FOSTERING EFL STUDENTS' ACADEMIC LITERACY: STUDENTS' PERCEPTION USING ELICIT AI

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ABSTRACT Elicit AI is an artificial intelligence–powered research assistant designed to help users locate, evaluate, and synthesize scholarly sources efficiently. As the use of AI tools in higher education continues to expand, there remains limited empirical research on how such tools are perceived and utilized by English as a Foreign Language (EFL) students, particularly in supporting academic literacy skills such as sourcing and managing references for thesis writing. Addressing this gap, the present study examines English Education students' perceptions of Elicit AI as a tool for enhancing academic literacy. Using a mixed-method design, data were collected from 21 sixth-semester students through questionnaires and interviews. Results show that 75% of students perceive Elicit AI as useful, 82% find its feedback effective, and 67% report an increase in motivation and engagement. While descriptive data suggest gender neutrality, One-Way ANOVA reveals a significant difference between male and female students. These findings highlight Elicit AI's potential to foster academic literacy and engagement in EFL contexts. Limitations include the small sample size and reliance on self-reported data. Future research should investigate broader demographics and curriculum-level strategies for the equitable and ethical integration of AI in language education. Overall, Elicit AI demonstrates strong potential as a supplementary tool for fostering academic literacy and supporting students' engagement in higher education.

Keywords: academic literacy, Elicit AI, gender differences, students' perception

INTRODUCTION

Over the past decade, the global educational landscape has undergone a profound transformation, largely driven by the accelerated integration of digital technologies into pedagogical practices. Among these innovations, Artificial Intelligence (AI) has emerged as a disruptive force with the potential to redefine literacy education at both conceptual and practical levels (Lee et al., 2025; Luckin et al., 2016). Literacy, traditionally conceived as the ability to read and write, now encompasses a broader spectrum of competencies, including critical analysis, evaluative reasoning, and the capacity to engage meaningfully with multimodal information sources (Guerrero & Sjöström, 2025; Savage, 2022). In an era characterized by rapid sociotechnical change, understanding the role of AI in fostering these expanded dimensions of literacy is not merely desirable but imperative.

Existing research highlights AI's capacity to support personalized learning and adaptive feedback (Hu et al., 2025; Woolf, 2010). For instance, research indicates that AI can enhance learner autonomy and engagement via individualized content delivery (Fortuna et al., 2025). Likewise, AI-based tools have been associated with improved learning outcomes across various educational settings (Dong et al., 2025). However, studies focusing specifically on AI-driven interventions for academic literacy, particularly in English as a Foreign Language (EFL) setting remain scarce. Most prior research has examined technology acceptance in broader educational technologies rather than AI applications tailored to literacy development (Chen et al., 2025; Davis, 1989). This gap is critical because students' perceptions of usefulness, ease of use, and motivational dynamics significantly influence adoption and learning outcomes (G. C. et al., 2024; Ryan & Deci, 2020). Consequently, interrogating these perceptions is essential for informing the design and implementation of AI-enhanced literacy programs that are both pedagogically sound and contextually responsive (Sulistyanto et al., 2024).

Within this context, Elicit AI represents a promising technological paradigm designed to optimize learning experiences through adaptive feedback and personalized content delivery (Boob-Engel, 2025). By leveraging data-driven insights, Elicit AI dynamically calibrates

instructional inputs to align with individual learners' cognitive profiles and preferences, fostering autonomy and intrinsic motivation (Bora, 2025; Dabbagh & Kitsantas, 2012). Despite its theoretical and practical promise, empirical evidence on learners' perceptions of Elicit AI in academic literacy development is limited. Therefore, the present study addresses this research gap by examining English Education students' perceptions of Elicit AI as a supplementary tool for sourcing references and improving academic writing skills. The findings are expected to inform the design of AI-enhanced literacy programs that are pedagogically sound, contextually responsive, and equitable for diverse learners.

Grounded in the Technology Acceptance Model (Davis, 1989) Students' perceptions of usefulness and ease of use are critical determinants of their willingness to adopt AI-mediated learning tools. Similarly, Self-Determination Theory (Ryan & Deci, 2020) underscores the role of autonomy and competence in sustaining motivation, which personalized AI systems such as Elicit AI aim to foster. However, existing research has predominantly examined these constructs in the context of general educational technologies rather than AI-driven literacy interventions. This theoretical gap reinforces the need for empirical inquiry into how learners interpret and negotiate the integration of AI within literacy instruction, thereby situating the present study at the intersection of technology acceptance, motivational dynamics, and personalized learning frameworks.

