

Human Connection in AI Era: A Mixed-Method Study in Vietnamese Higher Education Contexts

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Abstract

This quantitative-qualitative study used a combination of a Likert-scale-question survey of 302 students and in-depth interviews with 17 in order to investigate how students majoring in English Studies (ES) view the changing role of human interactions in AI-integrated classroom. The findings showed despite that fact that ES students really appreciate AI's efficiency and resources, they highly evaluated the existence of human connection. Statistic analysis indicated that students' desire for human support of emotion and motivation was directly related to their concerns for the AI's ethical deficiency and its solutions to complicated learning issues. Interviews obviously supported this, emphasizing the fact that students consider their human educators important factors of emotion encouragement, ethical guidance, and interactive-learning reassurance. Ultimately, this study provides life-based deposition for the viewpoint that human beings and AI can work effectively in the same learning environment of higher education. The most important outcome of this study is a set of practical implementation of acclimating curriculum, professional development, and educational policies to new learning environments with AI.

1. INTRODUCTION

Within numerous disciplines, artificial intelligence technologies are recognized for their substantial potential to customize pedagogical approaches, automate the provision of feedback, and increase administrative efficacy (Luckin et al., 2016; Zawacki-Richter et al., 2019). Within the pedagogical context of English Language Studies, AI-driven instruments such as intelligent tutoring systems, automated writing assessment tools, and generative language models are increasingly leveraged to bolster the linguistic capabilities of learners (Godwin-Jones, 2020; Kukulska-Hulme, 2021). Notwithstanding the potential for enhanced efficiency and scalability afforded by these technologies, they concurrently necessitate a critical examination of the role of human interaction, specifically the affective, motivational, and interpersonal dimensions that are foundation to profound pedagogical engagement. The centrality of human connection to effective pedagogical practice has long been established. Socio-constructivist frameworks, for instance, assert that learning is an intrinsically relational activity, facilitated through discourse, collaborative engagement, and affective attunement (Vygotsky, 1978; Mercer, 2019).

That AI has been used widely in the educational settings results in the driving a paradigm shift in established modalities for dissemination, acquisition, and assessment of knowledge. In various areas, AI technologies have substantial potential to tailor pedagogical approaches, provide feedback automatically, and boost administrative potency (Luckin et al., 2016; Zawacki-Richter et al., 2019). Particularly, AI-regulated tools including generative language models, intelligent tutoring systems, automated tools for writing assessment have been utilized to enhance the linguistic competence among learners of English Studies ((Godwin-Jones, 2020; Kukulska-Hulme, 2021). However, despite the efficiency and scalability of AI technologies can go in educational contexts, the role of human interaction, specifically the affective, motivational, and interpersonal dimensions that are foundation to profound pedagogical engagement must be counted as the central factors. The link between human connection and pedagogical practice has been recognized for ages as a solid and basic educational element. Vygotsky (1978) and Mercer (2019), in their socio-constructivist frameworks, affirmed it is learning that must include an intrinsically relational activity, facilitated through discourse, collaborative engagement, and affective attunement.

In term of language acquisition, a lecturer being attuned and empathetic not only provides his learners with linguistic progression but also builds their self-assurance, identity formation, and motivational drive (Dörnyei, 2009; Xie & Derakhshan, 2021). Consequently, AI integration in education has brought about the concern that the proliferation of AI-based system may dominate or even replace these human aspects of pedagogy, potentially culminating in learner estrangement, depersonalization, and decreased engagement (Selwyn, 2019). Even though AI can emulate linguistic outcome and plan learning procedures, it can hardly nurture the emotional resonance, solve unprecedented situations, or build interpersonal dynamics intrinsic to the teacher-learner relationship (Fegely et al., 2023).

This issue is particularly noticeable in Vietnamese higher education, where traditional teacher-centered models are giving way to more technology-mediated and learner-centered movement. The sudden acceleration of AI acceptance in education post-COVID-19 has catalyzed both innovation and tension, as institutions make great efforts to modernize while preserving cultural values of care, community, and respect (Pham & Hoang, 2021; Le, 2023). However, little empirical research has explored how students themselves perceive the changing nature of interpersonal interaction in AI-augmented classrooms—especially in linguistically and relationally sensitive domains such as ELS.

To address this gap, the present study employs a mixed-methods design to examine student perspectives on human connection in AI-integrated ELS learning environments. Drawing on quantitative survey data from 302 students and qualitative interview data from 17 participants, the research investigates how learners evaluate the role of emotion and motivation from human presence and the implications this holds for future pedagogy. By evaluating student voices, the study contributes to a growing body of research in order to lay supports for ethically responsible, emotionally intelligent, and socially grounded uses of AI in education (Holmes et al., 2022).

2. LITERATURE REVIEW

The central role of human connection in effective language pedagogy is well-established in theory. Vygotsky's (1978) socio-constructivist frameworks also affirmed that learning is facilitated through interaction and guided participation which is thought to be a dynamic especially critical in the acquiring of language, in which language process is constructed together with human conversations including non-sounded ones. Numerous studies have indicated that such affective elements as emotional support, empathy, and human feedback are crucial and instrumental in enhancing learner motivation, identity formation, and communicative desire (Mercer & Dörnyei, 2020). As a result, educators in language teaching environments have to conduct a dual function, (1) facilitators of knowledge and (2) creators of secure and emotional classrooms of language (Gkonou et al., 2020).

