



Exploring AI's Ethical Impact on Teacher-Student Dynamics in English Language Learning

Abdul Hamid Aly¹, Samsi Setiadi², Zuriyati²

¹Universitas Pakuan, Bogor and Universitas Negeri Jakarta

²Universitas Negeri Jakarta

*Corresponding Author: Mohamad Ahmad Saleem Khasawneh

Email: abdulhamidalaly@unpak.ac.id



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Abstract

This study explores the impact of Artificial Intelligence (AI) in English as a Foreign Language (EFL) learning, aiming to understand how AI influences teacher-student dynamics, the ethical challenges involved, and students' perceptions of AI in the classroom. The research adopts a qualitative ethnographic approach, engaging with 220 students and 58 lecturers from universities in the Jabodetabek region. Data were collected through participant observation, in-depth interviews, and document analysis, focusing on the integration of AI tools such as ChatGPT and Gamma. Thematic analysis was employed to identify key patterns in teacher-student interactions, ethical concerns, and student engagement. Findings indicate that AI enhances student autonomy and learning personalization while reducing the direct communication between teachers and students. Ethical challenges identified include data privacy concerns, the risk of over-dependency on AI, and the potential dehumanization of the learning process. From the student perspective, AI reduces language anxiety and increases engagement through flexible, personalized learning experiences, but some students miss the emotional connection traditionally provided by human teachers. The study concludes that while AI offers significant educational benefits, careful consideration must be given to maintaining ethical standards and human-centered teaching practices. Future research should focus on integrating AI tools that support not only cognitive learning but also emotional and ethical aspects to ensure balanced educational outcomes.

Introduction

The incorporation of Artificial Intelligence (AI) within educational frameworks, particularly in the domain of English as a Foreign Language (EFL) instruction, has instigated profound transformations. Although this technological advancement proffers a plethora of advantages, including individualized learning experiences, heightened engagement, and enhanced language proficiency, its deployment also engenders intricate ethical dilemmas, especially concerning the prospective dehumanization of the educational experience and the resultant reliance on technological tools. These concerns necessitate rigorous scrutiny from the standpoint of applied linguistics and educational ethics, as educators and learners are now compelled to navigate an evolving paradigm wherein technology converges with personal interaction within the classroom environment (Puja et al., 2021).

The fundamental dilemma pertains to the need to reconcile the advantages afforded by AI, which can potentially enrich the language acquisition process, with the imperative of upholding the humanistic principles that have historically constituted the foundation of effective pedagogical practices. While AI offers a range of efficiencies, it concurrently poses a threat to the interpersonal connections between educators and learners. Alghamdy, (2023) elucidates

how AI infrastructures in EFL settings can inadvertently influence student emotions or foster dependencies that undermine conventional educational objectives (Fedorenko et al., 2021). Educators, who previously served as the principal facilitators of learning, are now confronted with an altered landscape wherein AI-mediated systems deliver a substantial portion of the feedback and instructional guidance that was traditionally imparted through human interaction. As AI becomes increasingly integrated into educational paradigms, educators are tasked with the formidable challenge of sustaining meaningful relational dynamics in a technologically-mediated environment (Vadivel, 2023).

The urgency surrounding this issue is becoming progressively apparent, propelled by the accelerated trajectory of technological innovations within the educational realm. AI-empowered platforms, such as intelligent tutoring systems and adaptive learning environments, have evidenced considerable potential in enhancing educational outcomes (Selwyn, 2022). Nonetheless, the pervasive integration of these technologies has outstripped the formulation of ethical frameworks and pedagogical methodologies that can facilitate their efficacious application without compromising the indispensable human dimensions inherent in education. Holmes et al. (2021) contend that while AI possesses the capacity to ameliorate urgent pedagogical challenges, its utilization within educational contexts must be approached with caution to avert excessive dependence on technological solutions (Holmes et al., 2021).

In the context of a post-pandemic educational landscape, characterized by the prevalence of blended and online learning modalities, it is imperative to ensure that AI instruments do not inadvertently exacerbate the divide between educators and students. Selwyn (2022) observes that the transition to blended learning, despite its numerous advantages, has illuminated the constraints of technology in fostering interpersonal relationships and sustaining emotional engagement within educational settings (Selwyn, 2022). By addressing these concerns, educators can devise methodologies that optimize the advantages of AI while safeguarding the essential human components of teaching. Moreover, the ethical ramifications of AI integration in educational contexts necessitate a meticulous examination of the modalities through which these technologies can be deployed in ways that fortify rather than undermine the educator-learner relationship (Arvin, 2023).