Against this backdrop, the present study seeks to examine students' perceptions of Elicit AI as a tool for literacy development. Employing a mixed-methods approach that integrates qualitative and quantitative analyses, the research aims to generate nuanced insights into learners' experiences, preferences, and apprehensions concerning AI-mediated instruction. The findings are expected to contribute to a more sophisticated understanding of how AI can be effectively operationalized within literacy pedagogy, thereby offering actionable implications for educators, policymakers, and technology developers. By foregrounding the learner perspective, this study aspires to advance equitable, inclusive, and future-ready literacy practices in an increasingly digitalized educational ecosystem.

LITERATURE REVIEW

The Concept of Literacy in English as a Foreign Language (EFL) Learning

Literacy within the context of EFL has evolved beyond the mechanical ability to read and write, encompassing a more complex and multidimensional understanding. Suharni et al (2024) conceptualizes literacy as a socio-cultural practice involving interpretation, collaboration, and the purposeful use of language within specific contexts. In EFL instruction, literacy entails learners' ability to comprehend, critically evaluate, and produce texts effectively in English (Kim & Zagata, 2024).

Previous studies by Ika Sari et al (2024) underscore the growing importance of digital literacy as an integral component of language literacy. Digital literacy extends beyond mere technological proficiency; it encompasses the ability to locate, evaluate, create, and communicate information through digital platforms, which increasingly includes competence in utilizing AI-based tools such as Elicit AI. Consequently, fostering literacy among EFL learners in the contemporary era necessitates equipping them with resources and strategies that support digital literacy development (Zakir et al., 2025). This approach ensures that learners are not only linguistically competent but also capable of navigating and leveraging technology to engage meaningfully with information in diverse communicative environments (Xia et al., 2024).

The theoretical underpinnings of digital literacy in EFL are closely aligned with the Multiliteracies Framework proposed by Nabhan & Habók (2025), which emphasizes the need for learners to engage with multiple modes of meaning-making in technologically mediated contexts. Similarly, the European Digital Competence Framework (DigComp) provides a structured approach to developing skills in information processing, communication, content creation, and problem-solving within digital environments. These frameworks highlight that

literacy in the 21st century is inherently multimodal and technologically embedded, requiring pedagogical practices that integrate linguistic, cognitive, and digital competencies (Rioseco-pais & Silva-quiroz, 2024). In this regard, AI-driven tools such as Elicit AI can serve as catalysts for operationalizing these theoretical principles by enabling personalized, interactive, and context-sensitive learning experiences.

Artificial Intelligence (AI) Technology in Language Education

The integration of Artificial Intelligence (AI) into language education has introduced a new paradigm characterized by personalization and adaptability. AI refers to systems or machines that emulate human intelligence to perform tasks and iteratively improve their performance based on accumulated data (Collins et al., 2021; E. Davis et al., 2016). Within the domain of EFL, AI applications have been deployed in various forms, including intelligent tutoring systems that provide individualized instruction and feedback (Chassignol et al., 2018), automated writing evaluation tools such as Grammarly and Turnitin that offer scoring and corrective suggestions, and conversational agents or chatbots designed to enhance speaking and interaction skills. Additionally, AI-powered research tools like Elicit AI have been developed to support academic inquiry by summarizing articles, generating ideas, and identifying relevant literature. Collectively, these tools are believed to foster learner autonomy, broaden access to information, and create more engaging and interactive learning experiences (Kovari, 2025).

Recent theoretical perspectives on AI integration in education emphasize models such as the ISAR framework, which conceptualizes AI's role in learning through inversion, substitution, augmentation, and redefinition of instructional practices (Bauer et al., 2025). Similarly, the C.H.A.T.S. model positions AI-driven conversational agents within socio-constructivist and connectivism paradigms, promoting authentic communication and learner agency in language learning (Abdallah, 2025). Recent research also highlights the development of AI competency frameworks that integrate knowledge, skills, attitudes, and values to enable informed, ethical, and agency-driven use of AI in education (Filo et al., 2024). These frameworks advocate for learner autonomy, critical thinking, and responsible engagement with AI tools, ensuring that technology serves as a catalyst for innovation rather than a passive instrument of content delivery.

Students' Perceptions of Technology Use in Learning

Students' perceptions constitute a critical factor influencing the successful adoption of technology in educational contexts. According to the Technology Acceptance Model (TAM) proposed by Davis (1989) perceived usefulness and perceived ease of use are two primary determinants shaping users' acceptance of technological systems. These constructs remain highly relevant in understanding learners' engagement with emerging educational technologies.

