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The Influence of Students' Independent Use of Generative AI Tools on the EFL Writing Classroom: Recommendations for Students, Teachers, and Policymakers

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Abstract

This research explores the influence of generative AI tools on the EFL writing classroom through the lens of Complexity Dynamic Systems Theory (CDST), particularly with regard to the influence on classroom dynamics. The data were collected through semi-structured interviews with both teachers and students using an exploratory qualitative design. The results show that generative AI has disrupted writing classroom dynamics and resulted in a shift in assessment and classroom instructions. Also, since the rise of generative AI, noticeable changes have occurred in students' writing. These tools have changed both the way they write and what they produce. The advent of generative AI has led to the emergence of new patterns changing the way that students engage with writing, changing teacher-student interactions, and ongoing feedback loops acting on steering classroom practices. These insights imply that the advent of generative AI has resulted in challenges and opportunities in EFL writing classrooms. These results highlight the adaptive nature of the writing classroom as a complex dynamic system, where stability and change coexist. The research concludes with recommendations for students, teachers, and policymakers on how to balance AI's challenges and opportunities facing EFL writing classrooms.

Keywords: generative AI, academic writing, students' perceptions, teachers' perceptions, writing process, EFL writing classrooms

1. Introduction

1.1 Problem Statement

While generative AI (GenAI) tools are becoming increasingly popular among EFL students, teachers encounter considerable challenges in understanding how and to what extent these tools are used independently by learners to complete their tasks (Khalil & Er, 2023). In contrast to previous technologies that mainly focused on basic functional support, such as spelling and grammar checking, GenAI tools now are capable of instantly generating an entire text, from rewriting a sentence to producing full essays (Godwin-Jones, 2022). This breakthrough has profound implications for the integrity of student work (Khalil & Er, 2023). Educators are concerned that instead of writing themselves, students may rely on artificial intelligence tools, undermining the writing process and academic integrity as a whole (Inayah & Sulistyaningrum, 2021). Furthermore, teachers worry that students may use AI to submit AI-written assignments and be passed without displaying their actual skills and abilities. Although some studies have investigated generative AI's influence on language learning on a broader scale, research into students' and teachers' understanding of how students engage these tools in the writing classroom is limited. The existing research has tended to analyze students' or teachers' perceptions in isolation, rather than providing a holistic view of how both groups perceive the influence of such tools on the overall writing classroom. Furthermore, the fast and large-scale integration of generative AI tools into EFL classrooms is a unique phenomenon that has not yet been sufficiently addressed in the current literature. To fill this gap, this study explores the influence of GenAI tools on the EFL writing classroom from the perspectives of both students and teachers. The objective is to explore the influence of these tools on students' writing processes and products and how teachers adjust their teaching and assessment practices in accordance with the students' use of such tools. Finally, this study will provide valuable insights into how generative AI tools are transforming the EFL writing classroom and is anticipated to present concrete recommendations for their effective utilization.

1.2 Significance of the Study

This study seeks to explore teachers' and students' perceptions of GenAI tools' influence in EFL writing classrooms. Understanding the perceptions of both groups is important to have a clear overview of the issue. Understanding students' perceptions will help engage them more because students will be more motivated when they believe their voices matter and are taken into account. Furthermore, understanding students' actual use of GenAI and the underlying reasons behind their use of AI tools can inform classroom practices more accurately to mitigate the adverse effects of GenAI. Teachers' perceptions, on the other hand, are equally significant, as their beliefs and perceptions directly shape their teaching practices, teaching-learning processes, and the overall academic development of the students (Ramzan, 2021). Thus, this study will provide significant insights that will be useful in guiding teaching practices and

students' writing skill development and serve as a foundation for a balanced and effective utilization of AI in the EFL writing context. Also, this study will provide helpful recommendations for teachers, students, and policymakers regarding responsible AI tool integration in the EFL writing context.

1.3 Literature Review

1.3.1 From Editing Aid to Text Generation

GenAI lacks a universally agreed-upon definition, often resulting in misunderstanding. However, it is generally referred to as advanced models capable of producing high-quality, human-like outputs within the AI field of research (García-Peñalvo & Vázquez-Ingelmo, 2023). According to the Saudi Data and Artificial Intelligence Authority (SDAIA), GenAI is described as a type of machine learning model designed to produce new examples resembling its trained data. It is a subcategory of artificial intelligence that generates original content such as text, images, sounds, icons, and videos, based on user commands. These tools are capable of performing tasks that usually require human cognitive skills, such as understanding and producing written or spoken responses (Saudi Authority for Data and Artificial Intelligence, 2024).

In addition, new tech advancements with natural language processing (NLP) have also contributed to advanced AI models like Chat Generative Pre-trained Transformer (ChatGPT). These refinements have enhanced these models' abilities to perform a variety of language tasks, one of which is the ability to provide consistent and contextually coherent responses (Dergaa et al., 2023). OpenAI has also released major updates to ChatGPT that significantly expanded its training data, language understanding, and knowledge base in November 2022, helping it to respond to a wider range of queries more accurately and relevantly (Dergaa et al., 2023). Such rapid improvements in technology and the advent of GenAI have paved the way for such tools to evolve from basic editing features to entire text generation. This evolution presents new challenges for education. In particular, educators are concerned with how students could be using these tools and how their use may impact students learning.

