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BALANCING SPEED AND SELF-DIRECTION: A MEDIATED MODEL OF RESPONSIBLE CHATGPT USE FOR MALAYSIAN UNIVERSITY ESL LEARNERS

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Abstract:

The rapid adoption of generative artificial intelligence (AI) technology like ChatGPT in institutions of higher learning has revolutionized academic writing and language learning process. However, ESL students in universities need to make use of the computational power of AI while ensuring active self-regulation so as not to over-rely on ChatGPT, become passive learners, and have academic integrity issues. This conceptual paper thus presents a mediation framework for responsible ChatGPT use among Malaysian university ESL students. The study is based on a narrative review that used qualitative literature obtained from Scopus by adopting search terms, criteria, and procedures for screening studies and thematic synthesis of results. Findings suggest that ChatGPT can make tasks easier and faster and give instant feedback; however, its educational value lies in active involvement of learners in goal setting, evaluation, revising, and ownership of the task at hand. The suggested model views self-regulated learning as the main mediating mechanism between ChatGPT usage and learning, while feedback engagement, ethical considerations, and teacher scaffolding are moderating factors. The above relationships are conceptual propositions and not statistically tested mediators or moderators. Theoretically, the article brings together the self-regulated learning framework, learner autonomy framework, and sociocultural framework by viewing artificial intelligence as a scaffolding tool and not a replacement of cognitive efforts. In practice, the above theoretical framework helps in

understanding the need for structured AI literacy, reflective writings, disclosure, and institutional regulation framework.

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Keyword:

Academic Integrity; ChatGPT; Learner Autonomy; Pedagogical Scaffolding; Self-Regulated Learning



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Introduction

Generative artificial intelligence (GenAI) has significantly transformed how university students plan, compose, revise, and evaluate academic texts. Among available applications, ChatGPT is particularly relevant to language learning because it can generate explanations, propose ideas, reorganise content, model linguistic forms, and provide immediate responses. These affordances are attractive to university ESL learners, who must manage disciplinary content alongside vocabulary, grammar, cohesion, style, and rhetorical organisation. Research indicates that ChatGPT can function as an on-demand writing-support tool by assisting with idea generation, drafting, language correction, revision, and formative feedback (Kohnke et al., 2023; Mahapatra, 2024). Its speed and accessibility can reduce linguistic and procedural burdens. However, the normalisation of GenAI requires careful attention to how students can use it without surrendering intellectual responsibility, authorship, and agency over their learning. International guidance similarly emphasises that GenAI integration should remain human-centred and strengthen rather than displace human agency (Miao & Holmes, 2023).

Although ChatGPT can enhance task efficiency and provide immediate feedback, these affordances do not by themselves establish improved language learning. In the proposed model, self-regulated learning is treated as the central mediating mechanism through which ChatGPT-supported efficiency may be translated into learning and learner autonomy. Feedback engagement, ethical awareness, and teacher scaffolding are treated more cautiously as moderating or boundary conditions that may strengthen or weaken this relationship. This is a conceptual relationship based on literature review and is not a statistically proven effect. In terms of theory, such positioning creates a link between self-regulatory and sociocultural approaches because it considers AI as an interactive scaffolding tool and not as a substitute for

cognitive processes. In practice, this gives rise to a foundation for AI literacy, reflective writing, and ethics.

Modern research increasingly views ChatGPT both as a facilitator of learning and as a potential source of over-reliance on technology. As a feedback tool, ChatGPT can support academic writing by providing immediate explanations, language guidance, and revision assistance (Mahapatra, 2024). However, rapid access to coherent text may also encourage students to bypass important stages of the writing process, including planning, critical evaluation of sources, argument development, drafting, and reflection. Consequently, concerns extend beyond plagiarism to issues of authorship, undisclosed assistance, misinformation, disengagement, reduced ownership of written work, and the mistaken assumption that completing a task necessarily constitutes meaningful learning.