Empirical studies on students' perceptions of AI-assisted tools in EFL contexts generally report positive outcomes (Yuan & Liu, 2025). Learners perceive AI-based applications such as Automated Writing Evaluation (AWE) systems as beneficial for improving writing quality and enhancing grammatical awareness (Wei et al., 2023). Recent studies on Grammarly demonstrate that students perceive it as an effective tool for improving grammatical accuracy, sentence structure, and overall writing quality (Yusuf et al., 2025). The detailed feedback provided by Grammarly not only helps learners identify and correct errors but also fosters greater confidence and autonomy in writing tasks (Maypida et al., 2024).

Despite its pedagogical benefits, integrating AI into language education raises significant ethical and instructional concerns. These include issues of data privacy, algorithmic bias, decreased learner autonomy, and academic integrity, as well as the risk of diminishing critical and creative thinking skills when students become overly dependent on AI tools (Aljabr & Al-Ahdal, 2024; Sulistyanto & Prayoga, 2025). Such challenges underscore the need to

explore students' perceptions of specific AI applications like Elicit AI to ensure that technology adoption promotes responsible use, safeguards ethical standards, and supports meaningful learning experiences.

Elicit AI as a Research and Academic Literacy Tool

Elicit AI is a research platform that leverages large language models (LLMs), such as GPT, to assist researchers and students in academic tasks. Unlike traditional search engines, Elicit interprets queries expressed in natural language and retrieves answers by analyzing academic databases like Semantic Scholar (Whitfield & Hofmann, 2023). Its core functionalities include summarizing findings from multiple scholarly articles, mapping concepts and supporting brainstorming for research ideas, extracting specific data such as methodologies or results from collections of papers, and identifying relevant literature that might otherwise be overlooked in manual searches.

Recent evaluations underscore Elicit AI's potential to accelerate evidence synthesis and academic writing through high-precision searches and user-friendly design, while highlighting its limitations for comprehensive systematic reviews. In a four-case evaluation using Elicit Pro's Review mode, average sensitivity was 39.5% (25.5–69.2%) with precision at 41.8%, compared to 7.55% in traditional searches, indicating its utility for preliminary searches, seed-paper discovery, and strategy testing rather than as a primary search method (Lau & Golder, 2025). Elicit also surfaced additional eligible studies across domains, yet limitations were documented in the transparency of the "top-500" selection, inconsistent application of inclusion criteria, duplicate handling, and threshold scoring, all of which constrain reproducibility required by SR standards. Performance varied by topic, with pharmacology reviews achieving higher sensitivity (69.2%) than public health (25–28%), suggesting stronger results when PICO structures are well-defined. Complementary evidence from generative AI research highlights persistent issues of hallucination, inconsistency, and relevance even with augmentations such as browsing and plugins, underscoring the need for human oversight (Yip et al., 2025).

Beyond systematic reviews, practical training studies demonstrate Elicit's usability and pedagogical value. A workshop involving 93 biology education students reported high ease of use, with 76 participants rating the application as "very easy" and 78 indicating that accessing information was highly convenient; most participants successfully exported metadata to reference managers (Hudaa et al., 2022). Students appreciated Elicit's web-based interface, filtering options for recent literature, and the ability to streamline literature review tasks, reducing reliance on physical libraries and mitigating delays in thesis completion. Minor challenges such as account registration errors (5%) and verification issues (7%) were noted but did not impede overall adoption. These findings position Elicit as a powerful scaffolding tool for novice researchers and EFL learners, lowering cognitive load in navigating complex academic texts while promoting ethical research practices. Accordingly, Elicit is best deployed as a supplementary resource that enhances precision and efficiency, while rigorous human-led methods safeguard completeness and methodological integrity (Bernard et al., 2025).

In the context of EFL literacy, Elicit AI can reduce the cognitive burden associated with processing complex English academic texts, enabling learners to concentrate on conceptual understanding, information synthesis, and argument construction skills that form the foundation of academic literacy.

Motivation, Engagement, and Comparative Approaches in EFL Learning

Motivation and engagement are widely recognized as critical determinants of successful language learning. Self-Determination Theory posits that intrinsic motivation driven by internal interest and personal value is a strong predictor of deep learning outcomes (Ryan & Deci, 2020). Engagement, as conceptualized by (Fredricks et al., 2004), encompasses

behavioral, emotional, and cognitive dimensions, all of which contribute to sustained participation and meaningful learning experiences.