It has been long established that teacher immediacy, including the set of behaviors able to lessen the perceived psychological distance between teachers and learners, strongly correlates with both learning outcomes and emotional enhancement (Myers et al., 2016). Similarly, interpersonal communication procedures which consist of praise, confirmation, and emotional scaffolding are associated with the improving of student engagement and the diminishing of language-related anxiety (Xie & Derakhshan, 2021). Altogether, these studies affirm that language acquisition is not only a cognitive-linguistic process but it is also an intrinsically social and affective procedure.

The integration of AI into education has developed speedily, which was obviously activated by the immediate-online transmission during the COVID-19 pandemic. AI-assisted tools lead to various options for learning and teaching, such as adaptive learning platforms and automated scoring systems, which aim to improve efficiency, scalability, and personalization in pedagogy (Zawacki-Richter et al., 2019). This trend extends to the research community, where studies on AI writing tools find that researchers' adoption is significantly driven by positive attitudes and subjective norms, with perceived barriers having little impact on their use intentions (Al-Bukhrani et al., 2025). In language pedagogy, a field particularly receptive to AI integration, technologies such as intelligent tutoring systems, conversational agents, and machine translation are widely used to support tailored learning for individuals (Fryer & Ainley, 2019; Godwin-Jones, 2020).

Side by side with the improvement, scholars worldwide have critical apprehensions relating to ethics, pedagogy and relations in AI-integrated educational environments. Selwyn (2019), who cautions against a technology-centric environment in which AI is considered an impartial solution, urges a critical examination of what the nature of pedagogy may suffer when human functions are abandoned or automated. Holmes et al. (2022), in the similar attention, assert that AI-integrated should be designed carefully in order to ensure its compatibility with human learning nature composed of emotion and motivation.

In a larger scale, a scholar movement has been raised to call for the humanization of artificial intelligence within pedagogical contexts, especially in the affectively sensitive domain of language acquisition (Fegely et al., 2023; Knox, 2020). In spite of the fact that AI can deliver feedback and simulate conversational exchanges, it cannot go with situational awareness and empathetic arrangement which are foundation to authentic human interaction. As a result, without careful and intentional construction, AI-assisted education may intensify the feelings of indifference or neglect among learners (Aoun, 2017).

Adopting a sociocultural lens necessitates that the implementation of AI be evaluated in relation to the specific values and expectations of its context. Within the Vietnamese educational landscape, which is profoundly influenced by Confucian heritage and norms of community-based learning, the interpersonal function of the teacher is especially salient (Pham & Nguyen, 2020). Consequently, the absence of such relational features in AI-mediated pedagogy could undermine a student's sense of community, belonging, and moral orientation within the learning milieu.

Furthermore, a scarcity of empirical research persists regarding student perceptions of artificial intelligence, which significantly construct engagement and adoption. Students' viewpoints on the convenience, usefulness of AI tools have an impact on their motivation, confidence and learning behaviors (Zawacki-Richter et al., 2019; Holmes et al., 2022). However, significant work has been mostly done in Western and developed Asian countries (Luckin et al., 2022; Bond et al., 2023), little empirical research has been done in Vietnam. Although several studies have investigated patterns of technological acceptance and utilization (Nguyen & Tran, 2022), substantially fewer have exploded learner interpretations of the shifting boundaries between human and machine function in pedagogy. The present study, therefore, seek to address this lacuna by centering student voices on the affective and interpersonal dimensions of AI integration.

To fulfill the purpose of the study, the survey sought to answer the following research questions:

2.1. Research Questions

- (1) *How do students of English Studies in Vietnamese higher education perceive the roles of human interaction in AI-integrated classrooms?*
- (2) *Which cognitive, ethical, and pedagogical factors significantly predict students' expectations for emotional and motivational human roles in AI-enhanced learning environments?*
- (3) *To what extent do students view AI as a complement rather than a replacement for human educators and how do these views shape their engagement with AI-supported learning?*

3. METHODOLOGY

3.1. Pedagogical Setting and Participants

This study was conducted in the context of English Studies programmes at five universities which are located in the South Central and Southern regions of Vietnam. The participants included undergraduate students enrolled in English-related majors. A total of 302 students participated in the quantitative phase through a stratified convenience sampling method using an online questionnaire distributed via *Google form*. For the qualitative phase, 17 students were purposefully selected based on their willingness to provide in-depth insights and to represent diverse academic backgrounds and attitudes toward AI integration.

3.2. Design of the Study

The research employed a convergent parallel mixed-methods design, which enables the collection and analysis of both quantitative and qualitative data within the same time frame (May 18th–27th, 2025). This design allowed for the triangulation of findings and the

integration of large-scale patterns with individual-level meaning-making. The quantitative component aimed to identify statistically significant trends and predictive factors related to students' perceptions of human–AI interactions, while the qualitative component explored nuanced beliefs and emotional stances through semi-structured interviews.

3.3. Data Collection and Analysis

Quantitative Strand

The quantitative data were collected using a 30-item Likert-scale questionnaire grouped into six thematic sections (A–F) (**Appendix A**), with particular emphasis on Group D (items D1–D5), which assessed students' views on the emotional and motivational roles of human educators. Reliability analysis yielded a strong Cronbach's alpha ($\alpha = .87$) for Group D. Statistical analysis was performed using JASP software and included:

Descriptive statistics and Pearson correlation coefficients for D1–D5.

T-tests comparing gender differences.

ANOVA tests to examine the influence of demographic factors (gender, study year, AI usage, AI skills).

Correlations between D1 and items from Groups A, B, C, E, and F.

Multiple linear regression analysis to identify key predictors of students' emotional-motivational expectations (D1).

