

EFL Teachers' Perceptions of AI-Integrated English Learning Platforms in Saudi Arabia Within the Context of Vision 2030

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Abstract—This study sought to investigate the perceptions of EFL teachers in Saudi Arabia regarding the benefits, challenges, ethical implications, and institutional support necessary to adopt AI-integrated English learning platforms. Using a quantitative, descriptive survey design, a structured online questionnaire was developed, and data were collected from a convenience sample of 168 EFL teachers in the Kingdom of Saudi Arabia (KSA). The results showed that EFL teachers were cautiously optimistic about adopting AI-integrated platforms and acknowledged their potential benefits. These benefits, however, are tempered by serious concerns that the unethical use of AI might weaken students' critical thinking skills and increase the risk of academic dishonesty. EFL teachers also expressed a strong need for clear institutional support, which includes ethical guidelines, policies and professional development that integrates technical and pedagogical strategies. The study demonstrated that the dimensions of benefit perception differed significantly by years of experience: early-career, proficient, and advanced teachers perceived the benefits more favorably than their expert counterparts. Regarding the other dimensions—challenges, ethics, and institutional support—there were no significant differences from experience. The study highlighted that the educational stakeholders should develop strong governance policies, provide targeted professional development, and implement pilot projects to ensure effective and ethical use of AI-integrated English learning platforms.

Index Terms—artificial intelligence, EFL teachers, AI-integrated platforms, perceptions, Saudi Vision 2030

I. INTRODUCTION

As technology continues to evolve quickly, educational institutions worldwide are moving faster to adopt AI tools that enhance student learning. On the same token, technology in general and AI in particular are effective in offering personalized learning experiences, delivering interactive content, managing and tracking the students' performance, and executing countless tasks (Ahmed, 2024; Kaswan et al., 2024). Thus, AI integration has become one of the key national priorities around the globe in general and in the KSA in particular to empower the graduates with the future capabilities (Elhajji et al., 2020).

In light of the Saudi 2030 Vision, KSA has emphasized modernizing the education system with up-to-date technology to ensure the best outcomes, which will be reflected in the economic prosperity as a form of the knowledge-based economy. The Saudi Vision, launched in 2016, posits that the national transformation is mainly dependent on the modernization of the educational institution and the human capital; it underscores the significance of STEM growth, the development of digital and technological skills, the autonomy of the institutions, and the employment of AI tools in the education infrastructure (Al Saiari et al., 2025).

AI-integrated learning platforms can function as intelligent tutoring systems, intelligent grading systems, and adaptive learning systems that augment the teaching-learning process; more interestingly, many AI tools can be used in order to provide predictive analytics to identify at-risk students. Several recent studies have acknowledged the numerous benefits of Artificial Intelligence (AI) for improving the teaching-learning process. Ouyang et al. (2022) also affirmed the abundant benefits gained from the employment of AI and highlighted how it was deployed to improve education. It is proposed that AI will provide innovation, engagement, and lifelong learning while making learning more enjoyable and cultivating improvement in the learners' academic performance.

On the other hand, perceptions greatly influence the adoption or rejection of AI technologies. When the tools are perceived as useful and easy to use, they are adopted by educators and students, as indicated by the Technology Acceptance Model (Davis, 1989). More critically, Dotan et al. (2024) demonstrated that the implementation success of such tools depends on the perceptions, acceptance, and employment of those on the ground: EFL teachers. Consequently, their perceptions about its best use, benefits, challenges, and ethics shape how efficiently AI can be implemented and utilized in educational institutions. A plethora of established models underlie teachers' perceptions; according to the Technology Acceptance Model, users would adopt AI tools as a form of technology when they perceive that they are useful and easy to use (Davis, 1989). The Unified Theory of Acceptance and Use of Technology (UTAUT) highlights the elements of adopting technology: performance expectancy, effort expectancy, social influence, and facilitating conditions

(Venkatesh et al., 2003). Another relative model of technology perception is Rogers' Diffusion of Innovations, which explains how technologies spread among people and become more common based on relative advantage, compatibility, complexity, and observability (Rogers, 2003).

II. LITERATURE REVIEW

While prior work examines discrete facets of AI adoption in education—such as instructor readiness, implementation barriers, and assessment trustworthiness—there is still a clear gap regarding EFL teachers' perceptions of benefits, challenges, ethical considerations, and required institutional support. This gap warrants a thematic synthesis of recent findings to clarify key knowledge gaps.

A. *AI Benefits in Educational Institutions*

Studies suggest that KSA policymakers, educational stakeholders, EFL teachers, and students recognize AI's potential benefits for teaching and learning, including its use in AI-integrated learning platforms. Al-Zahrani and Alasmari (2024) conducted a large-scale study with 1,100 stakeholders in Saudi higher education and reported generally positive attitudes toward AI. The study also reported perceptions that AI can enhance teaching-learning processes and administrative tasks. The students also showed positive attitudes towards the employment of AI in the teaching-learning process. Similarly, Khodeir et al. (2024) reported that 91.9% of students at Qassim University expressed positive attitudes toward using AI for educational purposes.