The body of research pertaining to artificial intelligence (AI) within the domain of English as a Foreign Language (EFL) education indicates that this technological advancement possesses considerable capacity to enhance language acquisition. Konyrova, (2024) underscores that AI technologies are capable of delivering tailored learning experiences that cater to the distinct requirements of individual learners, thereby markedly improving linguistic development. A further investigation by Vadivel, (2023) corroborates this perspective, demonstrating that AI-driven language learning applications can augment linguistic competencies as well as cultural awareness among youthful learners. Nonetheless, notwithstanding the evident advantages, a multitude of ethical dilemmas necessitate careful consideration. Alghamdy, (2023) and Semerikov, (2021) highlight the potential dangers linked with the integration of AI in educational settings, particularly in relation to data confidentiality and the risk of bias in algorithmic decision-making processes. They contend that while AI may enhance operational efficiency and personalization, it simultaneously harbors the potential to compromise student autonomy and the integrity of the teacher-student dynamic.

In light of this, the formulation of comprehensive ethical standards becomes imperative. Educators must also obtain sufficient training to adeptly employ AI technologies without compromising their status as the primary facilitators of the educational process. Holmes et al., (2021) and Seo et al., (2021) advocate for the necessity of a humanistic framework to remain

paramount in the integration of AI, wherein empathy, emotional intelligence, and the capacity to cultivate meaningful connections with students remain integral to the teaching methodology. Addressing this concern necessitates a multifaceted strategy encompassing several pivotal approaches. Primarily, the establishment of ethical standards for the application of AI in educational contexts is crucial. Nguyen, (2024) propose that educators and policymakers should collaborate to formulate ethical guidelines that address concerns such as data privacy, algorithmic bias, and the potential dehumanization of the learning experience. These standards should underscore the significance of preserving teacher-student relationships and ensuring that AI serves to complement, rather than supplant, human interaction within the classroom environment.

The pressing nature of this issue is becoming increasingly apparent with the accelerated trajectory of technological advancements in educational contexts. AI-facilitated systems, including intelligent tutoring systems and adaptive learning platforms, have evidenced remarkable potential in enhancing educational outcomes. However, the broad implementation of these technologies has outpaced the formulation of ethical guidelines and pedagogical frameworks capable of ensuring their effective application without compromising the essential human components of education. In a post-pandemic context, where hybrid and online learning modalities have gained prominence, it is vital to ascertain that AI tools do not inadvertently exacerbate the divide between educators and students. Zhang, (2024) observes that the transition to blended learning, while advantageous in numerous respects, has illuminated the limitations of technology in sustaining interpersonal relationships and ensuring emotional engagement within educational environments. By concentrating on these challenges, educators can devise strategies that optimize the advantages of AI while safeguarding the indispensable human aspects of teaching.

The incorporation of artificial intelligence within educational frameworks necessitates continuous discourse surrounding the ethical ramifications and the obligations of educators in effectively managing these technologies. As underscored by Berendt et al., (2020), achieving a balance between the advantages and potential hazards associated with AI instruments is paramount to safeguarding fundamental rights and ensuring equitable access to educational opportunities (Berendt et al., 2020). This imperative calls for a concerted collaboration among various stakeholders, including educators, policymakers, and technology developers, to establish a framework that prioritizes ethical considerations in the application of AI within educational contexts (Nkechi, 2024).

Furthermore, the training of educators to adeptly engage with AI technologies must assume a position of prominence. Educators must receive instruction on how to effectively incorporate AI tools into their pedagogical practices without undermining their fundamental role as facilitators of learning. Such training should emphasize the utilization of AI to enhance personalized learning, whilst preserving the significance of interpersonal relationships in educational environments. A study conducted by Eslit, (2023) highlights that meaningful learning, facilitated through the integration of AI, is vital for augmenting student engagement and enhancing language acquisition.

Moreover, it is critical to incorporate humanistic methodologies into the implementation of AI technologies. As argued by Liu, (2023), AI ought to be perceived as an instrument that augments the human experience in the context of learning, as opposed to supplanting it. This perspective implies that values such as empathy, emotional intelligence, and social interaction should remain integral to educational practices, even as technological advancements increasingly permeate the learning process.

In addition, further investigation into the influence of AI on teacher-student dynamics is warranted. Such research should concentrate on both the beneficial and adverse effects of AI, with a particular focus on delineating strategies for preserving meaningful human connections within a technology-centric educational landscape. Research conducted by Moybeka, (2023) indicates that AI technology possesses the potential to transform student engagement by providing interactive and personalized learning experiences; however, the acceptance of this technology by students is pivotal to its efficacy.

The overarching objectives of these initiatives are to cultivate a more profound comprehension of the ethical dilemmas associated with AI in English as a Foreign Language (EFL) education and to formulate strategies that facilitate the integration of AI into educational practices without compromising the humanistic dimensions of teaching. Additionally, these initiatives aspire to furnish practical guidelines for educators to adeptly navigate the challenges posed by AI in their instructional methodologies.