1.3.2 Generative AI and Academic Writing

Until recently, students used to use technology in writing to help them only in editing, suggesting words, checking for spelling or grammar errors. However, recent advancements in GenAI have expanded the use of technology beyond these basic assistance tasks. Building on this, a systematic review by Alharbi (2023) of 104 peer-reviewed papers examined the recent empirical research on AI-powered writing assistance technologies used by students. This review found that students are increasingly utilizing a variety of AI-powered writing tools that fall into four main categories: automated writing evaluation, automated writing corrective feedback, AI-assisted machine translation, and automatic text generation.

Expanding on these findings, an exploratory qualitative study conducted by Söğüt (2024) revealed that students now could leverage AI for a wider range of purposes during the writing process, including generating source material, varying text content and quality, conducting in-depth research, improving the lexical variety, and enhancing text organization. The most recent

addition to AI-assisted writing tools is automatic text generators that suggest improvements to wording or even generate full texts when given a topic or prompt (Godwin-Jones, 2022). These advancements have significantly altered students' approaches to writing, leading to the widespread adoption of AI-assisted tools (Hong, 2023). In specific, GenAI is the focus of this research because it has raised concerns on the way full texts can be generated and how it is sometimes difficult to detect and distinguish between texts written by AI and humans. . For instance, a descriptive study conducted by Khalil and Er (2023) highlighted the advanced capabilities of GenAI. Conventional plagiarism detection software, iThenticate, and Turnitin, was used to perform analysis of text generated by ChatGPT. This was followed by a quantitative analysis in which the output generated by the chatbot was numerically scored based on the originality scores determined by the plagiarism detection software. The researchers aimed to find out whether these popular, widely used software could detect whether the text was written by AI or humans. They generated 50 essays with ChatGPT and passed entered them through this software to check their originality. Surprisingly, the software classified 40 essays as highly original, meaning it highlighted 80% as original. This finding suggested that ChatGPT has great potential to generate sophisticated texts without being well-recognized by conventional plagiarism detection software (Khalil and Er, 2023). However, the results of this study should not be fully relied on, as it depends on outdated versions of detection tools. In April 2023, Turnitin began detecting AI-generated text, which indicates that the results may not reflect current realities. Considering the recent Turnitin improvements, Perkins et al. (2023) conducted an experimental study, on Turnitin which was evaluated in terms of its effectiveness in detecting AI-generated content, as well as faculty members' ability to determine whether academic dishonesty has occurred. The faculty staff was informed of the presence of papers that were generated using GPT-4, designed to look like typical student submissions. The instructors were asked to flag any submissions they suspected of being AI-generated. It was found that Turnitin correctly identified 91% of the papers as containing AI-generated output despite the adversarial techniques developed by the research team to evade detection, which suggests that Turnitin's potential as an AI detector has become more reliable. However, faculty members only formally reported 54.5% of the papers as potential cases of academic misconduct. The results underscore the faculty members' inability to effectively distinguish between AI-generated content and students' original writing. Building on this, Hostetter et al. (2023) conducted a study which revealed similar findings leading to the conclusion that the human eye is weak in detecting AI-generated text. Eighty-three students and eighty-two faculty members were presented with four writing samples, three from students and one generated by ChatGPT. The participants were asked to rate the samples based on various categories without knowing that a response had been generated by GenAI. They found that neither the teachers nor the students were able to identify the text generated by ChatGPT (Hostetter et al., 2023). This implies that GenAI can produce texts that blend with students' writing and remain undetectable by traditional methods (Hostetteret al., 2023). However, these studies were conducted at a time when AI was still novel in the academic context, and it is quite possible that teachers are now more used to AI-produced content and better able to detect its use.

These findings indicate that GenAI tools are evolving. On the other hand, while AI detection

tools are getting better, they are still not perfect. Moreover, teachers also struggle with detecting AI-generated content. This raises more general questions about the impact of GenAI on students' writing skills and development as writers.

1.3.3 Influence of GenAI on Students' Writing Skills

GenAI has the potential to revolutionize the educational field, and it brings both benefits and challenges that need to be carefully considered. Some think that GenAI causes serious problems as it could lead to the loss of fundamental human skills and thinking ability of the human brain. This concern was investigated by , Ahmad et al., (2023) in their qualitative study on AI's effect on decision-making ability, laziness, and privacy concerns among 285 students from different universities in Pakistan and China. The study stated that AI is reducing and replacing the role of humans in decision-making (Ahmad et al., 2023). GenAI makes students lose the skills to perform traditional tasks in an educational environment and consequently lose reasoning skills in decision-making (Ahmad et al., 2023). Unsurprisingly, it was also found that relying on AI leads to the addictive behavior of not using human skills, thus making a people lazy (Ahmad et al., 2023). Students who use AI technology will slowly and gradually lose interest in completing tasks themselves (Ahmad et al., 2023). In fact, there is a risk that people will become overly dependent on AI to make decisions. This may limit the critical thinking and innovative capacity of students (Ahmad et al., 2023). Learners may become more reliant on the AI systems or lose interest in performing activities or developing new skills or methods. A situation like this will, ultimately, deter both the educational quality and the personal development of the students.

