Students' Motivation in Using ChatGPT for Flipped Classroom Preparation: A Quantitative Study in a Vietnamese EFL Setting

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Abstract : This study investigates the motivation of English-major students at Dai Nam University, a private higher education institution in Hanoi, Vietnam, in using ChatGPT within flipped classroom settings. Adopting a quantitative survey-based design, data were collected from 76 participants through a five-point Likert scale questionnaire comprising 20 items organized around five motivational dimensions: general ChatGPT usage, enjoyment and interest, competence and confidence, curiosity and intellectual exploration, and anxiety reduction and extrinsic engagement. Descriptive statistical analysis revealed an overall mean score of 3.74, indicating a moderately positive motivational orientation toward ChatGPT among participants. Curiosity and intellectual exploration emerged as the strongest motivational dimension (M = 3.87), followed by competence and confidence (M = 3.82), anxiety reduction (M = 3.78), and extrinsic engagement (M = 3.76), while enjoyment and interest produced the most moderate scores (M = 3.57). The findings suggest that ChatGPT functions as a meaningful motivational resource in flipped classroom contexts, particularly in fostering intrinsic curiosity, building learner confidence, and alleviating language anxiety. Implications for EFL pedagogy and AI integration in Vietnamese private universities are discussed**.**

Keywords: ChatGPT, motivation, flipped classroom, EFL, English-major students

INTRODUCTION

The rapid advancement of artificial intelligence (AI) has significantly transformed education worldwide. Since its public launch in late 2022, ChatGPT — a robust chatbot powered by large language models — has gained rapid global recognition (Van Horn, 2024), attracting considerable attention for its capacity to provide instant feedback, support autonomous learning, and enhance learner engagement. ChatGPT's capabilities assist in language development and foster learners' autonomy, engagement, and motivation through tailored, interactive support (Firat, 2023), making it especially promising for EFL education.

In Vietnam, AI adoption in education has become a national priority. Vietnam's Ministry of Education and Training has made rapid strides in digital transformation, and AI now signals a sharper shift toward comprehensive restructuring of teaching and education governance (Nguyen, 2025). Nevertheless, the integration of AI tools in private universities remains uneven, and institutions such as Dai Nam University — a private university in Hanoi — represent contexts where English-major students encounter both the opportunities and challenges of this technological shift.

Alongside AI, the flipped classroom model has gained growing traction in higher education. Research indicates that the flipped classroom approach positively affects learning by reducing cognitive load, increasing motivation, and improving student attitude and satisfaction (Turan & Akdag-Cimen, 2020). When combined with generative AI tools like ChatGPT, the flipped classroom — built on the premise of using class time for active, student-centered learning — can empower students to take greater charge of their own learning (Anggoro, 2025). However, empirical research exploring this intersection in the Vietnamese higher education context remains limited. Therefore, this study investigates the motivation of English-major students at Dai Nam University in using ChatGPT within flipped classroom settings, examining both intrinsic factors such as personal curiosity and enjoyment, and extrinsic factors such as academic expectations and instructor encouragement.

LITERATURE REVIEW

2.1 ChatGPT in EFL Education

The rapid proliferation of artificial intelligence tools in educational settings has generated considerable scholarly interest, with ChatGPT emerging as one of the most widely studied AI applications in language learning contexts. Since its release in November 2022, many studies have explored the use of ChatGPT in EFL education, with research providing solid evidence regarding its affordances — including increased learning opportunities, personalized learning, and teacher support (Lo, 2023). As a large language model capable of generating contextually appropriate, human-like responses, ChatGPT offers EFL learners an interactive and accessible platform for practicing language skills outside the formal classroom environment. Scholars have increasingly positioned it not merely as a supplementary tool, but as a transformative agent capable of reshaping how students engage with language learning tasks (Kasneci et al., 2023).

Research has consistently highlighted the broad utility of ChatGPT across multiple language skills. Studies examining its application in writing instruction have found that it provides timely, personalized feedback that helps learners identify and address grammatical and lexical weaknesses (Yan, 2023). In speaking contexts, ChatGPT has been found to boost students' confidence and speaking skills, though inaccurate information, difficulty in using correct prompts, and technical issues remain key challenges (Muniandy & Selvanathan, 2024). Beyond discrete skills, the tool has also been recognized for supporting vocabulary acquisition, reading comprehension, and critical thinking — competencies that are central to the academic development of English-major students in Vietnamese higher education institutions such as Dai Nam University.