Emerging evidence suggests that technology, including AI-based tools, can enhance both motivation and engagement by providing interactive, personalized, and authentic learning environments. AI-driven platforms offer adaptive feedback, individualized content, and real-time support, which collectively foster learner autonomy and reduce cognitive overload; factors closely linked to intrinsic motivation and cognitive engagement (Quan, 2025). Comparative studies between technology-mediated and traditional approaches consistently indicate that learners perceive technology-enhanced instruction as more engaging and relevant to their needs, although its effectiveness depends heavily on thoughtful pedagogical design and integration (Panagiotidis et al., 2023; Thuan, 2021).

In the context of EFL education, these findings underscore the potential of AI tools not only to increase learner motivation and engagement but also to support higher-order academic skills such as critical reading and argument construction. When implemented strategically, AI can serve as a scaffolding mechanism that complements human instruction, thereby promoting deeper learning and sustained engagement.

RESEARCH METHODS

Research Design and Settings

This study adopts a mixed-method approach, combining quantitative and qualitative methodologies within a case study framework, and employs surveys and interviews as the primary instruments for data collection (Creswell et al., 2017; Yin, 2018). The research is conducted at Universitas Islam Kadiri (UNISKA) and involves sixth-semester students of the Faculty of Teacher Training and Education, majoring in English Language Education, who are preparing to undertake their final thesis and enrolled in the Quantitative Research course during the even semester of the 2024/2025 academic year. The total respondents were 21 students, with the aim of enhancing their literacy skills in sourcing references for their final thesis.

Data Collection Technique and Instruments

Quantitative data

Quantitative data were collected through an online questionnaire administered via Google Forms to 21 sixth-semester students enrolled in a Quantitative Research course in the English Language Education program. The instrument comprised 18 items organized into six indicators: (1) students' perceptions of using Elicit AI, (2) motivation and engagement, (3) challenges in using Elicit AI, (4) evaluation of Elicit AI feedback, (5) demographic information (gender), and (6) comparison between Elicit-supported learning and traditional approaches. There are three items per indicator. All items used a four-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree). The questionnaire items were adapted from established theoretical constructs in AI-supported learning and technology integration (Ryan & Deci, 2020; Snow, 2010). An example item from the first indicator is: "I feel that Elicit AI helps me understand the learning materials better." Students completed the questionnaire independently and electronically during scheduled class time.

Qualitative data

To enrich and contextualize the survey findings, in-depth, semi-structured interviews were conducted with three purposively selected participants representing the broader respondent group. Interviews focused on students' experiences when using Elicit AI for sourcing references and developing academic literacy (e.g., perception using Elicit AI, motivation and engagement, practical constraints, feedback quality, gender differences, and comparison between Elicit AI and traditional teaching). Each interview was conducted individually, audio-recorded with participants' consent, and later transcribed verbatim for analysis

Instrument validity and reliability

Content validity was established via expert judgment by two lecturers specializing in AI-enhanced pedagogy, who reviewed item clarity, relevance, and alignment with the target constructs. Construct validity was examined using empirical data (results provided in the table 1), and the instrument demonstrated excellent internal consistency, with Cronbach's alpha = 0.916, indicating that the items consistently measured the intended constructs across the scale.

Table 1. Validity of Questionnaire

No.	R-count	Sig. (2-tailed)	Note
1.	0.780	0.000	Valid
2.	0.818	0.000	Valid
3.	0.490	0.024	Valid
4.	0.656	0.001	Valid
5.	0.535	0.013	Valid
6.	0.484	0.026	Valid
7.	0.729	0.000	Valid
8.	0.483	0.039	Valid
9.	0.702	0.000	Valid
10.	0.604	0.004	Valid
11.	0.619	0.003	Valid
12.	0.638	0.002	Valid
13.	0.602	0.004	Valid
14.	0.527	0.014	Valid
15.	0.716	0.000	Valid
16.	0.876	0.000	Valid
17.	0.499	0.021	Valid
18.	0.806	0.000	Valid

Ethical considerations

All participants provided informed consent prior to data collection. Participation was voluntary, and responses were kept confidential and analyzed in aggregate form.

Data Analysis Technique

Quantitative analysis

Survey data were first summarized using descriptive statistics (e.g., percentage distributions by response category for each indicator) to profile overall tendencies in perception, motivation/engagement, perceived challenges, feedback evaluation, and comparative preferences between Elicit AI and traditional approaches. To examine whether perceptions differed by gender, then conducted assumption checks (including Levene's test for homogeneity of variances) followed by a One-Way ANOVA (Field, 2018). The homogeneity assumption was met, and the One-Way ANOVA indicated a statistically significant difference between male and female students' perception scores. Throughout, statistical significance was evaluated at $\alpha = 0.05$. Summary statistics for the homogeneity test and One-Way ANOVA are reported in the Findings section.