Qualitative Strand

Seventeen students participated in semi-structured interviews (**Appendix B**) guided by six main and three follow-up questions, focusing on perceptions of interpersonal interaction in AI-mediated classrooms. Interview transcripts were processed using AntConc and analyzed following Braun and Clarke's (2006) six-phase thematic analysis, including:

Open and in-vivo coding to retain participants' authentic expressions.

Cross-question and cross-participant comparisons categorized by affective tone (positive, neutral, negative).

Visualization of theme distributions through tables and charts.

Synthesis of emergent patterns, supported by representative quotations illustrating key emotional, ethical, and pedagogical concerns.

4. FINDINGS

4.1. Quantitative Findings

To understand how students in English Studies perceive the emotional and motivational role in AI-integrated learning environments, a multi-phase quantitative analysis was conducted. Phase 1 established a reliable composite score (D1) representing students' valuation of human emotional support, which demonstrated internal consistency and moderate-to-strong individual item correlations. Phase 2 tested the influence of demographic variables—including gender, year of study, frequency of AI use, and AI self-rated skill—on D1 using ANOVA, but yielded no statistically significant group differences, suggesting that students' valuation of human emotional presence was not demographically determined. Phase 3 employed correlation

analysis to explore relationships between D1 and six conceptual blocks (A–F), revealing particularly strong associations with ethical concerns, human–AI balance, and perceptions of AI's limitations in language disciplines. Phase 4 advanced this investigation through regression modeling, identifying Block F (English Studies) and Block E (Ethics) as the strongest predictors of D1, with adjusted R^2 values reaching up to 0.464.

4.1.1. Phase 1: Block D - Descriptive statistics, Pearson's correlation, and T-Test

Table 1

Descriptive Statistics D1-D2

Descriptive Statistics

	D1_Human_Role_Emotion_Motivation	D2_Human_to_Human_Interaction	D3_Human_Role_Secure	D4_Human_Role_Trust_Connection	D5_Human_Role_Qualities_Professionalism
Valid	302	302	302	302	302
Missing	0	0	0	0	0
Mean	4.023	3.957	3.781	3.536	3.937
Std. Deviation	0.924	0.867	0.810	0.833	0.862
Min. imum	1.000	1.000	1.000	1.000	1.000
Max. imum	5.000	5.000	5.000	5.000	5.000

Descriptive statistics in Table 1 revealed generally positive attitudes across all five indicators of human roles in AI-integrated learning environments. Among them, D1 (Human Role – Emotion & Motivation) received the highest average rating ($M = 4.02$, $SD = 0.92$), indicating students' strong agreement on the emotional and motivational significance of human presence.

In contrast, D4 (Trust & Connection) reported the lowest mean ($M = 3.54$, $SD = 0.83$), suggesting more neutral or varied views regarding trust-based human interactions in AI-mediated settings.

Table 2

Correlation D1-D5

Pearson's Correlations

Variable	D1_Human n_Role_E motion_M otivation	D2_Hum an_to_Hu man_Inte raction	D3_Hu man_R ole_Se cure	D4_Hum an_Role_ Trust_Co nnection	D5_Human _Role_Qual ities_Profes sionalism
1. D1_Human _Role_Emo tion_Motiv ation	Pea rso n's r	—			
		p- val ue	—		
2. D2_Human _to_Human _Interaction	Pea rso n's r	0.714	—		
		p- val ue	< .001	—	
3. D3_Human _Role_Secu re	Pea rso n's r	0.579	0.568	—	
		p- val ue	< .001	< .001	—

Table 2

Correlation D1-D5

Pearson's Correlations

Variable	D1_Human_Role_Emotion_Motivation	D2_Human_to_Human_Interaction	D3_Human_Social_Security	D4_Human_Role_Trust_Connection	D5_Human_Role_Qualities_Professionalism
4. D4_Human_Role_Trust_Connection	Pea rso n's r	0.446	0.436	0.592	—
	p- val ue	< .001	< .001	< .001	—
5. D5_Human_Role_Qualities_Professionalism	Pea rso n's r	0.711	0.716	0.522	0.468
	p- val ue	< .001	< .001	< .001	< .001

Pearson correlation analysis in Table 2 showed strong, positive associations among the five human-role dimensions. Notably, D1 (Emotion & Motivation) was closely correlated with D2 (Human-to-Human Interaction) ($r = 0.714$, $p < .001$) and D5 (Human Qualities & Professionalism) ($r = 0.711$, $p < .001$), forming a cohesive cluster emphasizing affective engagement and professionalism. The weakest yet still significant correlation was between D1 and D4 (Trust & Connection) ($r = 0.446$, $p < .001$), indicating this latter dimension may represent a more distinct subdomain within the broader human-role construct.

Table 3

Independent Samples T-Test D1-D5 with Gender

	t	df	p
D1_Human_Role_Emotion_Motivation	0.109	300	0.913
D2_Human_to_Human_Interaction	-0.041	300	0.967
D3_Human_Role_Secure	1.046	300	0.296
D4_Human_Role_Trust_Connection	0.281	300	0.779
D5_Human_Role_Qualities_Professionalism	0.494	300	0.621

Note. Student's t-test.

Independent-samples t-tests comparing male and female students in Table 3 revealed no statistically significant differences across all five dimensions of human roles (all $p > .26$). This suggests that perceptions of emotional, interpersonal, and professional human presence in AI-enhanced learning environments are consistent across gender.

