these frameworks enable a comprehensive analysis of the pedagogical benefits and challenges of integrating AI into EFL lesson planning.

By investigating the potential benefits and challenges of AI-assisted lesson planning with "To Teach AI," this study aims to fill the identified gap and provide valuable insights. The findings will enhance instructional practice by promoting AI literacy and equipping teachers with the skills to integrate AI tools into their lesson planning effectively. The following research question guided the study:

> How do EFL teachers perceive the integration of "To Teach AI" in EFL lesson planning?

Literature review

The Importance of Effective Lesson Planning in Adult EFL Learning

This review highlights the essential role of well-designed lesson plans in optimising learning outcomes for adult learners in English as a Second Language (EFL) classrooms. A lesson plan serves as a blueprint that outlines a teacher's intended learning goals for their students. These goals or learning outcomes ultimately determine how the lesson is assessed (Farrell, 2024). As Brown (2001) stated, a lesson plan is a series of exercises on curricular steps that also serve as a means of assessment and lesson preparation. Similarly, Spratt et al. (2005) noted that a lesson plan consists of a series of syllabi that provide a teacher with instructions on what type of learning materials to teach and how to teach them. Pawan (2008) highlighted that a well-designed lesson plan allows teachers to incorporate strategies that consciously support EFL learners, such as providing visual aids, simplifying language, activating prior knowledge, and scaffolded teaching. The lesson plan must be prepared before learning occurs (Emiliasari, 2019).

As noted by Siame (2023), lesson planning gives teachers an overview of what has been taught and what still needs to be addressed. By anticipating potential areas of difficulty, the teacher can plan lessons that gradually introduce new concepts and essential vocabulary while providing students with multiple opportunities to practice and apply their English skills. Careful lesson planning ensures that instruction is focused, purposeful, and responsive to students' needs (Causton-Theoharis et al., 2008). Gulo et al. (2023) emphasised that, especially in English writing classes, teachers must design lessons with structured and logical learning steps to help students achieve their goals. This can include discussions, group tasks, individual tasks, and practical projects. The

education landscape is evolving, driven by a growing emphasis on personalised learning that addresses diverse student needs. As noted by Liang (2024), educators and researchers have promoted instruction responsive to students' individual needs over the past two decades. Inclusive lesson plans, as emphasised by Causton-Theoharis et al. (2008), accommodate this diversity. Moreover, König et al. (2020) pointed out that lesson planning is a critical skill for new teachers, allowing them to integrate technology effectively while addressing individual student needs. Without planning, teachers and classrooms rarely function effectively (Yinger, 1980). As Reed and Michaud (2010) stated, the lesson-planning process also enables educators to assess their understanding of the material.

Effective lesson planning is the foundation for competent EFL teaching for adults. Iqbal et al. (2021) reiterated the importance of well-designed lesson plans for effective teaching and learning. Effective plans serve as a roadmap for instruction and ensure that all activities are aligned with specific learning goals (Farrell & Ashcraft, 2024). This targeted approach allows teachers to prioritise essential skills and knowledge, resulting in deeper understanding and improved language acquisition (Santagata et al., 2007). Beyond outlining goals, lesson plans also anticipate potential student challenges and offer solutions or alternative approaches. This proactive planning ensures a smoother learning experience and minimises confusion (van Diggele et al., 2020). Pang (2016) pointed out that the ability to plan effective lessons is a crucial skill aspiring teachers worldwide must develop during their teacher training programs. Similarly, Imran and Almusharraf (2023) also claim that quality classroom teaching is the key to successful language learning. Creating effective lesson plans is a core responsibility of teachers. These plans should be tailored to what teachers believe their students need to learn. (Seherrie & Mawela, 2021). A structured approach is critical to ensure successful small-group teaching. This means careful preparation and planning beforehand, which is key to a well-organised and effective session (van Diggele et al., 2020).

Despite realising the importance of lesson plans as pedagogical tools, EFL teachers encountered specific challenges in preparing lesson plans. These challenges included the formulation of learning outcomes and objectives, the selection of materials, the design of learning activities, the allocation of time, and the developmental assessment process (Emiliasari, 2019). Most EFL teachers face challenges when creating a lesson plan. By overcoming challenges using a well-designed learning plan, educators can personalise learning experiences to meet the specific needs of each student (van Diggele et al., 2020). Effective lesson plans anticipate students' challenges and offer solutions or alternative approaches. This proactive planning creates a smoother learning experience and minimises confusion for EFL adult students.