Academic-integrity scholarship consequently emphasises proactive guidance that helps students distinguish legitimate assistance from the substitution of their own intellectual work (Chan, 2023; Cotton et al., 2024). The central pedagogical problem is thus an efficiency-autonomy dilemma: the same tool that enables faster writing may reduce learner autonomy when its outputs are accepted without analysis or reflection.

Existing research has examined ChatGPT-enabled writing performance, learner perceptions, language-learning opportunities, and academic-integrity concerns, but these dimensions are often treated separately. This separation provides an incomplete account of responsible AI-assisted writing because efficiency cannot be judged only by time saved, and satisfaction does not necessarily indicate meaningful learning. General models developed for higher education or broad EFL settings may also overlook the multilingual academic context and evolving institutional expectations faced by Malaysian university ESL learners. Malaysian higher-education guidance recognises effectiveness, academic integrity, ethical learning, stakeholder responsibility, and professional development as important elements of GenAI-enabled teaching and learning (Ministry of Higher Education Malaysia, 2024). A mediated model is therefore needed to explain how efficiency may support, rather than displace, learner autonomy while distinguishing the central mediating role of self-regulation from contextual conditions that shape that relationship. Accordingly, this paper proposes a Mediated Model of Responsible ChatGPT Use in which speed is educationally useful only when learners remain responsible for setting goals, checking outputs, revising, disclosing assistance, and owning the final work. The proposed framework is relevant from theoretical, pedagogical, institutional, and research perspectives. Learner Autonomy Theory conceptualises autonomy as learners' capacity to take responsibility for decisions about their learning rather than as independence from teachers (Holec, 1981; Little, 1991). Self-Regulated Learning Theory explains responsible AI use through goal setting, strategy selection, monitoring, evaluation, and reflection (Zimmerman, 2000, 2002). According to Sociocultural Theory, both tools and social assistance are described as mediation mechanisms, and their developmental potential depends on the application of the two in practices itself (Vygotsky, 1978). The application of these theories leads to the conclusion that ChatGPT is a mediating technology and its value is defined by the student's self-regulation skills and the number of ethical and pedagogical conditions. From pedagogy's point of view, the theory provides for the realization of writing assignments in which validation, comparison, reflection, and disclosure are necessary components. From the institutional viewpoint, the theory suggests applying AI literacy and governance strategies that advocate for the transparency and accountability of its utilization (Miao & Holmes, 2023; Ministry of Science, Technology and Innovation Malaysia, 2024).

The central question guiding this paper is: How can we balance ChatGPT's efficiency with ethical usage and learner autonomy of Malaysian university ESL students. The latter sections discuss responsible usage of ChatGPT including ethical usage and language development before detailing the method of review, literature synthesis and proposition development.

Literature Review

Responsible ChatGPT Use

Responsible ChatGPT usage entails learners' deliberate, critical, and self-regulated interaction with the technology while still having autonomy over academic choices and final ownership of work. In the context of university-level ESL writing, ChatGPT can be used for brainstorming, structuring, clarifying, revising, and formative assessment purposes, yet the key to responsibility depends on whether learners take advantage of these features as scaffolding tools or replace their own planning, drafting, and assessment skills with these features. According to Kohnke et al. (2023), responsible language learning through technology requires digital literacy, awareness of prompt design, and assessment of the output's relevance and accuracy. Similarly, Barrot (2023) suggests that ChatGPT can offer instant adaptive assistance to second-language learners, yet the pedagogical potential of ChatGPT is restricted to cases when learners analyze their outputs in terms of relevance, accuracy, style, and appropriacy.

Empirical studies have also shown that good use is associated with active participation of the learners in the process, rather than the mere availability of the technology. Thus, Meniado et al. (2024), for instance, noted that EFL learners typically used ChatGPT to brainstorm, structure their thoughts, make sense of the concepts, improve their outlines, and edit their drafts, thus making it possible to use this technology throughout the writing process. However, Koltovskaia et al. (2024) found that the way in which learners engaged with AI-based feedback was behavioural, cognitive, and affective in nature, which suggests that learners do not necessarily take the feedback provided by AI tools into consideration. Responsible use of these technologies therefore requires that learners identify their writing objectives, develop clear prompts, compare the recommendations offered by AI with the assignment requirements, check the facts, revise their papers independently, and evaluate whether the interaction with the tool helped them learn something new.