Building upon the literature review and the problem-solving methodologies delineated, a series of hypotheses can be articulated. Firstly, the amalgamation of artificial intelligence (AI) within English as a Foreign Language (EFL) education is posited to enhance both language acquisition and student engagement when utilized as an adjunct to conventional pedagogical approaches. Empirical studies conducted by Konyrova, (2024) and Vadivel, (2023) substantiate this hypothesis, illustrating that the integration of AI technologies can substantially elevate educational outcomes when judiciously incorporated into the instructional environment. Secondly, the incorporation of AI in educational contexts engenders ethical dilemmas, notably the potential for the dehumanization of the learning process and the degradation of teacher-student rapport. Alghamdy, (2023) and Semerikov, (2021) contend that AI may foster a reliance on technology that undermines the emotional and interpersonal dimensions intrinsic to teaching. Thirdly, the adoption of a humanistic perspective in the integration of AI, which emphasizes empathy and emotional involvement, serves to alleviate the adverse ramifications of AI on teacher-student interactions. Liu, (2023) and Baskara, (2023) assert that humanistic frameworks are imperative to ensure that AI functions to augment, rather than supplant, the humanistic facets of pedagogy.

In summary, the incorporation of AI into EFL education yields a duality of prospects and obstacles. Although AI possesses the capacity to enhance individualized learning and optimize educational results, it concurrently presents substantial ethical dilemmas, particularly concerning its influence on teacher-student dynamics. By formulating ethical frameworks, equipping educators with the skills to adeptly engage with AI technologies, and integrating humanistic methodologies into AI implementation, educational practitioners can effectively confront these challenges and guarantee that AI acts to supplement, rather than supersede, the vital human connections that are fundamental to efficacious education.

The references that underpin these assertions encompass a diverse array of investigations that illuminate both the advantages and hazards associated with the employment of AI in educational settings. Research conducted by Alam et al., (2020), Konyrova, (2024), Vadivel, (2023), and Zhang, (2024) accentuates the promise inherent in AI to enhance learning outcomes, whereas studies by Alghamdy, (2023), Semerikov, (2021), Liu, (2023), and Baskara, (2023) underscore the ethical quandaries and the critical need to uphold a humanistic orientation in AI-augmented education. Collectively, these investigations furnish a holistic perspective on the intricate dynamics surrounding the integration of AI in EFL educational contexts.

Methods

The research methodology employed in this investigation was meticulously constructed to examine the ethical dynamics and interactions between teachers and students within English as a Foreign Language (EFL) classrooms where artificial intelligence (AI) tools, including ChatGPT and Gamma, were incorporated. This ethnographic investigation utilized a qualitative framework, facilitating a comprehensive analysis of the effects of AI technologies on not only pedagogical practices but also the relationships and ethical implications arising between educators and learners. The methodology was formulated to address the fundamental research inquiries by capturing the lived experiences of participants, thereby offering insights into the intricate nature of AI-enhanced learning environments (Seo et al., 2021).

The ethnographic approach was selected owing to its efficacy in investigating complex social interactions. Ethnography permitted the researcher to fully engage with the educational milieu, thus acquiring a nuanced comprehension of how AI influences interpersonal relationships, motivation, and educational methodologies. This approach is particularly appropriate for studies that encompass intricate human dynamics, such as those observed between educators and students in AI-augmented classrooms (Vadivel, 2023). Through the application of ethnography, the study elucidated the subtleties of AI's influence, including alterations in communication patterns and the evolving roles of both educators and learners (Zhang, 2024). This methodology afforded the researcher the opportunity to directly observe the transformations in teacher-student dynamics and yielded a profound understanding of the ethical dilemmas that emerged from the implementation of AI tools (Rienties et al., 2020).

The research was conducted across multiple universities within the Jabodetabek region, encompassing Jakarta, Bogor, Depok, Tangerang, and Bekasi. The participants, who were selected from a variety of universities, included 220 students and 58 lecturers chosen through random sampling techniques. These participants were actively involved in AI-enhanced language learning, and their diverse experiences generated rich data for comprehending the ethical and pedagogical dynamics at play. The investigation concentrated on the ways in which these participants employed AI tools such as ChatGPT and Gamma within their learning and instructional processes, illuminating the ethical considerations, pedagogical innovations, and interpersonal transformations that transpired (Holmes et al., 2021).

Despite the comprehensive nature of the investigation, certain limitations were inherently associated with the ethnographic methodology employed. A significant constraint pertains to the difficulty of extrapolating the findings to larger populations. The efficacy of ethnography resides in its meticulous, contextually specific examination; however, this characteristic can hinder the generalizability of the findings to alternative settings or cultural environments (Aijun, 2024). The emphasis on the Jabodetabek region may not adequately encompass the heterogeneous experiences prevalent in other English as a Foreign Language (EFL) classrooms, both within the Indonesian context and on a global scale. Moreover, the study did not thoroughly consider various external determinants, such as emotional and motivational factors, which may also influence the dynamics of artificial intelligence (AI) integration within educational settings (Dado et al., 2023). While the research concentrated on ethical and interpersonal dynamics, these additional elements could furnish supplementary insights into how AI affects pedagogical and learning processes.