The education sector is experiencing a new wave of innovation with the emergence of Artificial Intelligence (AI). Artificial intelligence (AI) utilises machine learning, natural language processing, and neural networks to mimic human intelligence on computers (Hamet & Tremblay, 2017). Like other human endeavours, language teaching relies on constantly selecting materials, activities, and methods (Tsui, 2003). This suggests that AI can potentially influence these crucial decisions in language teaching.

The emergence of generative AI has sparked growing interest in its potential applications in education. As Peterson et al. (2021) pointed out, the 21st century has seen significant teacher-teaching changes, mainly due to technological advances like AI. The effective integration of artificial intelligence (AI) technologies into education (Bai et al., 2024; Barton & Dexter, 2020) can undeniably be influenced by educators' perceptions of their abilities. Educational AI tools help with lesson planning by offering pedagogical frameworks, differentiated activities, and engaging multimedia content. These AI-powered solutions hold immense potential to improve learning by providing students with new and engaging ways to acquire knowledge. Developing lesson plans is a crucial step for teachers, as it allows them to integrate technology (such as AI) to improve teaching effectiveness and address diverse student needs. This process is essential for new teachers, as it helps them build critical teaching skills such as teaching reflection, assessment, and media selection (König et al., 2020). In another study, Gràcia et al. (2023) stated that primary school teachers can improve their efficacy by incorporating artificial intelligence (AI)-based technology into their EFL instruction. Asadi and Taheri (2024) highlighted that integrating AI with a teacher's instructional approach significantly enhances students' learning outcomes in language learning classrooms, demonstrating the potential for improved engagement and personalised feedback.

AI can transform how teachers plan lessons by allowing them to personalise learning experiences and respond even more effectively to diverse student needs (Uysal & Yüksel, 2024). Similarly, Wu (2024) emphasised that lesson planning is time-consuming and that teachers must consider various aspects such as objectives, activities, and teaching methods. He suggests that Large Language Models (LLMs) can offer valuable support by streamlining this process. Wu indicated that LLMs, such as ChatGPT, can act as "idea generators" that can help teachers brainstorm writing prompts and discussion topics aligned with specific learning objectives. This can save teachers valuable time previously spent developing these elements. Additionally, Wu acknowledged the importance of differentiated instruction, where assignments are tailored to students' proficiency levels.

Ong and Annamalai (2024) claimed that technology can be a powerful tool to enhance learning by adding value and effectiveness to instruction. However, many teachers still need more training and support to integrate technology into their classrooms

effectively. Similarly, Asadi and Taheri (2024) suggested that a phased implementation of AI-powered learning support systems in academic environments could bring significant benefits and lead to a more effective learning experience for students. AI-based educational platforms and applications can tailor learning experiences to individual students' needs and knowledge levels. This closer alignment leads to a more efficient learning process for everyone.

Previous studies have mainly focused on AI integration in education. Recent research suggests that AI tools have significant potential to improve the adult EFL lesson-planning process (Uysal & Yüksel, 2024). The existing literature highlights the considerable impact of AI in EFL teaching. However, no research articles on "To Teach AI" integrated lesson planning and its implications for EFL teacher training could be found. Notably, there is a critical gap in the literature and a lack of research on "To Teach AI" integrated lesson planning and its implications for teacher training. This study aims to fill this gap by exploring teachers' perspectives on "Teach AI." By delving deeper into teachers' experiences with "To Teach AI," this research aims to provide practical insights for educators and help them develop these technologies in the future. This in-depth investigation aims to contribute to a deeper understanding of how AI tools can be utilised in the context of EFL classrooms and inform future research on AI-assisted lesson planning in this domain. Understanding how teachers perceive and use "To Teach AI" will be critical to maximising their effectiveness in supporting and enhancing student learning experiences.