2.2 Motivation Frameworks in AI-Enhanced Language Learning

Understanding student motivation in technology-integrated learning environments has long been guided by established theoretical frameworks. Self-Determination Theory (SDT), proposed by Deci and Ryan (2000), identifies three core psychological needs — autonomy, competence, and relatedness — as the foundations of intrinsic motivation. Research exploring the impact of ChatGPT on EAP students' language learning experience through the lens of SDT suggests that understanding how this technology interacts with learners' basic psychological needs allows educators to make informed decisions about how to integrate it effectively (Pun & Curle, 2024). When these needs are met through AI-enhanced learning, students are more likely to engage deeply, persist through challenges, and derive genuine satisfaction from the learning process (Ryan & Deci, 2000).

Complementing SDT, the Integrated Model of Technology Acceptance (IMTA) has been applied to examine how intrinsic and extrinsic motivation jointly shape students' behavioral intention to adopt tools like ChatGPT. Research adopting the IMTA framework reveals that students generally perceive ChatGPT as both easy to use and beneficial for language acquisition, with perceived enjoyment significantly predicting their intention to use it (Zhang et al., 2025). This dual motivational lens — encompassing both enjoyment-driven intrinsic motivation and performance-driven extrinsic motivation — provides a valuable framework for understanding the multidimensional ways in which EFL learners engage with ChatGPT, and directly informs the design of the present study.

2.3 Intrinsic Motivation: Curiosity, Enjoyment, and Competence

Among the intrinsic dimensions of motivation, curiosity and intellectual exploration have been closely associated with ChatGPT use in educational settings. Learners are intrinsically motivated to actively explore new and complex aspects of ChatGPT, with their curiosity helping them to learn actively and to enhance their ability to retain information (Bai et al., 2025). This aligns with broader theories of curiosity-driven learning, which suggest that when learners encounter novel, responsive, and intellectually stimulating tools, they are more likely to pursue self-directed inquiry beyond the boundaries of assigned material (Oudeyer et al., 2016).

Enjoyment has similarly been identified as a significant intrinsic motivator in ChatGPT-assisted learning. The interactive nature of ChatGPT, coupled with immediate feedback, fosters a more engaging and enjoyable learning process (Huang et al., 2023). For EFL learners who may otherwise find independent study monotonous or anxiety-inducing, ChatGPT's conversational interface transforms preparation into a more dynamic and pleasurable activity. Research has also underlined the potential for student motivation in writing classrooms, where students are commonly discouraged by difficult words or expressions, and where educators are seeking more authentic and intrinsically motivating assignments (Rudolph et al., 2023).

The competence dimension of intrinsic motivation is equally well-documented in the literature. Students using ChatGPT in English language learning have reported increased intrinsic motivation due to the platform's conversational style and responsiveness, which gave them a sense of linguistic competence and control (Bai & Wang, 2023). This perceived competence is particularly meaningful in flipped classroom settings, where students are expected to arrive prepared and capable of contributing meaningfully to in-class activities. By allowing learners to rehearse, clarify, and consolidate their understanding of content before class, ChatGPT functions as a scaffolding tool that strengthens self-efficacy and reduces the cognitive burden associated with independent preparation (Firat, 2023).

2.4 Extrinsic Motivation: Anxiety Reduction and Academic Engagement

Beyond intrinsic motivation, existing research has documented significant extrinsic motivational benefits associated with ChatGPT use, particularly in relation to anxiety reduction. Foreign language anxiety — characterized by apprehension about making errors, being judged by peers, or struggling with difficult content — is a well-established barrier to EFL learning (Horwitz et al., 1986). ChatGPT can positively impact EFL students' language practice by offering a non-judgmental environment, immediate feedback, and practice opportunities (Jeon, 2024), which in turn lowers learners' psychological barriers to engagement. The non-judgmental nature of interacting with an AI — as opposed to a teacher or peer — appears to create a psychologically safer space in which students feel freer to experiment, make mistakes, and seek clarification without fear of social evaluation (Van Horn, 2024).