AI has been reported to improve teaching quality and learning outcomes. Ahmed (2024) assessed teaching quality in online platforms that use AI applications. Participants reported that perceived online platform quality depends partly on the AI applications used. Shaalan and Ahmad (2024) reported a statistically significant correlation between students' positive perceptions of AI and their linguistic competence development. The implementation of AI-powered instructional activities led to significantly better listening and speaking skills of EFL majors in comparison to the use of traditional approaches, which affirms the effectiveness of AI to promote the development of oracy skills through interactive and supportive learning experiences (Shaalan & Ahmad, 2025b). In summary, AI was commonly perceived as a useful assistant that can support educators and students in completing a range of tasks.

B. *Key Challenges of AI in EFL Education*

Despite the reported benefits, several challenges may hinder the adoption of AI in schools. Firstly, the instructors' skills development is one of the main challenges to the adoption of AI. Alenezi (2024), in a study at Northern Border University, reported a need for instructor support and training to use the Blackboard platform effectively. Accordingly, there is a need to develop technology-related competencies to use these tools effectively for administrative and academic tasks (Alotaibi & Alshehri, 2023). Similarly, students may feel apprehensive about AI-enabled surveillance; such fears ought to be considered by policymakers and developers to support responsible use of AI in education (Aprianto et al., 2024). Another critical point is the AI-integrated decision-making process, which can threaten the equality and the fairness of assessment among students (Aprianto et al., 2024). Shaalan and Ahmad (2025a) conducted a study investigating the necessary procedures to guarantee trustworthy assessment, which might be threatened by the utilization of AI by students. Aprianto et al. (2024) also highlighted institutional infrastructure readiness as a challenge to AI adoption. Many educational institutions adopt legacy management systems, limited capabilities, and resource constraints, which hinder the effective deployment of AI in the teaching-learning process.

C. *Responsible Use of AI in Schools*

Although the responsible use of AI in schools is crucial, ethical implications in education have received comparatively limited attention, despite growing emphasis in the literature. Recent research highlights general implications around AI ethics and reports specific ethical implications expressed by stakeholders regarding the responsible usage of AI. Al-Zahrani and Alasmari (2024), in their research, confirmed that stakeholders have ethical implications related to data privacy, security, and algorithmic bias. This suggests increasing awareness about the importance of having solid governance. Similarly, Aldossary et al. (2024) demonstrated that there is a dire need for developing a system to detect the misuse of generative AI misconduct and plagiarism. Such fears raise concerns about the academic integrity of AI use. The transparency of the AI decision-making process ought to be clear to the readers to foster trust and avoid bias, which might marginalize the students' population and promote standard educational chances among all students regardless of other social or demographic factors (Tirado et al., 2024).

Another significant point: several practical challenges are facing the proper implementation of trustworthy AI use. Data privacy, algorithmic bias, and trustworthiness of data are critical components that require clear procedures and policies for maximizing the intended outcomes. The digital literacy among the users is another concern, as the users' lack of knowledge about these tools and their capabilities might limit the outcomes of these tools, which necessitates training and practical support as well as clear policies for best utilizing these tools (Brown et al., 2025; Shaalan & Ahmad, 2025a; Al Zaidy, 2024).

D. *Critical Support and Resources in the Educational Institutions*

Given the challenges of AI adoption in schools, the literature available asserts that there is a need for considerable institutional support through conferences, seminars, and workshops as a form of professional development. On the other hand, the unavailability of the infrastructure is another significant component that directly impacts the implementation of AI. Alenezi (2024) pinpointed that there is a direct link between the lack of training and the failure to utilize AI tools. Alenezi (2023) showed that resources, known as “*facilitating conditions*,” are needed by educators, not to mention providing access to the right advanced AI tools, attaining technical support when needed, and offering incentives for instructors to motivate them to employ such tools. Such support must be based on institutional strategies; for instance, a “*systematic framework*” (Elhajji et al., 2020) and “*ethical guidelines*” (Al-Zahrani & Alasmari, 2024) are of crucial importance if AI is to be a priority and an integral part of the system that aligns with the ambitious goals of Vision 2030.

Academic integrity and effective AI integration in education are necessary for responsible adoption of such tools (Nikolic et al., 2024). Another item of significance: involving students in developing policy for AI employment can produce widely accepted institutional frameworks (Al Zaidy, 2024).