Method

Design

This single-case study design investigates the use of "To Teach AI" by a specific group of 14 Iranian EFL teachers who participated in a workshop on "AI Integration in Lesson Planning" as the primary data collection method. Based on Hsieh and Shannon's (2005) work on qualitative content analysis**,** this study employed a method that systematically coded and identified themes within the interview data. This approach allowed for an in-depth exploration and extraction of the interview data's subjective interpretations and recurring patterns. Semi-structured interviews were conducted with all 14 teachers to explore their experiences using To Teach AI for lesson planning. Interview data were analysed thematically to identify recurring themes and gain insights into teachers' perspectives on the benefits and challenges of AI-assisted lesson planning. Thematic analysis of the interviews revealed key themes related to the perceived benefits and challenges of AI-assisted lesson planning. Teachers reported that To Teach AI facilitated clear learning objectives, anticipated challenges, and designed tasks that meet instructional objectives. Qualitative methodologies have been shown to provide a more comprehensive understanding of the intricacies and dynamic processes inherent within

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social phenomena (Attride-Stirling, 2001). This deeper exploration allows researchers to move beyond surface-level observations and delve into the complex interplay of factors that shape these phenomena.

Participants

Fourteen English teachers, aged 21 to 36, including eight females and six males, voluntarily participated in a professional development workshop titled "AI Integration in Lesson Planning." The demographic diversity of the participants is significant as it reflects a varied range of perspectives, experiences, and teaching styles, which enrich the study's findings. The workshop, hosted by a language institute in Iran, consisted of eight sessions and a follow-up interview session. It was designed to address teachers' challenges in lesson planning by equipping them with the necessary skills to utilise artificial intelligence tools and evaluate their effectiveness effectively. The participants were selected based on specific criteria to ensure their suitability for the workshop.

They possessed at least two years of EFL teaching experience, a bachelor's degree or higher in English language teaching or a related field. They had all completed a Teacher Training Course (TTC) before joining the language institute and registering for the current workshop. This ensured that the participant pool consisted of individuals with the requisite qualifications and experience to offer valuable insights regarding the effectiveness of AI tools in lesson planning.

The workshop sessions were conducted by two trainers from the Iranian Language Institute who were certified in CELTA and had experience teaching TTC courses. The selection criteria encompassed the candidates' accessibility, eagerness to engage, and suitable qualifications. Both trainers possessed CELTA certifications, a minimum of five years of teaching experience, and a doctorate in TEFL. Furthermore, one trainer demonstrated a high level of AI literacy. This expertise ensured tailored and high-quality teacher feedback across traditional and AI-based lesson-planning approaches. Trainers were assigned workshop days based on their specific areas of expertise, such as AI literacy or traditional lesson planning. The teachers were given comprehensive information regarding the purpose and procedure of the study. Consent for voluntary participation was obtained by acquiring signed consent forms, ensuring participants were fully informed. In addition, the research followed ethical principles of confidentiality by anonymising all data from participants.

Instruments

Lesson Plan Rubric

A standardised rubric for lesson plans was created using the CELTA lesson planning template by Scott Thornberry (2020) (see Appendix 1). This rubric included all fundamental phases of a lesson plan, comprising:

- **Learning objectives:** Clarity and alignment with student needs and learning outcomes.
- **Needs analysis:** Consideration of prior knowledge, skills, and learning styles.
- **Teaching activities:** Variety and effectiveness in addressing the learning objectives.
- **Assessment:** Integration of formative and summative assessment strategies.
- **Resources and materials:** Suitability and alignment with lesson content.

To Teach AI Application

The intervention in this study utilised the "To Teach AI" **https://to-teach.ai/** application for lesson planning. The researchers discovered that the features of To Teach AI were particularly beneficial in personalising lessons and enhancing engagement. The platform primarily aims to create customised quizzes, exercises, and study materials using Machine Learning algorithms. This feature customises the content based on each student's strengths and weaknesses, enabling teachers to address their individual needs effectively. This AI tool provides multiple features that improve the teaching and learning experience. "To Teach AI" simplifies lesson preparation by automating time-consuming tasks, enabling teachers to allocate more time to instruction (see Fig 1). Moreover, the platform customises learning by adjusting to specific needs and lesson objectives. This ensures that the generated materials are relevant, engaging, and aligned with established educational criteria. Teachers can utilise extensive exercises specific to the subject and enhance them with multimedia resources to accommodate various learning styles. Ultimately, the platform provides exercises in multiple formats, ensuring students' engagement (see Appendix 2). To Teach AI can assist teachers in generating individualised and tailored worksheets that cater to the specific needs of students (see Appendix 3). Additionally, it facilitates the identification of customised worksheets by selectively sorting through a range of subjects, including English, science, math, biology, and others. In addition, teachers can choose the language proficiency level and the specific types of activities to involve students more effectively.