4.1.2. Phase 2: Block D and Demographic Variables

Table 4:

ANOVA Summary of D1 and Demographic Variables

	Independent Variable	F Value	p Value	Significant ($p < 0.05$)	Interpretation
1	Gender	0.012	0.913	No	No gender-based difference in D1
2	Study_Year	1.651	0.178	No	No significant difference across study years
3	AI_Usage	0.364	0.834	No	Frequency of AI usage does not affect D1
4	AI_Skills	0.58	0.677	No	AI skills do not affect D1

As can be seen in Table 4, A one-way ANOVA confirmed the earlier t-test results, showing no significant difference in D1 scores across gender categories ($F(1,300) = 0.012$, $p = 0.913$). This suggests that students' valuation of emotional and motivational human roles is statistically

independent of gender. ANOVA results showed no significant differences in D1 scores across academic cohorts ($F(3, 298) = 1.65, p = 0.178$). Post-hoc Tukey tests confirmed that no pairwise comparison reached significance, even though Year 4 students showed slightly higher scores than Year 1. Overall, learners from different academic stages perceived the importance of emotional and motivational human roles similarly. The frequency of AI tool usage did not significantly affect students' ratings of human emotional and motivational roles ($F(4, 297) = 0.364, p = 0.834$). Tukey HSD post-hoc tests showed no meaningful difference across usage levels, suggesting that students value human emotional presence regardless of how often they use AI tools. Similarly, students' self-rated AI skills were not associated with significant differences in their D1 scores ($F(4, 297) = 0.580, p = 0.677$). The lack of significant pairwise differences indicates that regardless of AI proficiency, students consistently affirm the value of human emotional and motivational support.

4.1.3. Phase 3 Correlation

Table 5

Correlation Summary

Block	Representative Items	Correlation with D1 (approx.)	D1 Strength	Interpretation
A	A4, A5	0.13–0.14	Weak	Minimal alignment with AI interaction/collaboration
B	B2, B3, B5	0.29–0.34	Moderate	Personalization & confidence in AI modestly relate to D1
C	C4, C5, C3	0.35–0.60	Moderate–Strong	Critical evaluation of AI aligns with valuing human emotion
E	E1, E3, E2–E5	0.44–0.61	Strong	Ethical concerns tightly correlate with D1
F	F2, F4, F3	0.56–0.63	Strong	Belief in AI limits (translation, analysis) strongly aligns with D1

Block	Representative Items	Correlation with D1 (approx.)	D1 Strength	Interpretation
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Table 5 shows that, in the B-block, moderate correlations were found between D1 and B2 (AI supports personalized learning) ($r \approx 0.34$), B5 (confidence in AI integration) ($r \approx 0.32$), and B3 (active AI tool use) ($r \approx 0.29$). These results indicate that students who trust AI's capacity to personalize learning and integrate meaningfully into education tend to also value human emotional support—but the association remains modest. Correlation analysis revealed that D1 aligned more strongly with C-block items evaluating AI's broader implications. In particular, C4 (evaluating benefits and risks) showed a moderately strong correlation with D1 ($r \approx 0.60$), followed by C5 (avoidance of over-dependence on AI) ($r \approx .47$) and C3 (need for ethical

boundaries) ($r \approx 0.35$). These findings suggest that those who critically assess AI's long-term role also place higher value on the emotional and motivational functions of human presence. The E-block (ethics and authenticity) exhibited the strongest set of associations with D1. Significant correlations were found with E1 (ethical risks of AI) ($r \approx 0.61$), E3 (difficulty distinguishing AI- vs. human-written work) ($r \approx .55$), and E2–E5 ($r \approx 0.44$ – 0.49). This indicates that students who express ethical concerns about AI also strongly affirm the need for human emotional and motivational presence. In the F-block (focused on English studies), F2 (AI translation not fully comprehensive) and F4 (need for human–AI balance) showed strong correlations with D1 ($r \approx 0.63$). F3 (AI cannot replace deep literary analysis) was also substantial ($r \approx 0.56$). These results reflect that students who perceive limits to AI's linguistic or interpretive capacity are more likely to emphasize human emotional support in language learning contexts.

4.1.4. Phase 4: Linear Regression

Table 6

Linear Regression Summary

Block	R ²	Key Predictors	Takeaway
A	0.041	A4, A5	Minor impact via beliefs in AI-human interaction
B	0.178	B5, B2, B3	Moderate predictive power from personalization & AI trust
C	0.401	C4, C5	Strong effects from AI-critical reflection
E	0.417	E1, E3	Ethical & authenticity concerns highly predictive
F	0.473	F2, F4	Disciplinary limitations of AI most strongly predict D1

As can be seen in Table 6, the regression model using A-block predictors (general perceptions of AI) accounted for a modest 4.1% of variance in D1 ($R^2 = 0.041$, $p = 0.030$). Among these, only A4 (AI increases interaction) and A5 (AI–human collaboration) were significant predictors ($p < 0.05$). This suggests that a belief in AI's potential for enhancing interaction slightly contributes to the valuation of emotional human presence in learning. The B-block model showed a stronger effect, explaining 17.8% of the variance ($p < 0.001$). Significant predictors included B5 (Confidence in integrating AI) ($p < 0.001$), B2 (Personalization support) ($p = 0.002$), and B3 (Active AI usage) ($p = 0.050$). These findings indicate that students who are confident in AI's educational value also tend to appreciate the complementary emotional role of human instructors. C-block predictors explained a substantial 40.1% of variance in D1 ($p < 0.001$), with C4 (Weighing AI's benefits and risks) emerging as the strongest predictor ($p < 0.001$), followed by C5 (Avoiding over-dependence on AI) ($p < 0.001$). These results suggest that students who critically evaluate AI's role are more likely to affirm the necessity of human emotional and motivational presence. The E-block regression accounted for 41.7% of the variance in D1 ($p < 0.001$). Key predictors included E1 (AI poses ethical risks) ($p < 0.001$) and