Although the available literature showed optimism towards adopting AI in the teaching-learning process, such optimism is balanced with significant challenges concerning the dehumanization of the educational process and other ethical considerations. The synthesis of the available literature highlights a knowledge gap addressed by the present research. Some studies investigated the participants’ opinions in a single institution (Alenezi, 2024); some targeted the stakeholder perceptions (Al-Zahrani & Alasmari, 2024).

The current study seeks to explore EFL teachers’ perceptions across a range of educational institutions. While previous studies have broadly documented general attitudes toward AI, this study’s distinct scholarly contribution lies in moving beyond standard perception-based research by mapping these perceptions directly against the socio-economic and human capital modernization goals of Saudi Vision 2030. Furthermore, by isolating the variable of teaching experience, this research provides granular, targeted insights into how different career stages influence technology adoption. Not only does the research tackle the aspects of benefits, challenges, ethical considerations, and academic support, but it also provides a multidimensional baseline of EFL teachers’ perspectives on technological change based on solid theoretical frameworks such as TAM and UTAUT. This contextualized approach enables the formulation of highly specific, evidence-based policy recommendations for institutional support that generic perception studies cannot provide.

III. METHODOLOGY

A. Research Questions

This study seeks to explore EFL teachers’ perceptions of AI-integrated learning platforms. It sheds light on the different aspects related to the perceptions of the benefits, challenges, ethical implications, and institutional support linked to such integration in the KSA context. The study also seeks to generate insights informing policy developments, decision-making, and institutional practice. Thus, finding answers to the following questions is the aim of the current study:

- [1] What are EFL teachers’ perceptions regarding the benefits of AI-integrated learning platforms?
- [2] What challenges do EFL teachers perceive in AI-integrated learning platforms?
- [3] How do EFL teachers perceive the ethical implications of AI-integrated learning platforms?
- [4] To what extent do EFL teachers believe that institutional support influences AI-integrated learning platforms?
- [5] How do years of experience affect EFL teachers’ perceptions of AI-integrated learning platforms?

B. Population and Participants

The study sample consisted of 168 participants who voluntarily took part in the research. In addition, a pilot sample of 43 EFL teachers was used to standardize the research instrument. Their responses were excluded from the main study sample, which completed the final questionnaire.

C. Data Collection Procedures

The present study employed a quantitative descriptive survey design to fulfil the research purpose, namely, identifying the EFL teachers’ perceptions of AI inclusion in learning platforms. The method is widely utilized to allow researchers to explore phenomena, gather, categorize, and interpret data, and provide implications and insights.

The research data were collected through a survey using a structured online questionnaire. The questionnaire was cautiously developed after a thorough review of the literature related to artificial intelligence in education, technology acceptance, and EFL learning platforms. The items were adjusted to properly elicit the intended perspectives from the study participants. The final questionnaire comprised 39 items organized under four main dimensions that operationalize key constructs from the TAM and UTAUT models as follows (Appendix): perceived benefits (aligning with TAM’s Perceived Usefulness and UTAUT’s Performance Expectancy), perceived challenges (reflecting UTAUT’s Effort Expectancy), perceived ethical implications, and perceived necessary institutional support (operationalizing UTAUT’s Facilitating Conditions). Adopting a five-point Likert scale (strongly agree – agree – neutral – disagree – strongly disagree), the questionnaire was distributed using Google Forms to ensure accessibility and efficient data collection.

The content validity of the questionnaire was established by submitting it to five experts in curriculum and instruction, instructional technology, and educational assessment to evaluate the clarity of its language, its alignment with the research objectives, and the soundness of its overall structure. Moreover, the questionnaire was determined to have internal

consistency and reliability through two sources: Firstly, the responses were processed statistically to ensure the internal consistency using the correlation coefficients, which ranged between 0.68 and 0.87, indicating higher levels of internal consistency. More critically, to ensure the reliability of the questionnaire, Cronbach's alpha was calculated, yielding a coefficient of 0.91; thus, robust content validation and high internal consistency were prioritised to ensure methodological rigour.

Data were analyzed using SPSS (Statistical Package for the Social Sciences, version 28). Descriptive statistics, including means, standard deviations, frequencies, and percentages, were computed. Inferential analyses included independent samples t-tests and analysis of variance (ANOVA) to examine differences among groups. Statistical significance was determined based on p-values. Before providing informed consent, participants received sufficient information to make an informed decision about participation. Moreover, they were informed that their participation was entirely voluntary, and their responses would be used only for research purposes.

IV. RESULTS AND DISCUSSION

The data collected from participants' responses were statistically analysed to achieve the study's purpose and provide evidence-based, in-depth answers to the research questions.

A. The Perceived Benefits

To address the first research question, "What are EFL teachers' perceptions regarding the benefits of AI-integrated learning platforms?" The participants' responses were statistically analysed to highlight the patterns of the perceived benefits. The table below displays the perceived benefits of AI-integrated learning platforms arranged according to their relative means.