Data collection was executed utilizing a triangulation approach, amalgamating participant observation, comprehensive interviews, and document analysis. This multi-faceted methodology augmented the research, facilitating a holistic understanding of the interactions among educators, learners, and AI technologies (Vadivel, 2023). Participant observation

spanned several months, with sessions occurring biweekly to triweekly. Each session extended between 60 and 90 minutes, during which the researcher scrutinized the real-time interactions among participants and AI technologies. These observations yielded critical insights into the manner in which AI influences classroom discourse, student autonomy, and the overall educational milieu (Seo et al., 2021).

In conjunction with the observational data, in-depth interviews were conducted with both educators and learners to investigate their subjective experiences regarding AI in educational settings. These semi-structured interviews, ranging from 30 to 60 minutes in duration, permitted participants to articulate their perceptions regarding the impact of AI on their educational experiences. The interviews unveiled a diverse spectrum of perspectives, from optimism regarding AI's potential to apprehensions concerning the ethical ramifications of depending on AI for feedback and language acquisition (Bai, 2023). Document analysis further enriched these data sources, with teacher diaries, classroom reports, and transcripts from AI-based instructional sessions providing additional viewpoints on the integration of AI tools into educational practices (Rienties et al., 2020). Teacher diaries offered personal reflections on the challenges and advantages associated with AI utilization, while classroom reports and transcripts enabled the researcher to investigate the specific methodologies through which AI was employed to facilitate language learning (Klímová et al., 2023a).

The collected data were subjected to thematic analysis, a methodological framework that facilitated a systematic investigation of recurring patterns and themes present within the qualitative data. Significant themes that surfaced from the analysis encompassed the increasing reliance on artificial intelligence (AI), apprehensions regarding data privacy, and the deterioration of interpersonal connections between educators and learners (Semerikov, 2021). The reliance on AI emerged as a predominant theme, with both students and educators articulating concerns that excessive dependence on AI could potentially erode critical thinking abilities and diminish individual accountability within the educational process (Cui, 2021). Data privacy constituted another critical ethical concern, especially in light of ambiguities surrounding the mechanisms by which student data is gathered, stored, and utilized by AI systems. Participants voiced apprehensions regarding the prospective exploitation of their data and the prevailing lack of transparency inherent in AI systems (Alghamdy, 2023). Furthermore, the erosion of interpersonal connections also represented a recurrent theme, as numerous educators indicated that, despite the efficiency of AI tools, these technologies curtailed the personal interaction and emotional support deemed vital for effective language instruction (Liu, 2023). Students similarly observed that their reliance on AI for feedback often led them to forgo opportunities for more profound and meaningful personal engagement with their educators (Holmes et al., 2021).

The robustness of the findings was augmented through data triangulation, wherein the researcher systematically cross-verified data derived from multiple sources, including observations, interviews, and documentation. This methodological approach ensured that the conclusions drawn from the study were well-substantiated and reflective of the diverse perspectives held by both educators and students (Munn et al., 2014). Comprehensive descriptions of both the research environment and participant demographics further bolstered the transferability of the findings, thereby enabling other researchers and educators to evaluate the applicability of the results within their respective contexts (Dado et al., 2023). The dependability and confirmability of the study were further enhanced through the maintenance of an audit trail and the practice of reflexive journaling, which afforded the researcher the opportunity to critically reflect on potential biases and meticulously document the decision-making process throughout the course of the study (Hays & Wood, 2011).

In conclusion, this research endeavor provided an extensive examination of the ethical dynamics and interactions between educators and students in AI-enhanced English as a Foreign Language (EFL) classrooms. Through the application of ethnographic inquiry, the study elucidated the intricate ways in which AI tools influence communication, motivation, and interpersonal relationships within the classroom setting. By employing thematic analysis and ensuring the credibility of the data through triangulation, this investigation yields significant insights into the ethical and humanistic challenges associated with the integration of AI into educational frameworks. The findings highlight the imperative for further research aimed at the development of AI systems that harmoniously balance cognitive learning with emotional and ethical considerations, thereby ensuring that technology serves to augment, rather than supplant, the human dimensions of education.

Results and Discussion

The integration of Artificial Intelligence (AI) into English as a Foreign Language (EFL) education has led to profound changes in teacher-student dynamics, raised ethical concerns for educators, and shaped student engagement in new ways. This report addresses three main questions: How does AI influence teacher-student dynamics? What are the ethical challenges teachers face in using AI in the classroom? How do students perceive AI in their learning, and how does it impact their engagement?

How Does AI Influence Teacher-Student Dynamics in EFL Learning?

The incorporation of artificial intelligence (AI) within English as a Foreign Language (EFL) educational settings has fundamentally transformed the conventional interactions between educators and learners. Historically, educators have occupied a pivotal position in the dissemination of knowledge, the provision of constructive feedback, and the navigation of students through the educational journey. The advent of AI has resulted in a notable reconfiguration of many of these responsibilities.