Qualitative analysis

Interview transcripts were analyzed using thematic analysis (Braun & Clarke, 2006). The process included familiarization with the data, initial coding, theme generation, theme review and refinement, and theme definition and naming. To enhance credibility, analyst

triangulation and audit trails were maintained. Where necessary, emerging themes were triangulated with survey summaries to check convergence and divergence across data sources.

Integration of findings

Given the mixed-methods design, integration occurred at the interpretation stage: quantitative trends provided breadth, while interview themes supplied depth and explanatory nuance. Points of convergence (e.g., generally positive views of Elicit AI and its feedback) and divergence (e.g., subjective claims of gender neutrality vs. statistically significant group differences) were explicitly addressed in the Discussion to support robust, practice-oriented inferences.

FINDINGS AND DISCUSSION

Findings

Summary of Descriptive Statistics: Elicit AI Usage Survey

Here is the summary of the questionnaire results from all respondents. These results represent a compilation of each indicator included in the questionnaire instrument utilized.

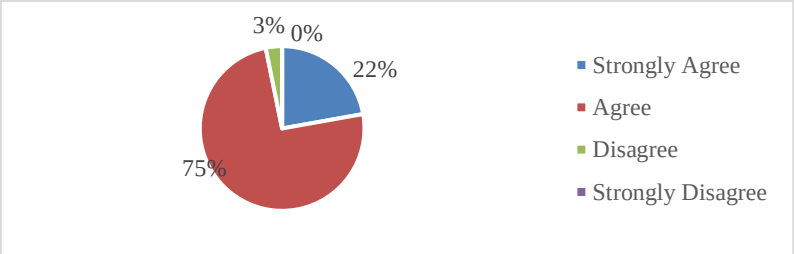

Figure 1. Students' Perceptions of Using Elicit AI (Perceived Usefulness Indicator)

The data presented in the figure 1 indicates that a substantial majority, approximately 75% of students, perceive Elicit AI as a tool that enhances their engagement and willingness to utilize it within classroom settings. They consider its application particularly beneficial for locating reference sources to support the preparation of academic reports and assignments. Conversely, only a marginal proportion, around 3%, expressed disagreement regarding the integration of Elicit AI into the learning process. This suggests a generally positive reception toward the adoption of AI-based tools in educational contexts, highlighting their potential to facilitate research and improve academic productivity.

Building upon these findings, it becomes essential to further examine how students' perceptions of Elicit AI translate into their motivational levels and engagement during the learning process. While the previous section highlighted the overall acceptance and interest in utilizing Elicit AI as a research support tool, understanding its impact on intrinsic motivation and active participation provides deeper insights into its pedagogical value. The subsequent analysis focuses on survey results related to students' motivation and engagement when integrating Elicit AI into academic activities.

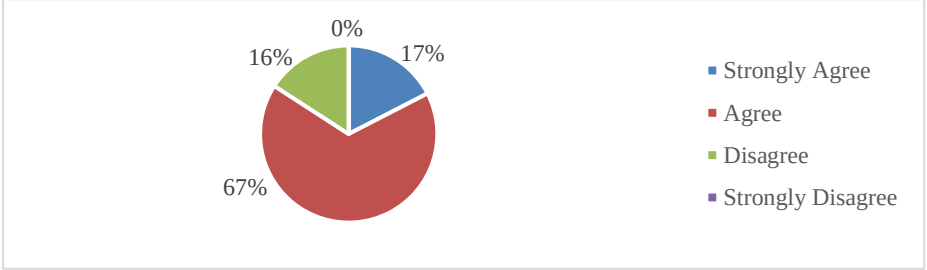

Figure 2. Students' Motivation and Engagement When Using Elicit AI

The summarized questionnaire results reveal that approximately 67% of students agree that they feel motivated and actively engaged in the learning process when utilizing Elicit AI. In contrast, only about 16% of students reported that they do not experience motivation or involvement when integrating Elicit AI into their academic activities. These findings indicate a generally positive correlation between the use of AI-based tools and students' motivational and engagement levels, suggesting that Elicit AI may serve as a catalyst for fostering active participation and enhancing the overall learning experience.

While the previous section demonstrates that Elicit AI contributes positively to students' motivation and engagement, it is equally important to acknowledge the potential challenges associated with its implementation. Understanding these obstacles provides a more comprehensive perspective on the practicality and sustainability of integrating AI tools into educational settings. The following section explores the key challenges identified by respondents when utilizing Elicit AI in the learning process.