TABLE 1
PERCEIVED BENEFITS OF AI PLATFORMS IN EFL TEACHING

No	Mean	SD	Level of Agreement	Rank (1–39)	Weighted Mean
Item 4	4.150	0.773	Agree	1	10.31
Item 9	4.114	0.553	Agree	2	10.22
Item 7	4.108	0.659	Agree	3	10.21
Item 3	4.108	0.905	Agree	3	10.21
Item 2	4.090	0.675	Agree	4	10.16
Item 6	4.084	0.605	Agree	5	10.15
Item 5	4.060	0.949	Agree	7	10.09
Item 8	4.030	0.978	Agree	9	10.02
Item 10	3.964	0.702	Agree	12	9.85
Item 1	3.533	1.150	Agree	26	8.78
Overall perceived benefits	4.024	0.831	Agree		

As illustrated in Table 1, the perceived benefits of AI-integrated learning platforms yielded an overall mean of 4.024 (SD = 0.831), indicating that EFL teachers agreed on the positive influence of AI in the learning platforms. The statistical means of the dimension items ranged from 4.150 to 3.533, which displayed generally favourable perceptions of all dimension items. In descending order, participants agreed that "AI-integrated learning platforms improve overall quality of teaching and learning outcomes" (M = 4.150; SD = 0.773; Weighted mean = 10.31; Rank 1), followed by "AI services in the learning platforms can make education easier" (M = 4.114; SD = 0.553; Weighted mean = 10.22; Rank 2). Among the dimension items, the lowest mean perceived benefit was reported for "AI enhances personalized (adaptive) learning experiences" (M = 3.53; SD = 1.15; Rank 26; Weighted mean = 8.78), indicating the least strong and least consensual perception among the perceived benefits represented in the dimension. Overall, there is a favourable baseline attitude toward AI adoption among EFL teachers, strongly confirming the Perceived Usefulness (TAM) and Performance Expectancy (UTAUT) of these platforms in educational settings.

Echoing the results attained, the related literature reveals that AI-integrated learning platforms assist in enhancing performance, engagement, and retention gains that significantly suggest high ratings related to quality improvement, ease of learning, and interactivity (Kulik & Fletcher, 2016; Liu et al., 2025; VanLehn, 2011). For example, in a large-scale implementation, an AI-powered system positively affects learning outcomes compared to traditional MOOC instruction (St-Hilaire et al., 2022). However, there are often gains specific to the context: intelligent tutoring systems perform better when taking into consideration factors like subject matter, instruction quality, and the alignment of intentions with practice (Owoc et al., 2021). On the other hand, the absence of professional development and curricular implementation may result in the inadequacy of attaining the potential benefits of AI-integrated learning platforms. While it is possible to assume that the perceived benefits of AI may equate to sustainable gains in the real world, it ought to be considered that it may not always turn out that way.

B. The Perceived Challenges

To address the second research question, "What challenges do EFL teachers perceive in AI-integrated learning platforms?" The participants' responses were statistically scrutinised to highlight the participants' patterns of perceived

challenges. The table below highlights the perceived challenges of AI integration arranged according to their relative means.

TABLE 2
CHALLENGES OF AI INTEGRATION IN EFL: TEACHERS' PERSPECTIVES

Item No	Mean	SD	Level of Agreement	Rank (1–39)	Weighted Mean
Item 16	3.892	1.047	Agree	15	10.61
Item 15	3.886	1.067	Agree	16	10.59
Item 14	3.829	1.174	Agree	20	10.44
Item 12	3.713	1.076	Agree	21	10.13
Item 19	3.647	1.006	Agree	22	9.94
Item 13	3.587	1.238	Agree	24	9.78
Item 17	3.539	1.063	Agree	23	9.65
Item 11	3.538	1.167	Agree	28	9.64
Item 18	3.529	1.110	Agree	29	9.62
Item 20	3.514	1.403	Agree	30	9.58
Overall Perceived Challenges	3.667	1.139	Agree		

As exhibited in Table 2, the analysis of the perceived obstacles produced an overall mean of 3.67 (SD = 1.14), indicating general agreement that meaningful obstacles exist with AI integration. The item means ranged from 3.89 (highest) to 3.51 (lowest), with weighted means ranging from 10.61 to 9.58 and substantial variation in SDs. The top-ranked items included *"AI tools might reduce critical thinking skills among students if overused"* (M = 3.89; SD = 1.05; Weighted mean = 10.61; Rank 15) and *"I feel a sense of anxiety regarding the increasing integration of AI in education"* (M = 3.89; SD = 1.07; Weighted mean = 10.59; Rank 16) exhibiting notable cognitive and affective concerns. The lowest-ranked concerns included *"The integration of AI increases my workload"* (M = 3.53; SD = 1.11; Rank 29) and *"I am concerned about the potential for AI to replace the teaching jobs"* (M = 3.51; SD = 1.40; Rank = 30), with the latter incorporating the highest variance and the widest range of experiences across EFL teachers. Collectively, item analysis indicates that institutions must recognize and address ethical/cognitive concerns and structural constraints through clear policies, updated infrastructure, and sustained support to enable responsible AI-integrated learning platforms.