Ethical Practices

Ethical considerations in ChatGPT-enhanced learning include academic integrity, clear attribution, proper representation of authorship, checking information accuracy, ensuring privacy, and meeting institutional guidelines. Ethical issues go beyond ordinary plagiarism since the output produced through AI may enable students to turn in fluent assignments that are not reflective of their language competency or involvement in the writing process. Risks according to Cotton et al. (2024) are those concerning unauthorized assistance, plagiarism, inaccurate plagiarism detection, and unclear use of AI by students as well as the need for university authorities to revamp assessments and set clear expectations rather than prohibiting the use of AI. Chan (2023) points out that organizations need to create AI policies that provide insight into governance and education, list permissible uses, and establish guidelines in AI literacy.

Regarding ESL students, ethical behavior means recognizing the difference between giving advice on grammar, vocabulary, organization, or comments and producing ideas, arguments, evidence, or tasks. It should also include verification of factual information and sources by learners since ChatGPT may generate erroneous, fabricated, biased, and irrelevant data (Barrot, 2023; Kohnke et al., 2023). As a result, learners are obliged to provide proper credit if AI significantly helped during the process of brainstorming, writing, translation, paraphrasing, or editing, even though the format of citation should depend on the rules established at the learner's institution. Moreover, one should not upload sensitive research information, personal data, unpublished participants' material, or institutional content into AI systems. Therefore, ethical ChatGPT usage should be viewed as an informed academic decision of learners who are still responsible for the accuracy, originality, citation, and relevance of all material submitted under their names, regardless of the source of specific sentences.

Language Proficiency Improvement

The potential role of ChatGPT in the development of language proficiency through instant explanations, feedback, alternative vocabulary choices, examples of sentences, and repetition of interactions is possible, but the research literature does not provide sufficient justification for the assumption that the application of ChatGPT will always result in language proficiency gains. As an educational tool, ChatGPT can help second language writers produce texts with better grammar, vocabulary, cohesion, organisation, register, and content as long as students analyse the provided feedback and revise the text accordingly (Barrot, 2023; Kohnke et al., 2023). The mixed-methods intervention conducted by Mahapatra (2024) showed that undergraduate ESL learners significantly improved their academic writing skills, having more coherent ideas and more grammatically correct sentences as a result of using ChatGPT as a feedback tool. The analysis of the intervention indicated that learners' preparation and assessment were integral parts of the process. Similarly, the students in the study by Meniado et al. (2024) found ChatGPT useful for generating ideas, organizing thoughts, clarifying understanding, and editing texts; however, positive evaluations of usefulness cannot be considered concrete evidence of improvement in the learners' competence. Teng (2024) provided a positive picture of learners' use of ChatGPT-based writing feedback; however, such feedback can still be very generic, linguistically advanced, inaccurate, and insensitive to the intended meanings of the learners. In addition, Mahapatra (2024) highlighted possible issues related to lack of focus on grammar and high reliance on machines, which indicates that the excessive provision of feedback hampers the learners' noticing of and problem-solving abilities. Language learning thus appears possible only if learners engage in comparing original and revised versions, ask for explanations instead of answers, reflect upon the need to accept or reject the feedback, track their own errors, and apply the newly acquired language skills in future independent tasks.

Methodology

Research Design

This conceptual paper employed a qualitative narrative review to assess and synthesise literature on responsible ChatGPT use, ethics, language-proficiency development, self-regulated learning, and learner autonomy in higher-education ESL contexts. A narrative review was appropriate because the purpose was not to estimate an overall effect size or conduct a meta-analysis, but to compare theoretical and empirical studies, identify conceptual

relationships and tensions, and use the synthesis to construct a conceptual model. Narrative reviews can support theory development when their scope, search process, selection criteria, and synthesis procedures are reported transparently (Ferrari, 2015; Green et al., 2006; Snyder, 2019). To reduce selection subjectivity, the review used explicit search concepts, predefined eligibility criteria, staged screening, and a structured extraction matrix.