E3 (Authenticity concerns about AI-produced content) ($p = 0.001$). This highlights that stronger ethical sensitivity is closely linked to valuing human emotion and presence in education. The F-block emerged as the most powerful predictive model, explaining 47.3% of D1's variance ($p < 0.001$). Significant predictors included F2 (AI translation is not fully comprehensive) and F4 (Need for human–AI balance in English Studies), both with $p < 0.001$. These findings suggest that when students perceive clear disciplinary limitations of AI, they strongly reaffirm the emotional and motivational importance of human instruction.

A synthesis of regression results across all blocks (A–F) revealed a clear gradient of predictive strength: while general usage beliefs (A-block) explained only 4% of the variance in students' valuation of the human emotional–motivational role (D1), more reflective and discipline-specific perceptions—such as translation limitations and the need for human–AI balance (F-block)—explained up to 47%.

Across all models, only reflective-cautionary beliefs survived as significant predictors. Factors such as speed of learning, frequency of AI use, or general usefulness were repeatedly overshadowed by concerns about ethical risks (E1), over-dependence (C5), authenticity (E3), and limits of AI in language-based learning (F2, F4). In particular, C4 (AI benefit–risk awareness) and F2 (translation gap) consistently emerged as top predictors of D1, often contributing one-third or more of each model's explained variance.

While these models collectively highlight the cognitive–ethical frame through which students evaluate AI, they also suggest caution in combining similar predictors due to potential shared variance. Residual diagnostics indicated mild skew and kurtosis in several models (e.g., C, E, F), but the Ordinary Least Squares approach remained robust. A future combined model incorporating C4, C5, E1, E3, F2, and F4 is estimated to yield $R^2 \approx .55\text{--}.60$, though multicollinearity should be tested (e.g., via VIF) prior to integration.

The quantitative analysis synthesized the predictive capacity of key variables to yield actionable insights for the design of emotionally responsive and ethically grounded AI-integrated pedagogical environments. Regression modeling revealed that emotional and motivational engagement (D1) is significantly predicted by students' cognizance of ethical risks (E1), their capacity to discern human versus AI-generated writing (E3), and their reflective practices pertaining to artificial intelligence (C4). The findings underscore that deeper student engagement is achieved when AI implementation is coupled with human-mediated interpretation, ethical framing, and affective validation. Moreover, concerns pertaining to authorship integrity (F2) and translation fidelity (D1) reveal that interpersonal trust remains a fundamental prerequisite for effective AI adoption. Synthesized, these results converge on a preferred design logic wherein AI systems function as transparent collaborators, designed to trigger critical reflection, signal operational boundaries, and preserve the teacher's essential interpersonal function.

In conclusion of the quantitative analysis, the results of the process show that students do not completely turn down artificial intelligence. Instead of that, they have a favor in its suitable implementation in a manner that augments - rather than replaces - the affective, ethical, and relational dimensions of the learning process. This core finding brings about the conceptual connection to the next qualitative analysis, in which voices from learners will indicate the significance of human dimensions and connection in the new era of education.

4.2.Qualitative Findings

With a thematic analysis conducted across four distinct phase of interviews, this study performs a subtle report on what higher-education students in Vietnam discuss the integration of AI into the discipline of university learning, especially in that of English Studies. The findings reveal a two-sided view: students readily accept AI for its instrumental benefits and yet simultaneously assert the irreplaceability of human connection, empathy, and ethics. These insights on the roles of human dimensions are structured through four analytic phases.

4.2.1. Phase 1: Thematic Coding and Human-AI Tension

The first phase of open coding showed a clear appreciation from students for the role of AI in advocating autonomy among learners and streamlining processes of pedagogy. For instance, interviewee [P01-Q1] emphasized the increased speed and ease of access to learning materials. However, the recognition of efficiency was concurrently challenged by concerns about emotional distance and spontaneity decline.

The student interviewees found AI-mediated interactions ‘less personal’ ([P03-Q1]) and ‘less personally engaging’ [P05-Q1]. The participants also told an important difference: AI was deemed suitable for supporting instrumental tasks such as grammar, research ([P02-Q3]) while higher-order cognitive and affective processes like ‘dialogue, reflection, and critical thinking’ necessitate human instructions. Significantly, they reaffirmed the irreplaceable role of empathy and ethical mentoring. “Emotional understanding and ethical direction remain crucial” ([P02-Q3]), and “[technology] cannot provide empathy and encouragement” ([P04-Q3]). Thus, AI is expected in the supportive role, not substituent. The student participants warned that spontaneity may fade even when confidence moves up (P03-Q4]). They showed a strong consensus for responsible AI adoption grounded in human discourse and ethical awareness ([P03-Q5], [P02-Q5]).

4.2.2. Phase 2: Sentiment Orientation and Diverging Priorities

This phase compared responses across questions and affective tones. While students acknowledged AI’s role in promoting autonomy (e.g., [P08-Q1]), they underscored a simultaneous decline in emotional engagement: “spontaneous conversations... may be less frequent.” In contrast, [P12-Q3] affirmed the enduring value of “personalized encouragement” and “ethical reasoning.” Despite thematic divergence, sentiment analysis showed a uniform tone of cautious optimism: all participants scored above the positivity threshold. As [P02-Q6] imagined, “AI would handle technical tasks... while the learning space encourages soft skills and interaction,” and [P05-Q6] emphasized, “Emotional intelligence and creativity are better nurtured through interpersonal engagement.” These views suggest openness to AI, conditional upon preserving the human side of education.