Along the same lines, some studies have provided evidence of challenges, including a lack of infrastructure, implementation complexity, poor policies, and institutional concerns, that AI poses a threat to critical thinking and generates anxiety in their professional practice (Owoc et al., 2021). These barriers are similar to the ranked barriers identified by the respondents, including infrastructure gaps and cognitive/affective hesitations. However, some other studies suggest that the programs helped to alleviate these barriers through phasing in implementation, policies and training workshops, suggesting that barriers may not be challenging when institutions provide well-structured support. (Liu et al., 2025; Sajja et al., 2025).

C. The Perceived Ethical Implications

To address the third research question, *"How do EFL teachers perceive the ethical implications of AI-integrated learning platforms?"* The participants' responses were statistically analysed to highlight the participants' patterns of the perceived ethical implications. Table 3 below demonstrates the perceived ethical implications of AI integration arranged according to their relative means.

TABLE 3
EFL TEACHERS' VIEWS ON THE ETHICS OF AI IN TEACHING AND LEARNING

Item No	Mean	SD	Level of Agreement	Rank (1–39)	Weighted Mean
Item 25	3.856	0.801	Agree	19	11.91
Item 24	3.850	1.035	Agree	18	11.89
Item 28	3.838	1.281	Agree	17	11.85
Item 22	3.824	1.161	Agree	14	11.81
Item 23	3.762	1.085	Agree	25	11.62
Item 26	3.603	1.088	Agree	27	11.31
Item 27	3.558	1.117	Agree	31	10.99
Item 21	3.480	1.053	Agree	33	10.75
Item 29	2.610	1.012	Neutral	35	8.06
Overall Perceived Ethical Implications	3.598	1.228	Agree		

As shown in Table 3, regarding the ethical-implications dimension, EFL teachers' mean response was 3.598 (SD = 1.228), and they agreed that there were ethical issues resulting from the use of AI. The mean for the items ranged from 3.856 to 2.610, with standard deviations indicating variable levels of agreement across the items. The highest-ranked ethical issues were *"There is a dire need for developing robust systems to detect AI-generated academic misconduct"* (M = 3.86; SD = 0.80; Weighted mean = 11.91; Rank 19) and *"AI tools make it more difficult to ensure academic integrity and prevent plagiarism"* (M = 3.85; SD = 1.03; Weighted mean = 11.89; Rank 18), confirming that academic integrity is a recognized risk. The lowest mean response was for the item *"AI systems ensure fair and equitable assessment for all students"* (M = 2.61; SD = 1.01; Rank 35; Weighted mean = 8.06), indicating low confidence in AI equity. These results suggest a need for institutional response to develop and implement tools for detecting academic misconduct; update

institutional policies related to intellectual property and data privacy; and provide training for EFL teachers on ethical governance of AI systems.

The research confirms ethical risks that match what has already been found: threats to academic integrity, privacy, bias, and undisclosed decision-making in AI systems (Bittle & El-Gayar, 2025). A systematic review by Balalle and Pannilage (2025) showed that AI not only poses potential risks related to academic misconduct but also offers effective tools for detecting such practices, which aligns with the high mean scores reported for misconduct detection needs.

D. The Perceived Necessary Institutional Support

To address the fourth research question, “*To what extent do EFL teachers believe institutional support influences AI-integrated learning platforms?*”, the participants’ responses were statistically analysed to highlight the participants’ patterns of perceived need for institutional support. The table below demonstrates that the perceived need for institutional support of AI integration is arranged according to its relative means.

TABLE 4
EFL TEACHERS’ PERCEPTIONS OF INSTITUTIONAL SUPPORT FOR AI INTEGRATION

Item No	Mean	SD	Level of Agreement	Rank (1–39)	Weighted Mean
Item 37	4.084	0.867	Agree	5	10.40
Item 31	4.072	0.826	Agree	6	10.37
Item 39	4.042	0.940	Agree	8	10.30
Item 38	4.006	0.854	Agree	10	10.21
Item 30	3.994	0.972	Agree	11	10.18
Item 34	3.916	0.934	Agree	13	9.98
Item 32	3.826	0.994	Agree	20	9.75
Item 35	3.880	0.849	Agree	17	9.88
Item 36	3.874	0.945	Agree	18	9.87
Item 33	3.563	1.039	Agree	26	9.08
Overall Necessary Institutional Support	3.926	0.934	Agree		