Research has found a moderate negative correlation between ChatGPT usage frequency and foreign language speaking anxiety among university students, indicating that more frequent use of ChatGPT is associated with lower anxiety levels (Chen, 2024). This anxiety-reducing effect has important implications for flipped classrooms, where students are required to prepare independently before class and then perform in collaborative, discussion-based activities. Students who feel less anxious about difficult content are more likely to engage in pre-class preparation with greater diligence and to participate more confidently in subsequent in-class tasks (Muñoz et al., 2023).

Extrinsic motivation also manifests in students' willingness to complete assigned tasks on time and to participate in structured classroom activities. Research involving 350 students and instructors reported that the use of ChatGPT notably increased students' learning motivation and class participation (Muñoz et al., 2023), suggesting that its benefits extend beyond the individual preparation phase to shaping broader patterns of academic engagement. These findings are particularly relevant to the Vietnamese higher education context, where extrinsic academic pressures — including grade expectations and instructor encouragement — play a substantial role in shaping student behavior (Nguyen & Habók, 2020).

2.5 ChatGPT and the Flipped Classroom Model

The flipped classroom model, which repositions direct instruction outside of class time and reserves in-class sessions for active, collaborative learning, has gained considerable traction in EFL education. Research indicates that the flipped classroom approach positively affects learning by reducing cognitive load, increasing motivation, and improving student attitude and satisfaction in higher education (Turan & Akdag-Cimen, 2020). When integrated with AI tools such as ChatGPT, the model's pre-class phase becomes particularly rich with possibilities for personalized, self-directed learning.

The integration of AI-based chatbots into flipped learning is an emerging research area (Lo & Hew, 2023), and scholars have begun to explore how these tools can support the pre-class preparation phase that is central to the model's effectiveness. ChatGPT has been found to help design more engaging and effective in-class activities, generating realistic role-play scenarios that allow students to practice language skills in authentic contexts (Anggoro, 2025), while also supporting learners in clarifying difficult concepts independently before class. This dual function — as a preparation tool and an engagement catalyst — positions ChatGPT as an especially well-suited companion to the flipped classroom approach.

Despite these promising developments, research specifically examining student motivation in ChatGPT-integrated flipped classrooms within the Vietnamese higher education context remains limited. Most existing studies have been conducted in East Asian contexts such as China, South Korea, and Thailand (Anggoro, 2025; Van Horn, 2024), leaving a gap in understanding how cultural, institutional, and linguistic factors specific to Vietnam — and to private universities like Dai Nam University in particular — shape students' motivational responses to this technological integration. The present study seeks to address this gap by providing empirical, survey-based evidence from English-major students at Dai Nam University.

RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a quantitative research design, utilizing a survey-based approach to investigate English-major students' motivation in using ChatGPT within flipped classroom settings at Dai Nam University. Quantitative research is well-suited to studies seeking to measure, describe, and analyze patterns across a defined population through the use of numerical data (Creswell & Creswell, 2018). Specifically, this study employed a descriptive survey design, which allows researchers to capture a snapshot of participants' attitudes, perceptions, and behaviors at a particular point in time (Cohen et al., 2018).

The use of surveys as the primary data collection instrument is well-established in educational research examining learner motivation and technology adoption. Survey-based designs have been widely used in studies investigating students' motivational orientations toward AI tools in language learning contexts (Zhang et al., 2025; Muñoz et al., 2023), as they enable the efficient collection of data from a relatively large number of participants while maintaining internal consistency and reliability. The present study employed a five-point Likert scale questionnaire, which is a commonly used instrument in motivation research for its ability to capture degrees of agreement or disagreement across a range of attitudinal items (Dörnyei & Taguchi, 2010). This design is appropriate for the present study given its aim to measure both intrinsic and extrinsic motivational dimensions, as it allows for the systematic quantification of students' responses and the identification of patterns across thematic clusters.

3.2 Participants

The participants of this study were English-major students at Dai Nam University, a private higher education institution located in Hanoi, Vietnam. Dai Nam University was selected as the research site because it represents a growing private university context in which the integration of AI tools and innovative pedagogical approaches such as flipped learning is still in its early stages, making it a particularly relevant and underexplored setting for this line of inquiry.