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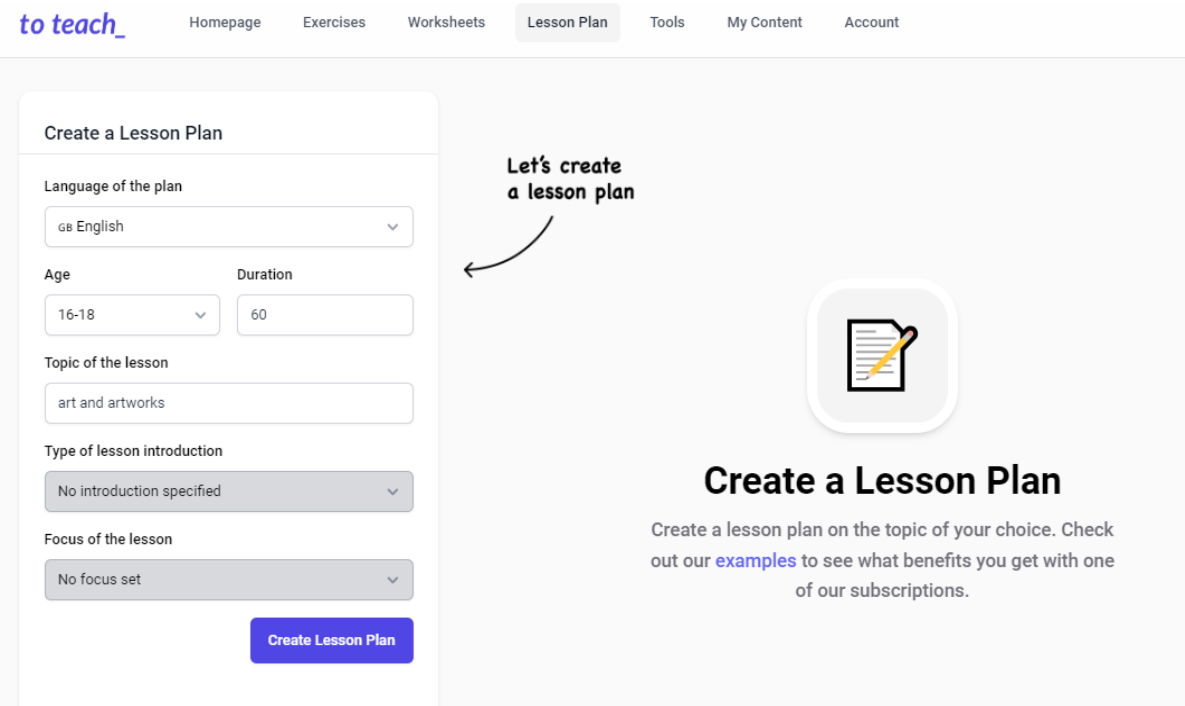
Figure 1

To Teach AI tool to create a lesson plan



Interview

A semi-structured interview protocol was created exclusively for this study, focusing on teachers' experiences with AI-assisted lesson planning using To Teach AI. The interview guide was developed following well-established qualitative research standards, including ensuring ethical considerations, enhancing validity through iterative refinement, and maintaining transparency throughout the research process. The guide was piloted with experienced CELTA holders to test its clarity and appropriateness. During the pilot phase, feedback highlighted the need to refine certain questions for clarity and relevance, such as rephrasing vague prompts to elicit more detailed responses and adjusting the sequencing of questions to improve the interview flow. These changes ensured the final guide was robust and effectively aligned with the study's objectives (see Appendix 4 for interview questions).

Procedure

This single-case study employed a workshop as the primary data collection method. The workshop, titled "AI Integration in Lesson Planning," was held at Lilac Language Academy in Iran and involved all 14 participants (8 females and 6 males, aged 21-33). The workshop consisted of four sessions focusing on various aspects of lesson planning with and without "To Teach AI." Following the workshop**,** semi-structured interviews

were conducted with all participants to explore their experiences using "To Teach AI" for lesson planning and their perceptions of its impact on effectiveness and personalisation.