As shown in Table 4 above, the institutional-support dimension resulted in a total mean value of 3.92 (SD = 0.934), indicating that strong institutional support is needed for AI integration to be transferred into practice. The items’ means ranged from 4.084 (highest) to 3.563 (lowest), reflecting strong endorsement in some areas alongside noticeable operational shortcomings. The highest ranked perceptions were related to research support and capacity building: “*My institution supports research into the effective and ethical use of AI to support education*” (M = 4.084; SD = 0.867; Weighted mean = 10.40; Rank 5) and “*Professional development programs should focus on both technical skills and pedagogical strategies for AI integration*” (M = 4.07, SD = 0.87; Weighted mean = 10.37; Rank 6). The lowest-ranked practical deficit was “*Reliable technical support is rarely available when I encounter issues with AI-integrated learning platforms*” (M = 3.563; SD = 1.039; Weighted mean = 9.08; Rank 26) and identified a negative operational gap. Overall, EFL teachers prioritise research endorsement, sustained professional development and pilot opportunities, while also signalling the need for explicit ethical guidance, curricular frameworks, incentives for innovation, improved access to advanced tools, and dependable technical support. In the context of the UTAUT framework, these findings underscore that *Facilitating Conditions*, specifically robust infrastructural, policy, and administrative backing, are viewed by educators as absolute prerequisites for translating positive AI perceptions into actual classroom adoption.

The related literature also emphasized the importance of institutional support, research funding, professional development (PD), pilot projects, governance, and technical support (Sajja et al., 2025). Such findings align with the current research findings, including EFL teachers valuing these forms of support. This suggests that even though gaps still exist, some progress is being made (Liu et al., 2025; Sajja et al., 2025). AI has been shown to present challenges to EFL assessment trustworthiness; however, it also provides opportunities for improvement via embracing authentic assessment tools, active learning models and advanced AI detectors (Shalan & Ahmad, 2025a).

E. EFL Teachers’ Perceptions of AI by Experience

To answer the fifth research question underscoring, “*How do years of experience affect EFL teachers’ perceptions of AI-integrated learning platforms?*” The participants’ responses were statistically analysed using a suitable statistical technique. Responses provided were then scored by determining four composite means (benefits, challenges, ethical implications, institutional support) built from the questionnaire items; the respondents were categorized by years of experience (early-career – proficient – advanced – expert) (OECD, 2019). A one-way ANOVA was used to test for mean differences across the years of experience for each dimension; effect size is reported as η^2 , with significance as $p < .05$. The following table shows the participants’ perceptions about AI based on years of experience.

TABLE 5
DIFFERENCES IN AI-RELATED PERCEPTIONS BY YEARS OF EXPERIENCE (N = 168)

Dimension	Early-career (3-5y) (N=9) Mean (SD)	Proficient (6-10y) (N=100) Mean (SD)	Advanced (11-15) (N=21) Mean (SD)	Expert (16+) (N=38) Mean (SD)	F (df)	p	η^2
Benefits	4.20 (0.00)	4.09 (0.57)	4.16 (0.68)	3.74 (0.45)	4.56 (3,16)	.004	.077
Challenges	3.58 (0.85)	3.66 (0.86)	3.70 (0.84)	3.77 (0.79)	0.22 (3,16)	.883	.004
Ethical implications	4.10 (0.44)	3.94 (0.63)	4.06 (0.56)	3.99 (0.59)	0.34 (3,16)	.710	.006
Institutional support	3.65 (0.98)	3.95 (0.59)	4.02 (0.91)	3.77 (0.68)	0.73 (3,16)	.536	.013

With respect to years of experience, only perceived benefits showed a statistically significant difference, $F(3, 16) = 4.56$, $p = .004$, $\eta^2 = .077$. Pairwise (Tukey HSD) comparisons clarified the specific differences: proficient and advanced teachers differed significantly from expert teachers ($p < .05$). For the other three dimensions (challenges, ethical implications, institutional support), there were no significant differences across ranks (all $p > .05$). Subsequently, years of experience matters for perceived benefits (small to moderate effect), there are no differences across years of experience for the other dimensions, those concerns, and perceptions of support are somewhat generalizable across years of experience.