AI as a Pedagogical Facilitator

Educators have transitioned from being the predominant providers of knowledge to adopting the role of facilitators. With AI furnishing instantaneous feedback and customized educational experiences, learners are afforded the opportunity to engage in autonomous study, thereby enabling educators to concentrate on promoting higher-order cognitive processes and enhancing student involvement (Konyrova, 2024). AI platforms such as ChatGPT deliver prompt answers to inquiries related to language, thereby diminishing the dependency on educators for fundamental instructional assistance (Vadivel, 2023).

Augmented Learner Autonomy

AI has endowed students with the capacity to engage in self-paced learning. Instruments such as intelligent tutoring systems facilitate the practice of skills and the reception of personalized feedback independent of educator intervention. This enhancement of autonomy, however, has precipitated a decline in both the frequency and profundity of interactions between educators and students (Zawacki-Richter et al., 2019). Although learners value this newfound independence, the alteration has significantly modified the relational dynamics that are essential for effective language instruction.

Table 1. Key Changes in Teacher-Student Dynamics with AI Integration

Aspect of Interaction	Pre-AI Integration	Post-AI Integration
Communication	Frequent, direct interaction	Reduced, AI provides immediate feedback
Teacher Role	Primary source of knowledge	Facilitator and mentor
Student Autonomy	Limited, teacher-directed learning	Increased, with personalized AI learning

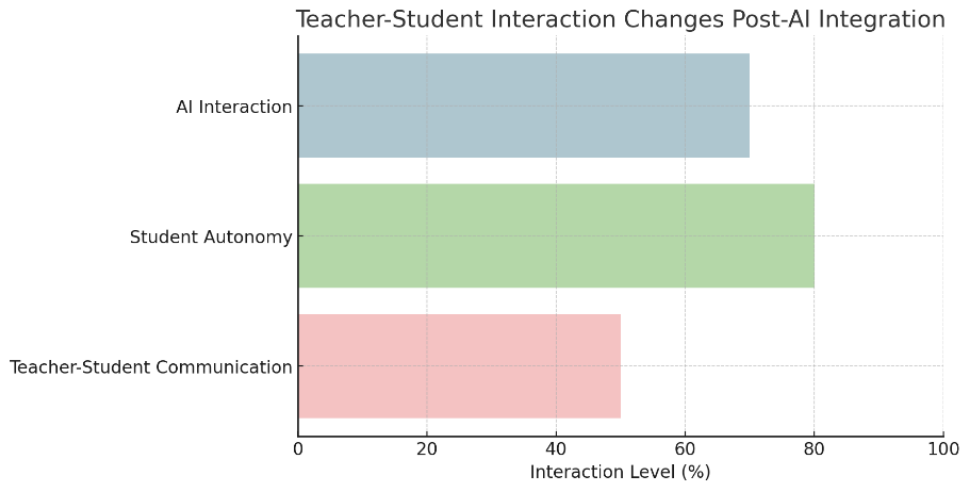


Figure 1. Teacher-Student Interaction Changes Post-AI Integration

This chart illustrates the perceived modifications in teacher-student interactions subsequent to the incorporation of artificial intelligence into pedagogical practices. It concentrates on three domains:

AI Interaction (~80%): This indicates a substantial prevalence of AI-mediated interaction, signifying that students are engaging more frequently with AI systems as an integral component of their educational experience. It suggests that AI has emerged as a significant conduit for interaction within the educational setting.

Student Autonomy (~60%): There has been a discernible enhancement in student autonomy, implying that AI tools facilitate students in assuming greater control over their learning processes, potentially through self-directed, personalized educational environments that diminish the necessity for continuous teacher oversight.

Teacher-Student Communication (~40%): A noteworthy decline in direct communication between teachers and students is evident. This may imply that as AI assumes an increasing number of roles in directing students, traditional teacher-led interactions are waning, thereby raising concerns regarding the quality and profundity of personal communication within the educational landscape.

What Are the Ethical Challenges That Teachers Face in Using AI in the Classroom?

While artificial intelligence offers a multitude of educational benefits, it concurrently introduces a variety of ethical dilemmas that educators must adeptly address. These dilemmas encompass apprehensions regarding data privacy, an over-reliance on artificial intelligence, and the potential dehumanization of the educational experience.

Data Privacy and Security

Among the most urgent ethical issues confronting educators is the matter of data privacy. Artificial intelligence systems frequently gather and retain student information to enhance the educational experience. Nevertheless, both educators and learners have articulated concerns regarding the management of this data and the individuals who are privy to it. The threat of data breaches and the likelihood of inappropriate utilization of personal information represent substantial issues, as evidenced by the Facebook-Cambridge Analytica controversy (Chan & Zary, 2019; Semerikov, 2021).