Traditional Lesson Planning Focus

The first day delved into the fundamentals of effective lesson planning for adult EFL learners. Sessions 1-3 explored the key components, emphasising the importance of clear learning objectives, anticipating challenges with solutions, fostering teacher-learner interaction, and outlining detailed materials and procedures with timings. To establish a baseline for the workshop's impact, Session 4 tasked participants with designing a 60-minute lesson plan focused on a specific passive voice tense for B1-level students. The topic was randomly chosen from Unit 7 on Art in "Solutions Intermediate 3rd." These initial lesson plans served as a preliminary assessment emphasising the passive voice (see Appendix 5). Researchers evaluated them using a standardised rubric based on the CELTA lesson planning template (Thornberry, 2020), focusing on alignment with objectives, student needs, and integration of interactive tasks.

Integration of AI in Lesson Planning

Day two shifted the focus to the potential of AI for improving lesson planning. Session 1 introduced various AI teaching tools and explored their benefits, specifically for adult EFL learners. Sessions 2 and 3 delved into "To Teach AI" by introducing its functionalities and capabilities. The trainer provided a comprehensive explanation of the app's features, including demonstrations of how it generates customised lesson plans. Participants received hands-on training to utilise the app and create their plans.

Building upon the previous day's work, Session 4 tasked participants with designing a new lesson plan (see Appendix 6) on the same topic (passive voice for B1-level students, Unit 7 on Art in *Solutions Intermediate 3rd*). However, this time, they were encouraged to integrate features from "To Teach AI" (see Appendix 7). This allowed for exploring how exposure to the AI tool might have influenced their lesson planning process and their perceived effectiveness in lesson design and personalisation of learning experiences (see Appendix 8). It is important to note that while this study does not provide objective measures of effectiveness, it evaluates perceived effectiveness through participants' reflections and experiences. The workshop concluded with a wrap-up session (Session 5). Semi-structured interviews were conducted with all 14 participants (see Fig 2) to gain insights into the qualitative findings and explore teacher experiences. These interviews focused on their experiences creating lesson plans after the "To Teach AI" training, aiming to understand any perceived changes in their approach, such as improvements in effectiveness or personalisation of learning experiences, following their exposure to the tool.

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Figure 2

Schematic representation of the procedure

Figure 2 presents the schematic representation of the study's procedure, detailing the steps implemented. The figure outlines the two-day workshop for the fourteen EFL teachers, focusing on the impact of "To Teach AI" on their lesson plan quality.

Semi-structured interviews were conducted with 14 experienced EFL teachers to understand their perspectives on integrating AI, particularly "To Teach AI," into their lesson planning practices. These interviews aimed to gather rich qualitative data complementing the qualitative findings. The interviews followed a protocol of eight open-ended questions focused on teachers' perceptions and digital skills related to using AI for lesson planning. Conducted in English in a comfortable setting, the interviews were audio-recorded with consent, transcribed verbatim, and analysed thematically using NVivo software. To ensure the credibility of the findings, member checking was employed. The NVivo software facilitated the data analysis process. The credibility of the interview results was evaluated using member checking, as described by Dörnyei (2007).

The interview transcripts were analysed using thematic analysis, a rigorous and systematic approach to identifying, coding, and interpreting patterns in qualitative data (Attride-Stirling, 2001). The study comprised four sequential steps. Initially, the researchers transcribed the audio recordings. During the second phase, they examined the transcription for interesting characteristics and classified them accordingly. The researchers classified the codes and thoroughly examined and improved them to eliminate duplicate or overlapping themes.

Data analysis

This single-case study employs thematic analysis to analyse the qualitative data collected through semi-structured interviews. Thematic analysis allows for the systematic identification, coding, and interpretation of recurring themes within the interview

transcripts, helping to explore the depth of participants' experiences and perceptions without imposing pre-determined categories (Braun & Clarke, 2006). The rationale for using thematic analysis is grounded in the study's aim to understand teachers' perceptions and experiences with "To Teach AI" in lesson planning, as it is particularly suited to identifying patterns and themes in qualitative data. The analysis process was both inductive and deductive. Initially, the analysis began inductively, with the transcribed interview data being examined line-by-line to identify key concepts, experiences, and perceptions. This open coding process allowed for initial data exploration without preconceived categories, ensuring the themes emerged directly from the data. As the analysis progressed, tentative categories were created to group similar concepts and ideas.