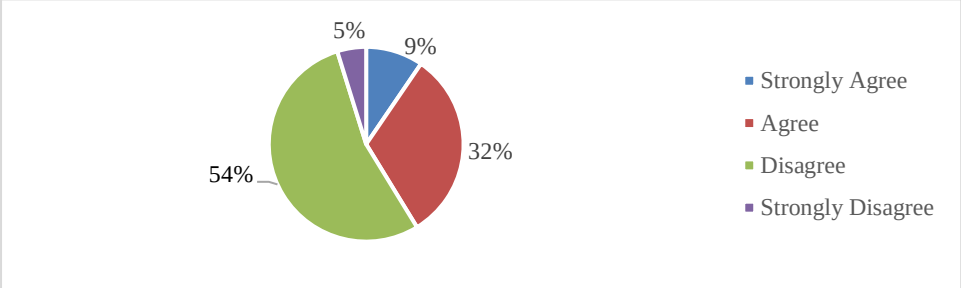

Figure 3. Students' Perceived Challenges in Accessing and Using Elicit AI

The results indicate that 54% of students disagree with the statement that accessing Elicit AI is difficult. This finding suggests that students perceive Elicit AI as highly accessible and user-friendly. Furthermore, the data implies that there are no significant challenges encountered in utilizing this tool, reinforcing its practicality for academic purposes.

Having established that technical barriers are minimal, it is essential to examine students' qualitative feedback regarding their experiences with Elicit AI. Feedback analysis is crucial as it provides nuanced insights beyond numerical data, capturing perceptions related to usability, effectiveness, and overall satisfaction. By examining these responses, educators and researchers can identify strengths that reinforce the adoption of AI-based tools, as well as areas requiring improvement to optimize their integration into academic settings. The following discussion summarizes key themes emerging from the feedback collected through the survey.

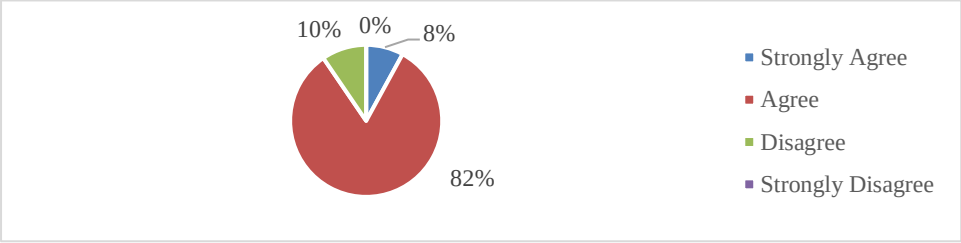

Figure 4. Students' Perceptions of Feedback Quality Provided by Elicit AI

The summarized results indicate that 82% of students agree that the feedback provided by Elicit AI contributes significantly to improving their literacy skills. This feedback enables students to enhance their reading abilities because it aligns with their specific learning needs. When students successfully implement the feedback received, their literacy competence is expected to improve progressively, reinforcing the role of AI-based tools in supporting personalized learning.

Having examined the overall impact of Elicit AI on literacy development, it is important to explore whether these perceptions and experiences vary across different demographic

groups. The next section presents survey findings based on gender, offering insights into potential differences in acceptance, motivation, and engagement with Elicit AI among male and female students.

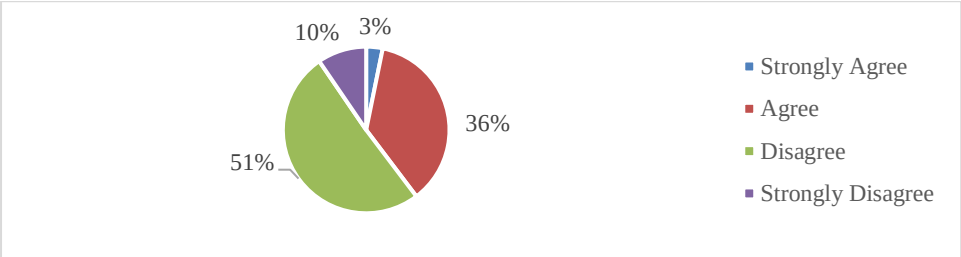

Figure 5. Gender-Based Differences in Students' Perceptions of Elicit AI Use

The questionnaire results reveal that 51% of students disagree with the notion that their perception of using Elicit AI is influenced by their gender. They also believe that Elicit AI is not exclusively beneficial to a particular gender. Consequently, both male and female students share similar perspectives regarding its use, indicating that gender does not play a significant role in shaping attitudes toward Elicit AI.