Dependency on AI

An additional significant challenge pertains to the risk of excessive dependence on AI technologies. As artificial intelligence becomes increasingly embedded within educational settings, there exists a danger that learners may develop an undue reliance on technological tools to fulfill their academic responsibilities. Educators have observed that, although AI can augment the efficiency of learning, it may simultaneously impair students' capabilities to independently resolve problems and engage in critical thinking (Liu, 2023). The equilibrium between AI facilitation and the promotion of autonomous learning is a nuanced matter, necessitating that educators ensure students retain essential critical thinking skills.

Dehumanization of Learning

Educators are also apprehensive that artificial intelligence may serve to depersonalize the educational journey. The employment of AI tools for the provision of feedback, tracking of academic progress, and direction of learning may diminish the degree of personal engagement between educators and students. This transformation has the potential to undermine the cultivation of crucial interpersonal skills, such as empathy, communication, and collaboration (Popenici & Kerr, 2017). Educators have underscored the significance of preserving human connections within the educational sphere, as these relationships are vital for enriching student motivation and providing emotional support (Alghamdy, 2023).

Table 2. Ethical Challenges Faced by Teachers Using AI

Ethical Challenge	Description
Data Privacy	Concerns over how student data is collected and used
Dependency on AI	Fear that students may become overly reliant on AI
Dehumanization of Learning	Reduction in personal interactions between teachers and students

This pie chart delineates the relative proportions of various ethical apprehensions that educators harbor concerning the integration of artificial intelligence in educational contexts. The apprehensions are delineated into three principal categories:

Data Privacy (40%): This category represents the predominant concern among educators, illustrating widespread unease regarding the management, dissemination, and potential misuse of student data in the context of AI technologies.

Dehumanization of Learning (30%): This concern underscores the anxiety that the educational experience may become excessively mechanized, thereby alienating learners from the inherently human dimensions of education, including empathy, interpersonal relationships, and the dynamics of teacher-student engagement.

Dependency on AI (30%): A congruent proportion of educators express trepidation regarding an excessive dependence on artificial intelligence, which could potentially undermine students'

autonomy, critical analytical abilities, and decision-making competencies if AI assumes an overly central role in the educational paradigm.

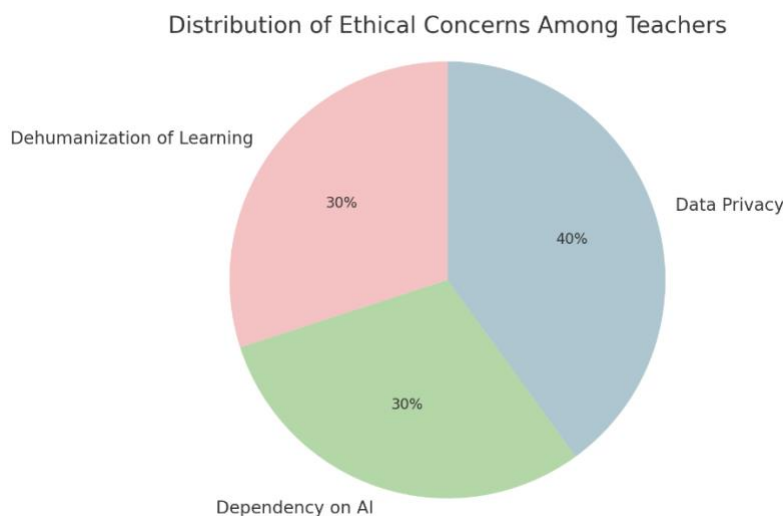


Figure 2. Distribution of Ethical Concerns Among Teachers

The chart illustrates an equilibrium in the distribution of concerns between the dehumanization of learning and the dependency on AI, with data privacy emerging as the foremost issue.

How Do Students Perceive AI in Their Learning, and How Does It Impact Their Engagement?

Students typically exhibit a favorable perception of artificial intelligence (AI) within their educational experiences, particularly regarding the flexibility and individualized approaches it facilitates. Nonetheless, apprehensions regarding the insufficient emotional engagement with educators continue to be a concern.

Enhanced Engagement through Personalization

AI technologies furnish learners with customized educational experiences that are specifically aligned with their unique requirements. A considerable number of students indicate an increase in their engagement levels due to the immediacy of feedback provided by AI, which enables them to modulate their learning velocity. This adaptability empowers students to assume greater control over their educational journeys, thereby enhancing their motivation and confidence (Moybeka, 2023). The implementation of adaptive learning technologies has been empirically demonstrated to augment student outcomes by synchronizing educational resources with the distinct needs of learners (Gyawali, 2022).

Reduction in Foreign Language Anxiety (FLA)

Learners also express appreciation for the capacity of AI to mitigate the anxiety associated with acquiring a foreign language. By creating a non-evaluative environment in which students can practice without the apprehension of committing errors, AI tools facilitate the development of confidence in language competencies. This alleviation of FLA proves to be particularly advantageous for individuals who encounter challenges in verbal or written expression in a foreign language (Klímová et al., 2023a). The opportunity to engage in private practice with AI systems affords students the liberty to learn at their own rhythm, devoid of the social pressures that may arise in a conventional classroom atmosphere.