V. CONCLUSIONS

EFL teachers generally perceive AI in learning environments positively (overall benefits $M = 4.024$), but they also report concerns about ethics, infrastructure, and capacity (overall challenges $M = 3.667$; ethical implications $M = 3.598$; institutional support $M = 3.92$). This mixed but mostly positive view aligns with existing evidence that AI-integrated learning platforms are capable of substantial learning gains if well implemented. Substantial evidence on learning platforms shows moderate to large gains in achievement when compared to traditional instruction, which may explain why EFL teachers rated *"improves overall quality"* and *"makes learning easier"* as some of their greatest perceived benefits. However, the effectiveness of AI-integrated learning platforms depends on the alignment between system design, curriculum objectives, and the fidelity of implementation (Kulik & Fletcher, 2016; VanLehn, 2011). Consequently, it can be concluded that the positive perceptions among EFL teachers are encouraging; however, the positive perceptions do not go far enough: achieving learning gains requires thoughtful instructional design and locally grounded evaluation (Kulik & Fletcher, 2016; VanLehn, 2011).

Concerns about academic integrity, data privacy, explainability, and bias are ever-present in the data provided and reflect broader findings in the field. The literature indicates that when generative tools are available, the risk of academic misconduct increases. To mitigate this concern, the literature emphasizes detection, clear policies, and pedagogical adaptation rather than banning the tools (Bittle & El-Gayar, 2025). Similarly, reviews of algorithmic bias indicate that educational algorithms (e.g., predictive analytics and automated assessment) can reproduce or amplify inequities unless equity is addressed at both the model-design and institutional levels (Baker & Hawn, 2021). When woven together, these threads of literature help explain why respondents prioritized ethical implications.

Institutional support was a critical indicator in the discovered results (overall support $M = 3.92$), with EFL teachers singling out research support, professional development, piloting, and solid technical support. This pattern corroborates prior syntheses that argue that the field must attend to innovation, governance, and building capacity (Zawacki-Richter et al., 2019). In short, EFL teachers' use of AI is more likely when leaders invest in the necessary scaffolding (policy, training, tools, and evaluation) to translate perceived benefits into classroom practice.

In terms of the demographic variables' effect on the results attained, only perceived benefits differed by experience: expert teachers rated the benefits of generative AI significantly lower than early-career, proficient, and advanced teachers. This may result from expert teachers being more hesitant due to their experience with student routines or higher opportunity costs. Perception of challenges, ethics, and institutional support did not differ by experience, which suggests some consistency in concern. At the end of the day, the adoption of generative AI may be more about institutional culture, training, and resources than the number of years of experience of teachers.

VI. PEDAGOGICAL AND POLICY IMPLICATIONS

The data demonstrate that positive attitudes alone are insufficient for meaningful technological integration; rather, the realization of AI's potential is heavily dependent on specific facilitating conditions. To convert the theoretical promise of AI into equitable, practical classroom benefits, educational institutions must prioritize four key areas. First, a phased approach is needed, with small discipline-linked pilots and robust evaluation: measure outcomes using aligned assessments and collect qualitative feedback, while scaling up only features that have evidence of pedagogical advantage (Kulik & Fletcher, 2016; VanLehn, 2011). Second, a clear AI governance and ethics policy ought to be created and communicated, addressing academic honesty, intellectual property rights, student data privacy and acceptable use, and operational procedures for audit review, incident response, and regular model-bias review (Baker & Hawn, 2021; Bittle & El-Gayar, 2025). Third, ongoing professional development that equips EFL teachers with technical expertise and instructional design knowledge can mitigate anxiety and enhance perceived usefulness and value, thereby promoting the

transformation of positive attitudes into effective instructional practice (Zawacki-Richter et al., 2019). Fourth, securing infrastructure and technical support as well as providing incentives (release time, small grants, recognition) for EFL teachers might have a positive impact on the overall outcomes.

Finally, it is recommended that assessments be redesigned to focus on authentic, process/product, and higher-order tasks such as portfolios, oral examinations, and project work, which are less vulnerable to exploitation by generative systems and better aligned to learning outcomes (Bittle & El-Gayar, 2025). Overall, the results indicate a fertile readiness among EFL teachers to embrace AI, but there is also responsibility: institutions need to put in place, along with promising technologies, governance, training, and evaluative rigor, so that the benefits become real and equitable. Evidence from AI-integrated learning platforms, literature about the use of AI across various educational contexts, and evidence on algorithmic bias all call for deeply pedagogical deployments rather than rapid, haphazard ones (Baker & Hawn, 2021; Bittle & El-Gayar, 2025; Kulik & Fletcher, 2016; VanLehn, 2011; Zawacki-Richter et al., 2019).

Overall, EFL teachers demonstrate a cautiously optimistic attitude toward incorporating artificial intelligence into learning environments: respondents were aware of clear pedagogical and operational value (better teaching, more interaction, efficiencies in administration) but at the same time expressed important concerns about the related ethical considerations, infrastructure, and capacity. The data show that the positive attitudes themselves are not a guarantee of effective or equitable implementation; rather, the readiness of the institution, for example, through policy, technical infrastructure, professional development, pilot assessment, and governance, will make the difference in whether perceived benefits lead to observable learning outcomes.