A total of 76 students participated in the study, comprising students from the first, second, third, and final years of their undergraduate English program. The majority of respondents were female (n = 64, 84.2%), with male students accounting for the remaining participants (n = 12, 15.8%). This gender distribution is broadly consistent with the demographic profile commonly observed in English language programs at Vietnamese universities, where female students tend to predominate (Nguyen & Habók, 2020). Fourth-year students constituted the largest group (n = 34, 44.7%), followed by second-year students (n = 28, 36.8%), third-year students (n = 12, 15.8%), and first-year students (n = 2, 2.6%).

Purposive sampling was employed to select participants, as this approach enables researchers to deliberately select individuals who possess the characteristics and experiences most relevant to the research questions (Creswell & Creswell, 2018). In this case, all participants were enrolled in an English major program and had prior exposure to both ChatGPT and the flipped classroom model, making them well-positioned to provide informed responses to the survey items. This sampling strategy, while not enabling statistical generalization to broader populations, is appropriate for exploratory studies seeking to generate contextually rich, meaningful data from a specific group (Cohen et al., 2018).

3.3 Procedure

The study was conducted during the academic semester at Dai Nam University. Prior to data collection, the researcher sought and obtained ethical approval in accordance with the university's research guidelines. All participants were fully informed of the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any time without consequence. Informed consent was obtained from all respondents before they completed the survey, in line with ethical standards for educational research (British Educational Research Association [BERA], 2018).

Before administering the survey, participants were introduced to the context of the study through a brief explanation of the flipped classroom model and the role of ChatGPT within it. This was to ensure that all respondents had a shared understanding of the pedagogical context being investigated, thereby improving the validity and reliability of their responses (Dörnyei & Taguchi, 2010). Students were encouraged to reflect on their actual experiences of using ChatGPT during flipped classroom preparation, including both in-class and pre-class activities, before completing the questionnaire.

The survey was distributed electronically via Google Forms, which has been widely adopted in educational research for its accessibility, ease of use, and efficiency in reaching student populations (Muñoz et al., 2023). Participants completed the questionnaire independently and anonymously, and data were automatically recorded upon submission. The survey took approximately 10 to 15 minutes to complete.

3.4 Data Collection and Analysis

Data were collected through a structured questionnaire comprising two main sections. The first section gathered demographic information, including participants' year of study and gender. The second section consisted of 20 items measuring students' motivational orientations toward using ChatGPT in flipped classroom settings, organized around five thematic dimensions: general ChatGPT usage, enjoyment and interest, competence and confidence, curiosity and intellectual exploration, and anxiety reduction and extrinsic engagement. Each item was rated on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The use of a Likert-scale instrument is well-supported in motivation research, as it captures nuanced attitudinal variation across a range of constructs (Dörnyei & Taguchi, 2010).

The questionnaire items were developed with reference to established motivational frameworks, particularly Self-Determination Theory (Deci & Ryan, 2000) and the Integrated Model of Technology Acceptance (Davis, 1989), ensuring theoretical grounding and content validity. Items were reviewed for clarity and appropriateness by an experienced EFL educator prior to administration, and a bilingual Vietnamese-English format was adopted to minimize potential misunderstanding among respondents, consistent with best practices in survey design for non-native English-speaking populations (Cohen et al., 2018).

Quantitative data were analyzed using descriptive statistical methods. Mean scores and standard deviations were calculated for each individual item and for each thematic cluster to identify patterns in students' motivational responses. Frequency distributions were also examined to determine the proportion of students selecting each response option, particularly for items of key theoretical significance. This approach to data analysis is consistent with survey-based motivation studies in EFL contexts (Zhang et al., 2025; Van Horn, 2024), and enables the identification of both overall trends and item-level variation in students' motivational profiles. All data were processed using Microsoft Excel and SPSS, with results interpreted in light of the theoretical frameworks guiding the study.

RESULTS

This section presents the findings of the survey administered to 76 English-major students at Dai Nam University. Results are organized around five thematic clusters: general ChatGPT usage, enjoyment and interest, competence and confidence, curiosity and intellectual exploration, and anxiety reduction and extrinsic engagement. Descriptive statistics — including mean scores (M) and standard deviations (SD) — are reported for each item and cluster. All items were rated on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree).