Following the analysis of demographic influences, it becomes pertinent to shift the focus toward a comparative perspective. Evaluating the use of Elicit AI against traditional approaches provides critical insights into its relative effectiveness in supporting academic tasks and enhancing learning outcomes. This comparison serves as a foundation for understanding whether AI-based tools offer substantial pedagogical advantages over conventional methods.

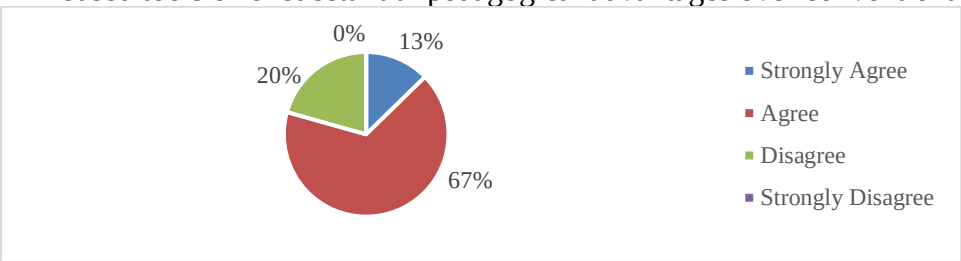

Figure 6. Comparison of Students' Learning Experiences: Elicit AI vs. Traditional Approaches

An examination of the survey results reveals that 67% of students express a clear preference for using Elicit AI over traditional classroom approaches. They report that the integration of Elicit AI provides a more engaging and effective learning experience compared to conventional methods. This enhanced experience is perceived to contribute positively to their academic performance, as students note continuous improvement in learning outcomes over time. These findings underscore the transformative potential of AI-based tools in modern education, suggesting that their adoption can significantly elevate both the quality and efficiency of learning processes.

Summary of Interview Findings

Interviews with three students, representing the broader respondent group, reveal consistent perspectives on the use of Elicit AI in academic learning. All participants agreed that Elicit AI significantly facilitates the writing process, particularly for final assignments, by streamlining access to relevant references and research summaries. The tool eliminates the need to read entire articles, thereby accelerating the reading process and improving efficiency.

In terms of engagement, students reported heightened interest and involvement when using Elicit AI. They emphasized that the tool enhances their understanding of assigned tasks, contributing to a more meaningful learning experience without presenting major challenges in its use.

Regarding feedback, participants highlighted that Elicit AI's summarization feature enables simultaneous comprehension of multiple articles, allowing them to construct well-founded arguments with greater ease. They also noted that gender does not influence learning with Elicit AI; rather, familiarity and frequency of use are the primary factors driving ease and effectiveness.

Finally, when comparing Elicit AI with traditional learning approaches, students acknowledged that both methods have distinct advantages and limitations. While direct instruction from lecturers remains valuable, Elicit AI offers a unique benefit through its ability to consolidate and summarize multiple sources, significantly reducing the time required for literature review.

One-Way ANOVA Analysis

Prior to conducting the comparative analysis of perceptions between male and female students regarding the use of Elicit AI, it is imperative to verify that the dataset satisfies the assumption of homogeneity. This step is crucial because statistical comparisons, particularly those involving parametric tests, require uniform variance across groups to ensure the validity and reliability of the findings. The homogeneity test was therefore performed as a preliminary procedure to confirm that the data distribution is consistent and comparable between the two groups. The results of this test provide the foundation for subsequent analyses and are summarized in the following section.

Table 1. Homogeneity Test

Group	Levene Statistics	df1	df2	Sig.	Note
Female and male	0,891	1	19	0,357	Homogenous

As presented in Table 1, Levene's test statistic based on mean indicates a significance value exceeding the threshold of 0.05. This result confirms that the variances between the two groups are statistically homogeneous. Consequently, the assumption of homogeneity of variance is satisfied, allowing the analysis to proceed to the subsequent comparative tests without violating the underlying statistical assumptions.

The subsequent analysis aimed to examine whether gender differences influence the utilization of Elicit AI. To address this research question, a One-Way ANOVA was employed, as it is appropriate for comparing mean differences across two or more independent groups under the assumption of homogeneity of variance. The summary of the One-Way ANOVA results is presented in the following table.