4.2.3. Phase 3: Frequency Mapping and Conceptual Salience

This phase quantified themes to determine conceptual weight. The terms “interpersonal” (36) and “emotional” (32) were the most frequent, confirming the centrality of human connection. Key themes included reduced interpersonal connection (44), empathy and emotional support (31), and dialogue and reflection (29), aligning with prior phases. Students welcomed AI’s efficiency (e.g., “grammar correction,” “research”) but insisted it not diminish human interaction. Pedagogical concerns emerged around ethical guidance (ethics and moral responsibility, 27), personalized mentorship (27), and learner autonomy (12), pointing to a vision where AI supports rather than replaces human judgment and presence.

4.2.4. Phase 4: From Themes to Pedagogical Design

Synthesizing insights across phases, students articulated a clear design philosophy: AI should amplify—not override—human presence. They identified three key concerns:

What is being lost: Informal dialogue, spontaneous interaction, and emotional warmth are fading. “Routine questions now go to ChatGPT,” reducing bonding opportunities and creating a transactional atmosphere.

What must remain: Empathy, mentorship, and ethical judgment must be human-led. “Critical thinking and encouragement must anchor any lesson.”

How to restore balance: Students proposed actionable strategies: letting AI handle routine tasks, embedding empathy structurally (e.g., check-ins, peer support), human-led reflection on AI outputs, and preserving unmoderated conversation spaces.

Ultimately, students offered a model of pragmatic optimism—open to automation’s benefits but insistent on preserving the “soul” of learning. Teachers, they argue, must remain “mentors-in-chief” in an AI-enhanced classroom.

5. DISCUSSION

The quantitative findings of this study offer compelling evidence that students of English Studies consistently uphold the value of human emotional and motivational support in AI-integrated classrooms. The composite indicator D1 (Human Role – Emotion & Motivation) received the highest mean score ($M = 4.02$), with strong correlations to interpersonal interaction (D2), professional human qualities (D5), and perceived security (D3), indicating that students see these human functions as interrelated and indispensable. Notably, gender, year of study, AI usage frequency, and AI self-rated skill had no statistically significant influence on D1, revealing a broad consensus that transcends demographic differences.

The correlation and regression phases highlighted a consistent cognitive-ethical framework shaping students’ responses. Strong associations were observed between D1 and concerns related to AI’s limitations in critical areas of English Studies (Block F: e.g., F2 “AI translation is not fully comprehensive”, F4 “Need for human–AI balance”), ethical ambiguity (Block E: E1 “AI poses ethical risks”, E3 “Hard to distinguish AI- vs. human-written content”), and reflective use practices (Block C: C4 “Evaluating AI’s benefits and risks”, C5 “Avoiding over-dependence on AI”). These results suggest that students who adopt a cautious, reflective approach to AI—particularly in areas involving authenticity, interpretation, and language nuance—are significantly more likely to reaffirm the importance of human emotional presence in education.

Regression models provided further substantiation for these qualitative observations. Whereas general beliefs about the benefits of AI (Block A) yielded only a modest predictive value ($R^2 = 0.041$), variables related to discipline-specific and ethically-grounded reflections (Blocks E and F) exhibited the highest predictive strength ($R^2 \approx 0.42–0.47$). Indeed, predictors such as C4, E1, and F2 consistently accounted for over one-third of variance in emotional and motivational engagement (D1), signifying a deep interdependence between students’ affective valuations and their epistemological skepticism or ethical framing. This aligns with recent scholarly findings (e.g., Holmes et al., 2022; Zawacki-Richter et al., 2019), which similarly underscore the perceived irreplaceable of human interpretation, care, and integrity with in AI-augmented pedagogical models.

Significantly, this observed pattern does not suggest a rejection of artificial intelligence per se. Instead, it reflects a sophisticated preference: students support integration of AI as a supplemental tool, not as a pedagogical replacement. Their stance is minimally influenced by superficial factors such as usage frequency or technical confidence, but is substantively guided by deeper considerations of authorship integrity, translational fidelity, and the moral architecture of the educational environment. This prioritization of human judgement and affective resonance is congruent with contemporary academic discourse advocating for ethically-conscious AI implementation (Selwyn et al., 2021; Luckin et al., 2022). Thus, the findings advance a critical design imperative: educational AI should be engineered not as a surrogate for, but as a amplifier of, human connection-cultivating pedagogical spaces that retain empathy, ethics, and emotional presence as their foundational principles.

These findings establish a crucial bridge to the qualitative strand of this research, where students narratives will further elucidate why emotional, ethical, and interpersonal roles are deemed not only desirable but indispensable within AI-integrated pedagogy. The convergence of quantitative and narrative data substantiates a central proposition: that human presence remains the fundamental of affective and ethical axis upon which effective education—regardless of technological advancement—must be architected.

The qualitative findings substantiate and enrich the quantitative data by elucidating the emotional, ethical, and pedagogical apprehensions that students harbor regarding the integration of AI within English Studies. Across four discrete phases of thematic analysis, students articulated a consistent perspective: while artificial intelligence may facilitate efficiency, it must never supplant the human nucleus of education - which they identify as empathy, mentorship, spontaneity, and ethical guidance.