4.1 General ChatGPT Usage

The general usage cluster yielded an overall mean of M = 3.66 (SD = 1.10), indicating a moderately positive pattern of ChatGPT adoption among participants. The highest-scoring item in this cluster was "I frequently use ChatGPT for academic purposes" (M = 3.92, SD = 0.94), suggesting that the majority of students have incorporated the tool into their broader academic routines. Students also reported moderate use of ChatGPT specifically for class preparation in flipped classrooms (M = 3.68, SD = 0.99) and for clarifying difficult concepts (M = 3.68, SD = 1.04). Students reported feeling confident in their ability to use ChatGPT effectively (M = 3.82, SD = 1.09), indicating a reasonably high level of perceived digital self-efficacy among the sample.

Notably, the lowest-scoring item across the entire survey was "I prefer using ChatGPT instead of traditional study resources" (M = 3.18, SD = 1.29). Frequency analysis revealed a notably dispersed distribution, with 36.8% of respondents disagreeing or strongly disagreeing, and 42.2% agreeing or strongly agreeing, suggesting a divided orientation among students regarding whether ChatGPT should replace rather than supplement conventional learning materials.

4.2 Enjoyment and Interest

The enjoyment and interest cluster produced the lowest thematic mean in the survey (M = 3.57, SD = 1.05), though scores remained above the midpoint of the scale. The item "Using ChatGPT makes flipped classroom activities more interesting" received the highest score within this cluster (M = 3.79, SD = 1.02), indicating that students broadly perceive ChatGPT as enhancing the appeal of flipped classroom tasks. By contrast, "ChatGPT makes me look forward to preparing for class" yielded the lowest score in this cluster (M = 3.45, SD = 1.01), with 18.4% of respondents selecting 2 (disagree) and 36.8% selecting 3 (neutral), suggesting that while the tool adds interest to the learning experience, it does not consistently generate anticipatory motivation for pre-class preparation among all students. Similarly, "ChatGPT helps me enjoy learning more than without it" scored moderately (M = 3.47, SD = 1.11), reflecting a positive but not overwhelming enjoyment effect.

4.3 Competence and Confidence

The competence and confidence cluster yielded a mean of M = 3.82 (SD = 0.95), one of the stronger thematic scores in the survey. The item "I feel more capable of contributing to class discussions after preparing with ChatGPT" received the highest score in this cluster (M = 3.92, SD = 0.97), with 65.8% of respondents rating it at 4 or 5, reflecting a strong perception that ChatGPT-assisted preparation translates into greater in-class readiness. "ChatGPT makes me feel more competent in my learning" also scored strongly (M = 3.82, SD = 0.95), with 60.5% of respondents agreeing or strongly agreeing. "ChatGPT increases my confidence in completing pre-class tasks" received a score of M = 3.74 (SD = 0.95), further reinforcing the pattern that students associate ChatGPT use with enhanced self-efficacy and perceived capability.

4.4 Curiosity and Intellectual Exploration

The curiosity and intellectual exploration cluster produced the highest thematic mean in the survey (M = 3.87, SD = 0.98), suggesting that intrinsic curiosity is the most prominent motivational dimension associated with ChatGPT use among the participants. The single highest-scoring item across the entire survey was "ChatGPT encourages me to explore topics beyond the assigned material" (M = 3.97, SD = 0.91), with 63.1% of respondents rating it at 4 or 5. "ChatGPT inspires me to ask more questions" also scored highly (M = 3.87, SD = 1.02), and "ChatGPT makes me more curious about the subject matter" yielded a score of M = 3.76 (SD = 1.02). Taken together, these findings suggest that ChatGPT plays a meaningful role in stimulating intellectual curiosity and encouraging students to engage with content beyond the requirements of assigned tasks.

4.5 Anxiety Reduction and Extrinsic Engagement

The anxiety reduction cluster yielded a mean of M = 3.78 (SD = 0.98). The highest-scoring item in this cluster was "ChatGPT reduces my anxiety about difficult topics" (M = 3.89, SD = 0.95), with 71.0% of respondents rating it at 4 or 5 — making it one of the most positively endorsed items in the survey. "Using ChatGPT makes pre-class preparation feel less stressful" similarly scored M = 3.79 (SD = 0.93), while "ChatGPT helps me overcome fear of making mistakes in class" received a slightly lower score of M = 3.66 (SD = 1.07), suggesting that the anxiety-reducing effect is more pronounced in the preparation phase than in the in-class performance context.