Practically, the findings identify three interrelated priorities for education stakeholders. First, implementation should be phased and evidence-based, beginning with small-scale pilot projects tailored to specific disciplines and rigorously evaluated to establish their pedagogical value before wider adoption. Second, develop a robust governance framework that addresses academic integrity, data privacy, ownership of intellectual property, algorithmic fairness, and explainability, and align that framework with operational instruments. Third, invest in sustainable capacity-building and technical support, including targeted professional learning that links technical fluency with instructional design, creating sandbox environments for exploration.

To address the limitations of convenience sampling in this exploratory study, future research should employ randomized sampling methods and utilize advanced predictive analytics, such as structural equation modeling (SEM) or multiple regression, to examine the causal relationships between these dimensions. Future research should use long-term studies to examine how AI-based teaching affects students' learning, memory, and academic progress over several semesters. It is also important to study how different types of professional training, such as workshops, coaching, and micro-credentials, help English language teachers improve their technology skills. Researchers should also explore new assessment methods, such as portfolios, projects, and oral exams, and compare them with approaches that only focus on detecting AI use. These methods may help maintain fairness and academic quality in the age of generative AI. In addition, future studies should examine how students use AI in their learning and daily study tasks. Researchers should also investigate students' attitudes toward AI, including their views about its usefulness and fairness. Using simple data analysis and focus group discussions can help provide a clearer picture of students' experiences with AI in education.

APPENDIX

EFL Teachers' Perceptions of AI-Integrated English Learning Platforms in Saudi Arabia Within the Context of Vision 2030

No.	Statement	1	2	3	4	5
Section II: The Perceived Benefits						
1.	AI-integrated learning platforms enhance personalised (adaptive) learning experiences for students.					
2.	AI tools make the learning process content more interactive and engaging.					
3.	AI helps track and manage student performance effectively.					
4.	AI-integrated learning platforms improve the overall quality of teaching and learning outcomes.					
5.	AI helps automate routine administrative tasks (e.g., grading, attendance), saving time and effort.					
6.	AI tools facilitate the development of digital and technological skills among students.					
7.	Using AI in learning platforms supports the development goals in light of the Saudi Vision 2030.					
8.	AI can act as an intelligent tutoring system, augmenting educational efforts.					
9.	AI services in the learning platforms can make education easier.					
10.	AI has a clear positive impact on students' engagement and understanding.					
Section III: The Perceived Challenges						
11.	There is a significant skill gap among EFL teachers in effectively utilizing AI tools.					
12.	Current institutional infrastructure (e.g., internet, hardware, applications) is insufficient for effective AI integration.					
13.	The complexity of integrating AI tools into existing learning platforms is a major obstacle.					
14.	Over-reliance on AI may lead to the dehumanization of the educational process.					
15.	I feel a sense of anxiety regarding the increasing integration of AI in education.					
16.	AI tools might reduce critical thinking skills in students if overused.					
17.	Keeping up with the rapid advancements in AI technology is challenging for EFL teachers.					
18.	The integration of AI in learning platforms increases the workload.					
19.	There is a lack of clear institutional policies regarding the use of AI in teaching and learning.					
20.	I am concerned about the potential for AI to replace teaching jobs.					
Section IV: Ethical Considerations						
No.	Statement	1	2	3	4	5
21.	I am concerned about the privacy of student data when AI is used in learning platforms.					
22.	AI systems ensure adequate protection for the security of personal and academic information.					
23.	I am concerned that AI algorithms in learning platforms might exhibit bias against certain student groups.					
24.	AI tools make it more difficult to ensure academic integrity and prevent plagiarism.					
25.	There is a dire need for developing robust systems to detect AI-generated academic misconduct.					
26.	It is often unclear how AI systems make decisions that impact student learning and assessment.					
27.	It is often unclear how AI systems make decisions related to student assessment and grading.					
28.	I am concerned about intellectual property rights when AI is involved in content creation.					
29.	AI systems ensure fair and equitable assessment for all students.					
Section V: Institutional Support						
30.	My institution provides adequate training and workshops on how to use AI effectively in teaching.					
31.	Professional development programs should focus on both technical skills and pedagogical strategies for AI integration.					
32.	My institution provides access to necessary advanced AI tools and software for academic purposes.					
33.	Reliable technical support is readily available when I encounter issues with AI in learning platforms.					
34.	My institution has clear ethical guidelines for the use of AI in teaching and learning.					
35.	There is a systematic framework in place for integrating AI into the curriculum.					
36.	My institution offers incentives (e.g., funding, recognition) for EFL teachers who innovate with AI in their teaching.					
37.	My institution actively supports research into the effective and ethical use of AI in education.					
38.	Opportunities are provided to experiment with AI tools before their full-scale implementation.					
39.	The education administration actively promotes the responsible and effective use of AI in learning platforms.					

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