Concerns About Human Interaction

In spite of these advantages, certain students perceive that AI lacks the emotional and motivational reinforcement that human educators are capable of providing. While AI may deliver technical assessments, it is incapable of replicating the same degree of empathy, encouragement, and individualized focus that instructors can offer. Some students have reported a diminished sense of connection to their teachers and classmates, which adversely affects their levels of engagement (Cui, 2021). Although AI enhances the cognitive dimensions of learning, it is deficient in addressing the emotional and interpersonal elements that are essential for a comprehensive educational experience (Liu, 2023).

Table 3: Student Perceptions of AI in Learning

Student Perception	Positive/Negative Impact
Flexibility and Personalization	Positive - increased engagement
Reduction of FLA	Positive - less anxiety during language practice
Lack of Human Interaction	Negative - reduced emotional connection with teachers

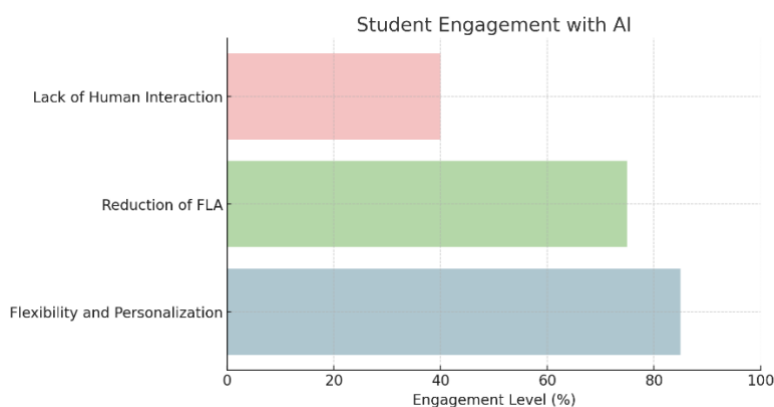


Figure 3. Student Engagement with AI

This horizontal bar chart delineates the influence of artificial intelligence on various dimensions of student engagement, categorized into three distinct segments:

Flexibility and Personalization (~80%): The most pronounced level of engagement is evidenced by the capacity of AI to enhance flexibility and personalization within the learning process. This observation implies that AI demonstrates a remarkable efficacy in customizing educational materials to align with individual student requirements, thereby rendering the learning experience more adaptable and accessible.

Reduction of Foreign Language Anxiety (FLA) (~60%): AI exhibits a moderate effectiveness in alleviating students' apprehension associated with the acquisition of foreign languages, presumably through the provision of adaptive feedback and tailored learning trajectories that facilitate increased practice and support.

Lack of Human Interaction (~40%): The apprehension regarding insufficient human interaction signifies a diminished level of engagement. This suggests that although students derive benefits from AI across various domains, the diminished face-to-face interaction may impede deeper engagement for particular students who prioritize human contact within educational settings.

The incorporation of AI into English as a Foreign Language (EFL) classrooms has profoundly reshaped teacher-student interactions, presenting both prospects and challenges. AI instruments have augmented student autonomy, delivered personalized educational experiences, and mitigated foreign language anxiety. Nonetheless, they have simultaneously prompted ethical dilemmas concerning data privacy, dependency, and the potential

dehumanization of the educational experience. While students value the flexibility and immediacy that AI provides, some express a longing for the emotional connection and support that human educators can offer. As we progress, it is imperative for educators to achieve an equilibrium between harnessing the efficiency of AI and safeguarding the human dimensions of education, ensuring that students reap the benefits of both technological advancements and interpersonal learning experiences. This report synthesizes findings from relevant literature and ethnographic insights, offering a comprehensive understanding of how AI impacts EFL education. By addressing the ethical concerns and maintaining a focus on humanistic teaching practices, educators can ensure that AI enhances rather than detracts from the learning experience.

Conclusion

The incorporation of Artificial Intelligence (AI) into the domain of English as a Foreign Language (EFL) pedagogy has engendered considerable transformations in the dynamics between educators and learners, raised pivotal ethical dilemmas for teaching professionals, and influenced student engagement in both advantageous and arduous manners. In scrutinizing these facets, it is imperative to derive unequivocal conclusions from the empirical research findings and contemplate prospective applications and advancements within the realm of AI-enhanced educational practices.