The basis of the study was the question of how the effectiveness of ChatGPT can be balanced with ethical practices and learner autonomy regarding Malaysian university ESL students. The literature was structured according to areas of responsible usage of ChatGPT, ethical practices, language improvement, self-regulation, and learner autonomy. These topics formed the basis of a mediated model of responsible ChatGPT use through concepts of Learner Autonomy Theory, Self-Regulated Learning Theory, and Sociocultural Theory. In this paper, mediation and moderation are theoretical tools used to explain the suggested relationships between constructs.

Key Steps in Conducting the Narrative Review

The narrative review consisted of five steps. To begin with, the topic was examined closely with regard to ChatGPT implementation, accountability, ethical questions, self-governance, student self-determination, language skills, and academic writing in higher education EFL context. The second step involved collecting information that mostly came from Scopus, as it has broad scope in terms of education, linguistics, social sciences and allied areas. The main search took place on 29 July 2026 with search strings:

TITLE-ABS-KEY (("ChatGPT" OR "generative artificial intelligence" OR "generative AI") AND ("ESL" OR "EFL" OR "second language" OR "English language learning" OR "academic writing") AND ("responsible use" OR ethic* OR "academic integrity" OR autonom* OR "self-regulat*" OR proficiency OR "writing improvement"))

A complementary study employed Malaysia*, "Malaysian higher education", "college education", ESL, and ChatGPT to scour for local literature. The study was based on literature published from 2022 to 2026. It sought to cover literature published soon after the public launch of ChatGPT and therefore research published in the peer-reviewed journals either in English or using English terms was prioritized. Primary theoretical works were examined separately due to their publication before GenAI.

After that, the records found were examined to ensure their appropriateness for the study. The first step of the examination was to analyze the titles and abstracts of the records, as well as conducting a full analysis of the records potentially appropriate for the study. The records were considered original if they dealt with ChatGPT or any other generative AI systems, education in tertiary and university institutions, learner's ESL/EFL background and the process of writing through academic languages, as well as the evidence that is related to the responsible use of AI systems, ethics, academic honesty, self-control, and independence.

Next, the collected data from the selected publications was organized in a review matrix consisting of author, year, country or learning environment, research design, participant characteristics, educational application of ChatGPT, significant findings, reported advantages and disadvantages, and implications for accountability, ethics, autonomy, professional

competence. This format allowed for the comparison between qualitative, quantitative, intervention, and mixed-method studies. Finally, the analysis was conducted through thematic synthesis relying on the recurring themes, common points of view, contradictions, and contextual boundaries. In accordance with the narrative review approach, the research was focused more on the interpretation of findings than on statistical analysis.

Data Collection and Review Strategy

A broader search described in the previous paragraph was supplemented by a focused search in Scopus to locate literature linking responsible/ethical use of AI with language learning and conceptual frameworks. Boolean operators were used in the title, abstract, and keywords fields. This extra search improved the conceptual coverage instead of creating a separate body of evidence.

((("responsible" OR "ethical" OR "accountable" OR "sustainable") AND ("ChatGPT" OR "AI" OR "artificial intelligence" OR "language model") AND ("ESL" OR "English as a second language" OR "language learning" OR "language acquisition") AND ("mediated model" OR "framework" OR "approach" OR "strategy") AND ("use" OR "application" OR "implementation" OR "integration")))

Through the steps of retrieval and screen, the literature was synthesised by an integrative thematic approach by familiarising oneself with the research selected, coding it, grouping the codes into themes, and lastly mapping them on to be able to connect the findings not only show in a list.

Key Findings from the Narrative Review

The synthesis did not pinpoint any available already prepared mediated framework which might apply in the context of Malaysian university ESL learners. Nonetheless, the reviewed studies highlighted the various components necessary for achieving the proper mix of speed and learner autonomy, including self-regulated learning, speed and efficiency, ethical and responsible usage, scaffolding, as well as personalisation and involvement. The components are presented in Table 1 along with the examples used in the conceptual synthesis.