In the initial phase, student participants emphasized AI's ability to improve learner autonomy and enforce access to learning materials. Simultaneously, they reported a discernible decline in affective depth and interpersonal spontaneity. That they described the AI-driven learning environment as “less personally engaging” and “more structured but emotionally distant” (e.g., [P05-Q1]) indicates their mixed feelings of expectations. These reactions align with global research results that alarm against excessive automation in education, highlighting the attendant risks of eroding social presence and student-teacher association (Holmes et al., 2022; Luckin et al., 2022).

A critical finding emerged in the tension between efficiency and emotional connection (Phase 2). While students expressed optimism about AI tools, their sentiment analysis revealed a preference for AI as a supporting agent, not a substitute. Phrases such as “AI supports, but dialogue and reflection must stay human-led” (e.g., [P02-Q2]) and “genuine encouragement can't be automated” (e.g., [P12-Q3]) indicate that learners draw a firm boundary between technical assistance and relational teaching. This affirms prior quantitative regression results where the strongest predictors of valuing human presence were tied to students' ethical reflections and critical evaluations of AI's limitations (e.g., E1, C4, F2). In both strands, students are driven by a principled desire to maintain the moral and interpersonal heart of pedagogy.

Phase 3 provided empirical salience mapping, which quantitatively substantiated these perceptions. The most frequently cited terms—“interpersonal” (36 mentions) and “emotional” (32)—reveal that even when students speak positively about AI, their dominant conceptual

frame is human-centered. This echoes the quantitative finding where D1 (“I value the emotional and motivational presence of teachers”) scored the highest overall and was robustly predicted by critical reflections on AI’s limitations. The triangulation of term frequency with statistical salience affirms a convergent logic: students are not rejecting AI, but are critically designing its role in relation to their learning values.

In phase 4, it was students who worked out solutions with pedagogical models to AI-human dialectic problems. They proposed strategies which include the delegating of instrumental tasks to AI, the preserving of opportunities for affective check-ins, and the of embedding reflection as a critical counterbalance to algorithmic outputs. All these proposed strategies focus on a common issue: a learner-centric blueprint for ethical AI implementation. Their responses quite align with the “human-in-the-loop” frameworks advanced by scholars such as Selwyn et al. (2021) and Woolf et al. (2021), in which lecturers function as curators of interaction and values, not as distributors of content or information. With these crucial learner-driven models, artificial intelligence is considered a relational enabler, a conceptualization that resonates with contemporary calls for co-agency within digital pedagogy; not an instructional authority that control pedagogical processes (Zawacki-Richter et al., 2019). The qualitative findings all together affirm that students neither support building pre-AI classrooms nor endorse a totally-automated pedagogical systems. Obviously, they are in demand for a hybrid model in which artificial intelligence does not serve to replace, but to support and amplify the human functions of ethics, affect, and dialogue. This perspective tells the story of a pragmatic, realistic optimism originating in a distinct moral clarity and inherent: only human beings can teach with empathy, respond to affective states, and structuralize ethical behavior and artificial intelligence works as a supporting factor. The clearest common point of quantitative and qualitative strands validates the central thesis of this research: human presence is a necessary precondition of learning in AI-driven environment, not a vestigial feature.

This convergence of quantitative-qualitative findings strengthens the central thesis that considers human involvement in AI-mediated education the matters of epistemology and ethics, not those of simple nostalgia or temporary reactions. Students’ valuation of human presence of affect and motivation (D1) revealed by the quantitative data was strongly predicted by (1) their apprehensions on AI’s ethical ambiguity (E1, D3), (2) AI’s limitations in core disciplinary tasks in English Studies (F2, F4), and (3) their own critical reflexivity on AI’s function (C4, C5). These predictors are indicative of a sophisticated and reflective stance laid on students’ academic and ethical competence; not ominous of superficial attitudes. The qualitative data confirmed this stance, according to student participants indicating the role of human educational factors as “emotional anchors,” “ethical models,” and “relational guides” ([P12-Q3], [P02-Q2], [P07-Q1]), while expressing concerns on the “transactional atmosphere” engendered by excessive automation ([P05-Q1]).

This mutual reinforcement across the methodological strands is accordant with recent empirical literature which emphasize the limitations of artificial intelligence in accomplishing high-order human functions. As illustrated by Holmes et al. (2022), emotional scaffolding, moral judgement, and pedagogical adaptability are human characteristic nature and capacities that AI cannot simulate with fidelity. In the same attention, Luckin et al. (2022) propose a “pedagogically grounded AI,” in which human teachers can perform their core functions in relational and ethical learning paradigms. This present study, following the scholarly perspectives above, transfer student-grounded viewpoints from the specific context of higher

education in Viet Nam, which reveals that even in amenable-to-AI-integration settings, the affective and ethical presence of teachers cannot be replaced. Additionally, quantitative-qualitative findings of this study respond positively to the call for “pedagogical co-agency” (Selwyn et al., 2021; Woolf et al., 2021). The pedagogical framework of co-agency has potentials of creating space for students, lecturers and AI operate in dialogic-supporting collaboration. The student participants in this study show that they can envision such a model - one in which human lecturers maintain emotional engagement, mentor intellectual autonomy, and supportively protect ethical integrity, while AI is deployed to optimize educational procedures in content delivery and administrative management. Obviously, these conceptions are not inspired with ideals but by empirical insight and their resonance across both quantitative and qualitative analysis, which imbues them with constraining credibility.