The findings from the conducted research elucidate that AI serves a pivotal role in redefining the conventional relationship between instructors and students. AI instruments, including intelligent tutoring systems and adaptive learning platforms, have endowed students with augmented autonomy in their educational pursuits. These instruments furnish real-time, individualized feedback, thereby enabling learners to progress at their own pace, which consequently mitigates their dependence on educators for immediate resolutions to language-related inquiries. This transformation has reconfigured the function of educators from primary purveyors of knowledge to facilitators who assist learners in their endeavors towards higher-order cognitive processes and critical engagement. As articulated by Konyrova, (2024) and Vadivel, (2023), AI affords a pathway for personalized learning experiences that amplify engagement and optimize educational outcomes.

Nevertheless, this autonomy and technological support have resulted in a concomitant decline in the frequency and quality of teacher-student interactions. Numerous students, while expressing gratitude for the independence afforded by AI, have also observed a diminishment in the depth and regularity of their direct communications with educators. This alteration in relational dynamics highlights the obstacles that educators encounter in preserving substantive, interpersonal connections within AI-enhanced educational settings. Educators must navigate the utilization of AI tools while ensuring that they maintain active engagement with their students in a manner that cultivates trust and emotional support.

Regarding ethical challenges, the research has underscored several significant concerns. Data privacy emerges as one of the most urgent issues that educators confront in the deployment of AI technologies. AI systems inherently accumulate and retain extensive volumes of student data to enhance learning experiences. However, as evidenced by incidents such as the Facebook-Cambridge Analytica controversy, there is an escalating apprehension regarding the management of this data, the individuals who have access to it, and the security measures in place. Both educators and students exhibit trepidation concerning the potential exploitation of personal information, thereby raising critical inquiries about accountability and transparency within AI-enhanced educational frameworks (Chan & Zary, 2019; Semerikov, 2021).

Another paramount ethical concern pertains to the risk of students developing an excessive dependency on AI tools for the completion of their academic tasks. While AI undoubtedly has the potential to enhance efficiency and bolster academic performance, there exists a peril that students may become overly reliant on these technologies, consequently undermining their capacity for critical thinking and independent problem-solving. As observed by Liu, (2023), educators must ensure that AI serves to complement, rather than supplant, the essential critical thinking skills that are crucial for the holistic development of students.

The dehumanization of the educational process constitutes a substantial concern articulated by educators. As artificial intelligence assumes an increasing number of instructional responsibilities, there exists a potential risk that interpersonal interactions between educators and learners may diminish, thereby creating a learning milieu that is more transactional and less emotionally nurturing. Educators express apprehension that AI-driven pedagogical methods may jeopardize the cultivation of vital soft skills such as empathy, communication, and collaboration, which are indispensable for a comprehensive educational experience (Pont-Niclos, 2024).

Notwithstanding these adversities, students predominantly maintain a favorable perspective regarding the role of AI in their educational endeavors. The capacity of AI to furnish customized learning experiences has augmented student engagement and motivation. Numerous students value the adaptability that AI facilitates, permitting them to modulate their learning pace in accordance with their unique requirements. This adaptability has also played a role in alleviating foreign language anxiety (FLA) for many learners, as they can practice without apprehension of committing errors in the presence of their peers. AI tools engender a non-judgmental atmosphere that promotes linguistic experimentation without the strain of immediate assessment, consequently enhancing their confidence and willingness to participate (Afrilla, 2023; Klímová et al., 2023b).

Nevertheless, while students acknowledge the cognitive advantages that AI affords, they concurrently experience a longing for the emotional connection and support that human educators provide. Although AI is proficient in delivering technical feedback, it inherently lacks the empathy, encouragement, and individualized attention that are hallmarks of human interaction. Some students have conveyed feelings of disconnection from their educators and peers, which adversely affects their overall engagement within the learning process. This observation underscores the necessity of preserving human connections in education, even as AI becomes increasingly integrated within the academic setting (Cui, 2021; Liu, 2023).

In summary, the incorporation of AI within English as a Foreign Language (EFL) education presents both advantageous opportunities and formidable challenges. On one hand, AI has augmented student autonomy, delivered tailored learning experiences, and mitigated foreign language anxiety. Conversely, it has prompted significant ethical queries concerning data privacy, dependency, and the potential dehumanization of the learning experience. In future endeavors, educators must endeavor to reconcile the advantages of AI's efficiency with the imperative to uphold the human dimensions of teaching and learning. By achieving this equilibrium, they can guarantee that AI functions as a mechanism to enhance, rather than diminish, the comprehensive educational experience.

Regarding prospective applications and advancements in the domain of AI-enhanced education, there exists an unequivocal necessity for educators and policymakers to prioritize the resolution of these ethical dilemmas. It is imperative to devise AI tools that not only deliver cognitive assistance but also incorporate emotional and ethical considerations into their architecture. AI systems should be engineered to bolster, rather than supplant, the essential

human components of education, including empathy, communication, and personal engagement. Further research should also be directed towards investigating methodologies for establishing more transparent, accountable, and privacy-conscious AI systems that emphasize the ethical treatment of student data. By tackling these challenges, the educational community can ensure that AI remains a constructive catalyst for innovation in language education.

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