After identifying these initial themes, a deductive approach was adopted. At this stage, the tentative categories were tested against new data from subsequent interviews to check for consistency and to refine the categories. This iterative process continued until saturation was reached, meaning no new information, insights, or themes emerged. At this point, the themes were refined and cross-checked against the data to ensure they accurately reflected the participants' experiences and perceptions. The data analysis also included grouping the initial codes into preliminary themes, representing the participants' core ideas. The themes were then refined through constant comparison to ensure coherence and that the final themes captured the most significant and recurring patterns. Finally, these refined themes were interpreted within the context of the study's research questions, exploring how they contributed to understanding the impact of "To Teach AI" on teachers' lesson planning practices.

Results

Seven key themes were identified through the thematic analysis of the semi-structured interviews with the 14 EFL teachers to answer the research question. As Table 1 indicated, these themes explored the teachers' perceptions of the benefits and challenges of using "To Teach AI" for lesson planning.

This qualitative section investigates teachers' perceptions and experiences with the To Teach AI app for lesson planning in adult EFL classrooms. The analysis identified seven key themes that capture the teachers' perceptions and experiences (Table 1).

Table 1

The theme of teachers' perception of "To Teach AI" integration

Theme	Code	Example
Enhanced learning objectives	• Clear main aims and sub-aims • Focused objectives • Clear personal objectives	"The app has been instrumental in helping me define clear main aims and sub-aims. It provides a comprehensive list of objectives aligned with different skills. For example, the app suggests sub-aims

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		related to structure, grammar, and vocabulary when teaching writing. It has guided me in setting focused objectives that enhance my lesson planning." "The app helps me create lesson goals that are easy to understand and teach, like making sure my students can use passive voice correctly in a story about art."
Anticipating and addressing challenges	• Identifying potential problems • Providing solutions for anticipated challenges • Anticipating planning activities to address difficulties	"It warns me about common student mistakes, such as students' difficulty in understanding different verb tenses, and gives me tips on how to fix it." "The AI tool has been invaluable in identifying potential problems and providing solutions. It offers examples of common difficulties students might face, such as confusion with verb tenses. I have used the app's suggestions to pre-emptively plan activities that address these challenges, ensuring smoother lesson delivery."
Task design and personalisation	• Designing tasks aligned with objectives • Generating a variety of task options • Designing tasks to cater to diverse needs	"The app gives me lots of different activities that match what I need to teach, like games for learning new words, which makes planning a lot easier." "The app has revolutionised my task design process. It generates a wide range of tasks based on the lesson objectives. For instance, the app provides diverse question types and prompts if I'm teaching reading comprehension. I can easily tailor the tasks to meet the specific needs of my students, considering factors like language proficiency or learning styles."
Task selection for effectiveness	• Selecting appropriate tasks from generated options • Enhancing the effectiveness of lessons • Engaging activities and specific examples and activities	"Sometimes the tasks from the app don't fit my lesson perfectly, but I can change them a bit so they work better for what I want to teach." "The AI tool has been beneficial in task selection. It offers a variety of tasks based on the lesson objectives, allowing me to choose the most suitable ones for my students. For example, the app provides different task options like matching exercises, fill-in-the-blanks, and word association when teaching vocabulary.

		This has significantly enhanced the effectiveness of my lessons by providing engaging activities that reinforce learning."
Influence on instructional practices	• Adoption of new teaching strategies • Modification of existing approaches for more effectiveness	"The app has inspired me to explore innovative teaching methods, such as fostering awareness and employing a discovery-based approach that encourages students to uncover the session's focal points." "The app has influenced my instructional practices and prompted me to adopt new teaching strategies. It has expanded my repertoire of task types and instructional approaches. For example, the app's suggestions for gamified activities have encouraged me to incorporate more game-based learning in my lessons. This shift has made my teaching more dynamic and interactive, increasing student involvement and deeper understanding of the content."
Time-saving efficiency	• Time-saving in the lesson plan • Reduced workload and increased productivity • More time for individualised support and professional development	"The app saves me a lot of time planning lessons, so I can spend more time helping my students one-on-one." "Using the "To Teach AI" app has been a tremendous time-saver in lesson planning. The app generates a variety of tasks and resources aligned with my objectives, reducing the time I would otherwise spend searching for or creating materials. This efficiency has lightened my workload and allowed me to invest more time in providing individualised support to students and engaging in professional development activities."
Suggestions for App Improvement	• Customisation options for tasks • Flexibility in modifying and adapting generated tasks • Sharing and collaboration features for educators	"Based on my experience, I would suggest enhancing the customisation options within the app. It would be beneficial to have more flexibility in modifying and adapting the generated tasks to better suit specific classroom contexts and student needs." "I think incorporating a feature that allows teachers to share and exchange their modified tasks or lesson plans could foster collaboration and encourage a

		community of practice among educators using the app."