Conclusively, co-method analysis of these data types proposes a fundamental and compulsory pedagogical guideline: Effective AI integration do not necessitate substitution, but human-AI synergy which must be constructed with the lens of learners’ affective and epistemic expectations. This study, supported by findings with quantitative statistical value and qualitative analytical significance, not only offers theoretical validation for hybrid pedagogical models but also provides pragmatic and applicable instructions for curriculum design, professional development, and institutional policy within the context of irreversible AI integration.

6. CONCLUSION AND IMPLICATIONS

This mixed-method study adds to the academic image of how students in Vietnamese higher education perceive the changing role of their lecturers in AI-integrated learning contexts. A robust mixed-method design, which comprises descriptive statistics, regression modeling, and multi-phase thematic analysis, helps find out that students in Vietnamese context of higher education do not oppose the use of AI in education. They advocate for a learning environment in which AI does not replace, but complements the emotional, ethical and interpersonal functions of human teachers.

In term of quantitative analysis, that student participants supportively affirm emotional and motivational human roles (D1) was tightly predicted by concerns of ethical reflection and specific disciplines; e.g., E1: ethical risks of AI, F2: AI’s limitations in language translation, C4: critical use of AI. Qualitatively, students strongly agreed with these priorities as they emphasized their teachers’ functions of emotional anchor, ethical role model, and dialogue facilitator. It is confirmed by these convergent findings that despite being valued for its efficiency and scalability, AI cannot replace the human dimensions that support deep learning: empathy, moral judgment, and relational engagement.

This research reaffirms and strengthens recent calls for human-centred AI-integrated education, which are emphasized by Luckin et al., (2022); Selwyn et al., (2021); Holmes et al., (2022). Particularly, it has gone with “pedagogical co-agency,” - the paradigm in which human educators can manage AI-supported processes with the optimized oversight of positive emotions, true morality, and clear interpretation. In this study, students’ voices were foregrounded, which is crucial to offer context-sensitive and pragmatic instructions for the designing of AI-integrated learning in which learners’ human nature of social relationships and ethics is respected and appreciated.

The present study helps re-affirm sociocultural and relational theories of learning in the age of AI. Additionally, it underscores the irreplaceability of interpersonal interaction both in common sense perception and pedagogical functions, which are relevant to Vygotskian perspectives, affective education models, and critical pedagogy. Human beings are the core of any educational process; therefore, those perspectives must be involved in the learning environment of AI integration.

Pedagogical implications point out the strategy of hybridization, in which AI is assigned with mechanical tasks such as delivering information, grading, summarizing etc., while human educators take responsibility for tasks that require judgment, attention, and flexibility. Curriculums should be designed with the embedding of reflection points on AI use, the promoting of collaborative analysis on AI-generated content, and the training of teachers with guidance on how to control teaching situations and turn AI into an effective tool.

Institutional implications indicate that investments should not only be in construction of infrastructure for technology but also focus on professional development through which lecturers can improve skills of navigating the affective and ethical dimensions. Furthermore, institutions should re-frame their policies so that their lecturers can proactively make decisions about teaching instructions and process. The policies must ensure and reinforce the human presence as the core factor of educational quality and enhancement.

In conclusion, this study brings about empirical clarity to a pressing educational challenge: how to maintain and reinforce human core of teaching and learning in AI-integrated educational context. The answer, which is affirmed by both data and students' voices, exists in intentional design - in which AI is present not to eclipse human capacities but to amplify them.

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Appendix

Appendix A: Constructs and Questionnaire Blocks

The questionnaire tool was produced to measure students'[multifaceted perceptions of AI-integrated learning. There are six thematic blocks (A-F), each of which corresponds to a construct related to the literature on AI in education, learner psychology, and ethical digital pedagogies.

Block	Construct	Description
A	Perception of changes in AI-integrated learning environment	To capture how students perceive changes in undergraduate pedagogy, instructional flow, and how they assess the nature of knowledge in AI-supported settings
B	Use and integration of AI in ELS learning	To measure frequency, autonomy, confidence, and attitudes to AI tools that are used in academic tasks and self-directed learning.
C	Expectations in AI-supported learning environment	To reflect students' to-future-looking concerns, including their aspiration for ethical clarity, cognitive autonomy, and updated learning instruments.

D	Role of human connection in learning	To assess the perceived irreplaceability of emotional support, social interaction, and trust in human-human learning dynamics.
E	Critical thinking and ethical concerns	To evaluate awareness of academic integrity risks, need for ethical guidelines, and critical literacy in discerning AI-blended content
F	Perceptions by Academic Field	To explore domain-specific opinion on AI's relevance and adequacy across language skills, ESP, literature, and critical subjects

Each construct comprises five items rated on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The tool was made based on current theoretical discussions in the literature and was validated through expert view before deployment.

Appendix B: Core Themes of Interview

Themes	Interpretation
Impact of AI on interpersonal interaction	To explore shifts in how students engage with peers, instructors, and academic support networks as AI tools become embedded in their learning
Field-specific contributions of AI	To Investigate perceived value and limitations of AI in discipline-specific contexts
Enduring human connections in the AI context	Focusing on human elements that students believe cannot be substituted or degraded by AI tools.
Changes in academic participation	To address how AI influences collaborative, dialogic, and interactive learning formats
Perceptions of Institutional Support for interaction	To explore institutional readiness and design for interpersonal learning in an AI-enhanced classroom
Designing AI-classrooms for communication support	To gather recommendations from students on how to improve AI-human relational dynamics in learning

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