The extrinsic engagement cluster yielded a mean of M = 3.76 (SD = 1.08). "ChatGPT motivates me to complete pre-class work on time" scored M = 3.68 (SD = 1.16), and "ChatGPT increases my willingness to engage in flipped classroom activities" scored M = 3.71 (SD = 1.01). The overall motivation item — "Overall, ChatGPT improves my motivation to learn" — scored M = 3.89 (SD = 1.06), with 65.7% of respondents selecting 4 or 5, indicating that the majority of students perceive ChatGPT as having a meaningful positive impact on their overall motivation to learn.

DISCUSSION

The findings of this study provide empirical support for the positive motivational role of ChatGPT among English-major students using the tool within flipped classroom settings at Dai Nam University. With an overall mean score of 3.74 across all items, results

broadly indicate that students hold a moderately positive motivational orientation toward ChatGPT, consistent with the wider body of literature on AI-assisted language learning (Van Horn, 2024; Zhang et al., 2025). The discussion below addresses each thematic dimension in turn, connecting the survey findings to relevant theoretical frameworks and prior research.

5.1 ChatGPT as a Supplementary Rather Than Replacement Tool

One of the most notable findings in the general usage cluster was the relatively low mean score for the item measuring preference for ChatGPT over traditional study resources (M = 3.18, SD = 1.29). This suggests that while students have integrated ChatGPT meaningfully into their academic routines, they do not overwhelmingly favor it as a replacement for conventional materials. This finding resonates with Van Horn (2024), who cautioned that ChatGPT is not yet equipped to function as a standalone instructional resource, and with Kasneci et al. (2023), who emphasized the importance of maintaining a complementary rather than substitutive role for AI in education. In the Vietnamese higher education context, where students are accustomed to teacher-centered instruction and textbook-based learning (Nguyen & Habók, 2020), this conservative orientation toward ChatGPT is perhaps unsurprising, and may reflect a transitional phase in which students are gradually building familiarity and trust with AI-assisted learning.

5.2 The Primacy of Curiosity as an Intrinsic Motivator

The curiosity and intellectual exploration cluster produced the highest thematic mean (M = 3.87), with the top-scoring item across the entire survey relating to exploration beyond assigned material (M = 3.97). This finding strongly aligns with intrinsic motivation theory, which posits that curiosity — the drive to seek out novel and complex information — is among the most powerful predictors of deep learning and sustained engagement (Oudeyer et al., 2016). Bai et al. (2025) similarly found that learners are intrinsically motivated to actively explore ChatGPT's capabilities, with curiosity enhancing active learning and information retention. In the context of flipped classrooms, where self-directed pre-class engagement is essential, this curiosity-stimulating function of ChatGPT is particularly valuable, as it encourages students to go beyond surface-level preparation and engage more deeply with course content (Anggoro, 2025).

5.3 Competence and Self-Efficacy in Flipped Learning Contexts

The strong scores observed in the competence and confidence cluster (M = 3.82) are consistent with Self-Determination Theory (Deci & Ryan, 2000), which identifies perceived competence as a fundamental driver of intrinsic motivation. Students' strong agreement that ChatGPT prepares them to contribute more effectively to class discussions (M = 3.92) is particularly significant in a flipped classroom context, where in-class participation is central to the pedagogical model's effectiveness. Bai and Wang (2023) similarly found that ChatGPT's conversational responsiveness gives learners a sense of linguistic competence and control, and Firat (2023) noted that the tool's scaffolding capabilities support autonomous learning by reducing the cognitive demands of independent preparation. These findings collectively suggest that ChatGPT functions as an effective confidence-building resource during the pre-class phase, helping students arrive at class better prepared and more willing to engage actively with peers and instructors.

5.4 Enjoyment as a Moderate but Noteworthy Dimension

While the enjoyment and interest cluster produced the lowest thematic mean in the survey (M = 3.57), scores nonetheless remained above the scale midpoint, indicating a generally positive — if moderate — enjoyment effect. The finding that ChatGPT makes flipped classroom activities more interesting (M = 3.79) aligns with Huang et al. (2023), who found that the interactive and immediate feedback nature of ChatGPT fosters a more engaging learning process. However, the more modest scores for anticipatory motivation — specifically, students' looking forward to preparing for class (M = 3.45) — suggest that the enjoyment effect may not yet be sufficiently strong to consistently transform pre-class preparation from an obligatory task into a genuinely pleasurable one. This finding echoes Rudolph et al. (2023), who noted that while ChatGPT can create more intrinsically motivating learning environments, the extent of this effect varies across individual learners and pedagogical contexts. Educators at Dai Nam University may therefore consider designing more structured and gamified pre-class tasks that leverage ChatGPT's capabilities to further enhance enjoyment and anticipatory engagement.