Table 1: Key Components of a Mediated Model for Responsible ChatGPT Use

Component	Description	Illustrative Evidence
Self-Regulated Learning	ChatGPT can support autonomous learning through real-time feedback and tailored assistance when learners remain responsible for planning, monitoring, evaluating, and revising their work.	Dong (2024); Ayman et al. (2023); Al-atrash et al. (2026)
Speed and Efficiency	ChatGPT provides rapid feedback and text generation that can accelerate drafting and language-processing tasks.	Dong (2024); Aljohani (2026)

Ethical and Responsible Use	Responsible use requires attention to academic integrity, over-reliance, authorship, disclosure, and clear behavioural expectations.	Dong (2024); Ayman et al. (2023); Aljohani (2026)
Scaffolding and Mediation	Educator-led scaffolding can help learners evaluate AI output while balancing autonomy with pedagogical oversight.	Dong (2024); Ayman et al. (2023)
Personalisation and Engagement	Adaptive outputs may support engagement by responding to different learner needs and proficiency levels.	Dong (2024); Ayman et al. (2023); Deep et al. (2025)

Source: Authors' synthesis of the reviewed literature.

Summary and Synthesis of Findings

The thematic synthesis shows that it is important to achieve a balance between efficiency of operation and the use of ChatGPT in education. While generative AI can speed up the process of giving feedback and drafting, it is crucial that speed does not replace the importance of thinking through a solution. In this regard, teacher support can play a role of the so-called scaffolding, meaning that instructors can help students weigh the relevance of AI's advice, evaluate various alternatives, and think instead of merely accepting the response of AI (Dong, 2024; Ayman et al, 2023).

In addition, the full independence of learners cannot be achieved without understanding ethics. When ChatGPT is used correctly, it can serve as an example of adaptive scaffolding in terms of self-regulated learning and activity, without necessarily leading to the decline of linguistic abilities or learning (Al-atrash et al., 2026; Deep et al., 2025).

Theoretical Framework

The new proposal to relate Self-Management Learning (SML) with socio-cultural aspects and learner autonomy points out that SML is about active learning where students think through their cognitive activities (Zimmerman, 2000, 2002). In ESL learning at the university level, ChatGPT can be used as a technological tool that provides students with instant corrections, vocabulary options, and ideas for writing structure. However, the educational benefits of ChatGPT require students to assess information provided rather than merely take it at face value. From the socio-cultural perspective, ChatGPT serves as a mediational device, and its development is influenced by the activity itself, the student, and the learning context (Vygotsky, 1978). Further, the research in learner autonomy implies the responsibility for decision-making, determining learning aims, and claiming ownership of the work done (Holec, 1981; Little, 1991).

An important element of conceptual clarity arises from the presence of many different and complicated relations in the model. Among others, self-regulated learning acts as the key mediator that associates the use of ChatGPT with learning results and learners' autonomous behavior. Engagement in feedback, sense of ethics, and teacher scaffolding become components of the model and are regarded as moderating variables or boundary conditions due to their capability of modifying the strength or quality of the specified way of mediation.

Hence, the model does not imply that every factor enabling assistance in learning becomes a mediator and claims no statistical proof of mediation and moderation.

This framework, in effect, allows for projects that involve students needing to log their changes, reveal any significant use of AI when applicable, contrast AI-written and organically written texts, and offer rationales for using or not using the suggested changes (Buripakdi & Truong An, 2024; Dong, 2024). By doing this, the need for ChatGPT's efficiency is matched with the responsibility of the student instead of treating the efficiency itself as a learning outcome.

Self-Regulated Learning as a Mediating Mechanism

The advent of AI technologies like ChatGPT enables more efficient processes dedicated to grammar checking, choosing vocabulary, creating ideas, and drafting originals. Although this may help relieve learners of certain regular language tasks, it does not mean they will learn more. In fact, speeding up the output does not mean speeding up learning. If a learner uses generated text without questioning its content, they may just become less aware of the language.

The turn of efficiency into real learning is contingent on learners taking responsibility for the use of AI. It is essential for learners to have specific writing goals and to critically analyze AI-provided feedback, improve their writing, and remain accountable for the produced text.