Table 2. One-Way ANOVA

Group	Test	F	Sig.	df	Note
Female and Male	One-Way ANOVA	6,800	0,017	1	Significant

Based on the results of the One-Way ANOVA, the significance value (Sig.) obtained is less than 0.05, which is the conventional threshold for statistical significance. This finding indicates that there is a significant difference in perceptions between female and male students regarding the use of Elicit AI to enhance their academic literacy. Therefore, gender appears to play a meaningful role in shaping students' engagement with this AI-based tool.

Discussion

The findings of this study reveal an intriguing dynamic regarding the influence of gender on students' perceptions of using Elicit AI for academic literacy development. Descriptive data from questionnaires and interviews indicate that most respondents believe gender does not affect their views on the use of Elicit AI. This suggests that, subjectively, students perceive the technology as a neutral tool accessible to all users regardless of gender.

Such perceptions align with the normative assumption that AI-based technologies are designed to be inclusive and universally applicable (Chen et al., 2025; Fortuna et al., 2025).

However, inferential analysis using One-Way ANOVA produced a contrasting result. The statistical test revealed a significant difference between male and female groups in their perception scores toward Elicit AI. This discrepancy does not necessarily contradict the qualitative findings; rather, it indicates that although respondents believe gender is irrelevant, numerical variations between groups were large enough to be detected statistically. Several factors may explain this phenomenon. First, male and female students may interact with Elicit AI at different frequencies or in different ways, even if they are unaware of these differences. Such variations can influence perception scores measured through surveys. Second, respondents tend to assume that technology is universal, so their questionnaire and interview responses reflect normative beliefs rather than actual behavior. This aligns with (Brauner et al., 2024; Sulistyanto & Asyhar, 2024), who noted that perceptions of technology are often shaped by social assumptions. Third, the relatively small sample size (n=21) means that minor individual variations can impact statistical outcomes. (Field, 2018; Quan, 2025) emphasizes that statistical significance does not always equate to substantive differences in perception.

These findings underscore the need for cautious interpretation of statistically significant results. In this study, the ANOVA outcome reflects score variability rather than respondents' explicit beliefs about gender influence. Therefore, while Elicit AI is generally perceived as an inclusive tool, educators should consider potential differences in comfort level or effectiveness across gender groups.

The practical implication is that adaptive strategies may be necessary when integrating AI technologies into EFL classrooms. Although overall perceptions indicate positive acceptance, score variations suggest that training and support might need to be tailored to ensure equitable benefits for all learners. Future research with larger samples and multivariate analysis is recommended to determine whether these differences are consistent or merely artifacts of data distribution.

Overall, these findings support existing literature highlighting the potential of AI particularly Elicit AI in enhancing academic literacy (Bauer et al., 2025; Whitfield & Hofmann, 2023). Nevertheless, successful integration requires attention to demographic and pedagogical factors to ensure that the benefits of technology are distributed equitably.

CONCLUSION

This study examined students' perceptions of using Elicit AI as a tool for enhancing academic literacy in an EFL context. The findings indicate that, overall, students hold positive views toward Elicit AI, considering it helpful for locating references, improving engagement, and supporting the writing process. Qualitative data from interviews reinforce these results, highlighting the tool's role in streamlining access to academic sources and facilitating comprehension.

Interestingly, while descriptive data suggest that gender does not influence students' perceptions, inferential analysis using One-Way ANOVA revealed a statistically significant difference between male and female groups. This discrepancy underscores the complexity of interpreting perception data and suggests that variations in usage patterns or contextual factors may contribute to these differences. However, given the limited sample size, these findings should be interpreted with caution.

The practical implication of this research is that Elicit AI can serve as an effective supplementary tool for fostering academic literacy among EFL learners. Specifically, its integration can be operationalized through three strategies. First, in research methods courses, Elicit AI may be introduced as a scaffolding tool to support literature review and theoretical framework development, enabling students to critically compare AI-assisted searches with manual approaches. Second, lecturer training should include guidelines for ethical and responsible AI use, emphasizing transparency, data privacy, and strategies to prevent over-

reliance on technology while maintaining students' analytical skills. Third, at the curriculum level, Elicit AI can be embedded within digital literacy modules to strengthen multiliteracies practices, ensuring that students learn to engage critically and creatively with AI-generated content. These targeted approaches will help maximize the pedagogical benefits of Elicit AI while safeguarding academic integrity and promoting equitable learning opportunities. Future studies with larger samples and more robust statistical approaches are recommended to validate these findings and explore additional factors influencing the adoption of AI-based tools in language education.

In conclusion, Elicit AI demonstrates significant potential as a pedagogical aid in higher education settings. Its integration into EFL classrooms can enhance efficiency, motivation, and literacy development, provided that implementation strategies are inclusive and pedagogically sound.

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