5.5 Anxiety Reduction and Its Implications for Flipped Classrooms

The anxiety reduction cluster yielded consistently strong scores, with 71.0% of respondents agreeing or strongly agreeing that ChatGPT reduces their anxiety about difficult topics. This finding is well-supported by the broader literature. Jeon (2024) highlighted that ChatGPT's non-judgmental environment and immediate feedback lower psychological barriers to engagement, and Chen (2024) found that more frequent ChatGPT use is associated with lower levels of foreign language speaking anxiety. In the Vietnamese EFL context, where anxiety about making mistakes in front of peers and instructors is a commonly reported challenge (Nguyen & Habók, 2020), the anxiety-reducing function of ChatGPT carries particular significance. By allowing students to rehearse, clarify, and consolidate their understanding in a private, low-stakes environment before class, ChatGPT effectively addresses one of the most persistent barriers to active participation in flipped classroom activities.

Slightly lower scores for overcoming fear of making mistakes in class (M = 3.66) compared to reducing anxiety during preparation (M = 3.89) suggest that ChatGPT's anxiety-reducing benefits are more pronounced in the pre-class phase than in the live in-class context. This distinction implies that while ChatGPT is effective in building pre-class readiness and psychological comfort, additional in-class pedagogical strategies may be needed to sustain these confidence gains during collaborative activities (Muñoz et al., 2023).

5.6 Extrinsic Motivation and Overall Learning Motivation

The extrinsic engagement cluster (M = 3.76) and the overall motivation item (M = 3.89) indicate that ChatGPT also contributes meaningfully to students' extrinsic motivation, encouraging timely completion of pre-class tasks and greater willingness to participate in flipped classroom activities. These findings are consistent with Ali et al. (2023), who found a significant correlation between ChatGPT use, student motivation, and academic engagement, and with Muñoz et al. (2023), who reported that ChatGPT increased class participation among EFL learners. The fact that 65.7% of students agreed or strongly agreed that ChatGPT overall improves their motivation to learn suggests that the tool's motivational impact is perceived as both real and meaningful by the majority of participants. This finding has practical implications for curriculum designers and instructors at Dai Nam University, reinforcing the case for the intentional and structured integration of ChatGPT within flipped classroom pedagogies to maximize motivational outcomes for English-major students.

CONCLUSION

This study investigated the motivation of English-major students at Dai Nam University in using ChatGPT within flipped classroom settings, drawing on survey data from 76 participants across five motivational dimensions. The findings reveal a moderately positive motivational orientation overall (M = 3.74), with curiosity and intellectual exploration emerging as the strongest dimension (M = 3.87), followed by competence and confidence (M = 3.82), anxiety reduction (M = 3.78), extrinsic engagement (M = 3.76), and enjoyment and interest (M = 3.57). Collectively, these results suggest that ChatGPT serves as a multidimensional motivational resource that is particularly well-suited to the self-directed preparation demands of flipped learning, supporting students in building confidence, alleviating anxiety, and fostering deeper intellectual engagement with course content (Deci & Ryan, 2000; Bai et al., 2025; Anggoro, 2025).

Notably, students' relatively low preference for ChatGPT over traditional study resources (M = 3.18) indicates that the tool is currently perceived as a complement to rather than a replacement for conventional learning materials, reflecting a transitional stage of AI adoption consistent with the broader Vietnamese higher education context (Nguyen & Habók, 2020; Lo, 2023). These findings carry practical implications for EFL instructors and curriculum designers at Dai Nam University, who are encouraged to embed structured, purposeful ChatGPT tasks within the pre-class preparation phase of flipped classroom models to maximize motivational outcomes.

This study is limited by its sample size and cross-sectional design, and future research employing mixed methods and longitudinal approaches across multiple institutions would further strengthen understanding in this area (Creswell & Creswell, 2018). As Vietnam advances its digital education agenda (Nguyen, 2025), evidence-based integration of AI tools like ChatGPT represents a promising pathway toward more motivated and autonomous English language learners.

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