The findings generally provide valuable insight into the experiences of teachers using the To Teach AI app for adult EFL lesson planning. The app was seen as a valuable tool for formulating clear learning objectives tailored to students' needs. It empowered teachers to anticipate and address potential challenges for students. To Teach AI also played a role in designing tasks that met instructional objectives and addressed diverse student needs. Teachers highlighted the app's ability to generate a variety of tasks, allowing them to select the most effective ones for their classes. The app's adaptability also helped teachers deal with unexpected situations and accommodate students with different learning styles. The analysis also suggests that To Teach AI influenced teachers' teaching practices and encouraged them to adopt or change their teaching strategies, including a discovery-based approach that motivates students to identify the session's key points. Ultimately, the findings emphasise the app's ability to save time, allowing teachers to allocate more time towards offering personalised assistance and participating in professional development activities. Overall, this analysis provides valuable insights into the perception of To Teach AI among teachers and its potential to enhance adult EFL lesson planning and teaching methods.

Discussion

This study explored the impact of "To Teach AI" on EFL lesson planning and teacher perceptions, contributing valuable insights to the growing body of research on AI integration in language education. Key findings indicate that the tool significantly enhanced teacher preparedness, streamlined lesson design, and improved student learning outcomes by aligning lesson objectives with student needs and identifying potential roadblocks. These findings advance the field by demonstrating how AI tools can address time-consuming lesson planning challenges, a common issue in traditional EFL teaching (Wu, 2024). This research highlights the potential of AI to create more efficient, structured, and personalised lesson plans, thereby promoting teacher effectiveness and improving overall classroom experiences.

The study's findings align with existing literature on the importance of well-designed lesson plans in fostering effective EFL teaching (Farrell, 2013; Tsui, 2009), while also introducing new insights into the role AI tools can play in enhancing teacher preparedness and streamlining the planning process. "To Teach AI" was particularly noted for its ability to generate learning objectives closely aligned with student needs. This finding supports Farrell's (2024) emphasis on the importance of responsive lesson plans. The tool's ability to suggest learning activities and adapt to student needs is consistent

with the research by Morris and Hiebert (2017) on the importance of engaging, interactive activities in lesson planning. As highlighted in this study, integrating AI in lesson design suggests that AI can be a transformative tool in EFL teaching, particularly by offering personalised learning experiences and improving student outcomes.

"To Teach AI" empowers teachers to utilise the tool's suggestions to create engaging and effective learning experiences, fostering a more personalised approach (Uysal & Yüksel, 2024). The results also indicated significant time saved during lesson planning, aligning with Wu's (2024) suggestion that AI tools can streamline the process. This allows teachers to dedicate more time to individual student support and professional development, potentially enhancing teacher competence (Alghamdy, 2023). However, the desire for more customisation options reflects the importance of maintaining teacher agency and control over lesson content (Moorhouse, 2024).

The results revealed that teachers had positive attitudes toward using AI in lesson planning. They valued AI as an effective tool for teachers and learners, recognising its potential to facilitate the design of effective lessons tailored to student needs. Furthermore, the results showed that AI supports instruction by providing interactive and differentiated learning experiences, allowing for personalised instruction and catering to diverse student needs. This aligns with previous research highlighting the time-consuming nature of traditional planning (Wu, 2024).