Proposition 1: Self-regulated learning is supposed to be responsible for the positive influence of careful ChatGPT utilization on the learning and writing outcomes of ESL students.

Feedback Engagement as a Moderating Condition

The mere presence of AI-generated feedback does not suffice in producing learning outcomes. In order for feedback to be worthwhile, learners need to evaluate and engage with the feedback given to them instead of merely allowing for the feedback to influence their writing. A pedagogical framework can assist learners to assess AI-generated feedback critically, check it against task objectives and think through the need for making the changes suggested by AI feedback. The process is thus a great way to enhance learner agency given the rapid pace of automated feedback delivery.

The role of feedback engagement in this setting is seen as representing a moderating boundary condition rather than being a second mediator. When feedback engagement is high, learners will know how to process feedback in an effective manner. When engagement is low, the same piece of AI feedback may result only in a limited number of changes being made or lead to an increased dependence on AI.

Proposition 2: Active engagement with AI-generated feedback is proposed to strengthen the relationship between self-regulated ChatGPT use and university ESL learners' language-learning and writing outcomes.

Ethical Awareness as a Moderating Condition

Ethical awareness and academic responsibility are also important boundary conditions for responsible GenAI use. University ESL learners must make decisions about academic honesty,

disclosure, citation, authorship, and the boundary between language support and content substitution. Stronger ethical awareness may encourage learners to use AI transparently for drafting and revision while retaining ownership of ideas, evidence, and final decisions.

Ethical awareness is therefore conceptualised as a moderator that may influence whether self-regulated ChatGPT use supports legitimate learning or contributes to problematic practices. This distinction avoids treating ethical awareness itself as a mediator and recognises that responsible behaviour depends on both learner judgement and institutional expectations.

Proposition 3: Ethical awareness and academic responsibility are proposed to strengthen the relationship between self-regulated ChatGPT use and university ESL learners' language-learning and writing outcomes.

Teacher Scaffolding as a Moderating Condition

Another contextual condition for responsible AI-assisted learning is teacher scaffolding. Without appropriate pedagogical help, students may use ChatGPT without thinking critically or using it to accomplish tasks they should perform by themselves. Tasks can be designed in a way that allows teachers to encourage responsible AI use. It should be noted that teacher scaffolding is treated as a moderating condition reinforcing the benefits of self-regulated AI use among students. Teacher scaffolding helps the process of strategic planning and evaluation, as well as responsible use of AI feedback. At the same time, it should be understood that teacher support does not always provide wishful results.

Proposition 4: Teacher scaffolding and pedagogical guidance are proposed to strengthen the relationship between self-regulated ChatGPT use and university ESL learners' language-learning and writing outcomes.

Conclusion

According to this narrative review, the educational impact of ChatGPT on ESL students depends not so much on its computational efficiency as on learners' self-regulatory efforts in carrying out the work with the help of the technology. The synthesis confirms the warrant of the conceptual model whereby self-regulation functions as the chief mediation, with feedback activism, ethical awareness, and teacher support respectively appropriated as moderating variables. The relations specified here are merely theoretical propositions and need to be tested empirically. The review offers some direct recommendations as well. More so, the existent literature indicates the risks emanating from passive acceptance, not elaborated verification, unclear authorship, and overdependence. Therefore, colleges and universities ought to focus on structured AI literacy training courses, meaning revisions, open expectations concerning disclosures, and strict regulations. At the same time, the educators ought to develop assignments that require students to compare their results, justify revision, confirm information, and evaluate their reasoning. In effect, the above recommendations stem directly from the fact that efficiency is educationally relevant when accompanying reflection and accountable usage.

The paper is limited by its narrative-review design and reliance on secondary literature. Although the search and selection process was made explicit, the proposed model has not been empirically verified among Malaysian university ESL learners. Future research should

therefore test the proposed mediated and moderated relationships using appropriate quantitative designs, such as structural equation modelling, and complement these analyses with classroom-based or longitudinal studies of how learners actually use AI during writing.

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