However, there are limitations to this study that must be acknowledged. The single-case design and small sample size limit the generalizability of the findings. Future research should involve a larger, more diverse participant pool to assess the broader applicability of these results. Longitudinal studies could provide more insights into the long-term impact of AI on teaching practices and student learning outcomes. Tracking teacher practices over time through periodic classroom observations and interviews would offer a deeper understanding of sustained changes due to AI integration. Additionally, investigating how ongoing teacher support and professional development affect the effectiveness of AI tools is an area for further exploration. Workshops, mentoring, and online support communities could help educators maximise the potential of AI tools in lesson planning. Furthermore, comparative studies with control groups not using AI-assisted lesson planning would help assess the relative advantages of AI-driven methods versus traditional approaches. This research could provide critical evidence of the specific benefits that AI tools like "To Teach AI" bring to the classroom.

Conclusion

This study has provided valuable insights into the potential of AI tools, specifically "To Teach AI," in transforming EFL lesson planning. The findings indicate that AI can enhance teacher preparedness, streamline lesson design, and improve student learning outcomes by providing personalised, structured lesson plans. The study contributes to the

growing knowledge of AI integration in education, particularly in language learning environments.

However, despite its promising findings, the study also highlights several challenges and limitations. The small sample size and single-case design restrict the generalisation of these results. Future research should focus on larger, more diverse participant groups and longitudinal outcomes tracking. In addition, ongoing teacher support and professional development must be considered to maximise the effectiveness of AI tools. Exploring the role of comparative studies, where control groups do not use AI tools, will be essential to assess the true advantages of AI-assisted lesson planning. For practical applications, the findings suggest that AI tools like "To Teach AI" have the potential to transform the lesson planning process by helping teachers save time, create more engaging activities, and personalise learning experiences. However, effective integration of these tools requires addressing challenges such as teacher learning curves, the need for proper infrastructure, and concerns over data privacy and AI dependence.

Given these implications, recommendations for policy changes are necessary to support the integration of AI in education. Institutions should provide guidelines for teacher training on AI tools, ensure AI systems are customisable to meet individual classroom needs and establish policies to safeguard data privacy. AI can be successfully incorporated into the teaching process by taking these steps, enhancing educational outcomes and supporting teachers in their professional growth.

Funding: This research did not receive a specific grant from public, commercial, or not-for-profit funding agencies.

Declaration of Competing Interest: The authors declare no competing interests.

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Appendix 1

CELTA LESSON PLAN - Please fill in this page for every lesson that you teach **and do a whiteboard plan!**

Name	**Date**	**Week**	**TP No**
Level	**Length**	**Type of Lesson** (Language Focus, Listening Skills etc)	
Class Profile: (e.g. nationalities, weaker/stronger ss etc)			Tutor Comments:
Lesson Aims **Main:** **Subsidiary:**			
Outcomes for Students: By the end of the lesson, the students will have…			
Anticipated Problems: **Solutions**: (management of tasks, potential difficulties, timing problems etc.)			
Personal Objectives:			
Materials:			

Lesson Procedure

Time **Stage name + Aim** **Interaction**	**Procedure** (please write as notes, not a description)	**Tutor Comments**

Appendix 2

https://drive.google.com/file/d/1uJKjPHDnWZLuAUj0xQ1UhpU5IK5UFhAo/view?usp=sharing

Appendix 3

https://drive.google.com/file/d/14M34hzBRBuY8WDDCHhTX85pTVBg0O-Do/view?usp=sharing

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Appendix 4

Interview Questions
1. Did the "To Teach AI" app help you save time during the workshop compared to traditional lesson planning methods?
2. When planning the workshop lesson, how did the app's suggestions for specific examples and activities differ from your initial ideas? Did the app inspire new approaches or save you time finding examples relevant to the chosen topic?
3. During the workshop, when using the "To Teach AI" app to design activities for the chosen topic, how did the app help you generate a variety of specific examples or activities related to the topic? Did the app suggest ways to differentiate the activities to cater to different learning needs or interests?
4. Considering both time saved and the app's contributions to your lesson plan (e.g., specific examples, differentiated activities), how would you describe the impact of "To Teach AI" on your lesson planning process?
5. Would you consider using the "To Teach AI" app for future lesson planning? If so, what functionalities or features of the app would you find most helpful for further development, particularly for saving time and generating specific examples?
6. Have you encountered any limitations or challenges when using the "To Teach AI" app?
7. Can you describe how the "To Teach AI" app assisted you in formulating clear main aims and sub-aims for your lessons?
8. In what ways has the AI tool helped you anticipate potential problems or challenges that students may encounter during your lessons? How have you utilised the app's suggestions for possible solutions?