Creative thinking, not just with the writing process but with learning in general, is another skill that is influenced by GenAI. Creativity is central to developing students' ability to respond to challenges and find solutions within any field (Habib et al., 2024). Unfortunately, this skill is also affected by the use of GenAI. Habib et al. (2024) assessed the effects of ChatGPT on the divergent thinking skills of students in a creativity course for 100 college students using a mixed methods approach. The students participated in an activity called the Alternative Use Test, in which they had to brainstorm ideas with and without ChatGPT support. The results showed that the use of GenAI enhanced divergent thinking, which is an important part of the creative process, by increasing the diversity of ideas and high fluency of ideas, which students enjoyed for brainstorming and idea initiation. However, students also voiced some concerns about AI taking over their thinking process. They worried that GenAI could suppress their creative thinking and therefore their self-confidence (Habib et al., 2024).

As writing is deeply connected to students' overall academic success, it is imperative to assess whether GenAI proves advantageous or disadvantageous to students' overall academic performance. Wecks et al. (2024) explored this aspect in their research that assessed the impact of GenAI tools, like ChatGPT, on students' exam performance. The researchers administered an online survey for data collection and archived students' case study essays across the semester. After the final exam, they applied the GenAI recognition system ZeroGPT to identify GenAI users and used multivariate regression analysis to evaluate the effect on exam scores. The results of the analysis of exam results from 193 students showed that those who used

GenAI tools on average scored 6.71 points less than non-users. The negative impact was significantly higher in top-performing students, which indicates that GenAI use might negatively influence their learning and academic performance. These findings indicate that although GenAI might provide some learning benefits, GenAI use correlates with lower exam performance and raises concerns about its effects on students' writing skills and academic development. Although the research was bolstered by careful data analysis and the use of multiple data sources, questions were raised about the reliability of ZeroGPT in effectively indicating if GenAI content is produced. Additionally, the study allowed no insight into students' actual use of GenAI, which might have given more context for the observed differences in performance. On the other hand, Wang (2024) provides this context by investigating student engagement with ChatGPT across the writing process and their views on its pros and cons. Adopting a phenomenological research design, the study gathered qualitative data through written products, self-reflections, and interviews with six first-year writing students, both native and non-native English speakers. Analysis showed that students employed ChatGPT for a range of writing tasks, including brainstorming, outlining, revisions, and editing. They felt it supported their writing process by speeding things up, reducing cognitive load, opening up new learning opportunities, providing instant feedback, and having positive feelings about writing but also raised serious concerns. These encompass concerns about ChatGPT producing inaccurate or deceptive information, the non-creativity and originality of AI-based outputs, and the lack of credible evidence confirming its outputs.

While concerns about GenAI exist, some research highlights its benefits. For instance, in comprehensive exploration research conducted by Tian (2024), which explores the influence of GenAI technologies on academic writing in EFL and discusses the development of GenAI technologies and their applications for students and teachers in EFL, it was found that GenAI could provide the following benefits: First, it could promote students' cognitive support by alleviating students' cognitive load from the repetitive or cognitive efforts of making connections, organizing ideas, planning, and brainstorming. Next, they can also use it to explain complex concepts and provide examples (Tian, 2024). Thus, it helps them focus on the critical tasks that require intellectual effort. GenAI also supports students linguistically by giving them feedback, paraphrasing, and getting them to focus on communicating ideas rather than technical linguistic issues, making academic writing enjoyable.

The studies highlight the dual impact of GenAI on students' performance and writing skill development. On the one hand, GenAI tools such as ChatGPT offer cognitive assistance by relieving students from repetitive tasks and improving the writing process which potentially leads to more productivity and engagement (Tian, 2024). On the other hand, excessive reliance on these tools leads to concerns about critical thinking, decision making, and creativity being replaced. Additionally, GenAI's negative impact has reflected in students' examination performance, as demonstrated in the Wecks et al. (2024) research which highlights the value of thoughtfully implementing GenAI tools in education. They indicated that classroom instruction and learning must evolve, highlighting the need for GenAI to aid in learning yet not replace essential cognitive skills or academic integrity.

1.3.4 Teachers' Perceptions of GenAI in Students' Writing

The unprecedented access of students to GenAI applications and the ineffectiveness of traditional approaches to check originality in students' outputs have generated mixed perception and concerns among educators (Cardon et al., 2023; Khalil & Er, 2023), as they fear that these advancements pose threats to students' generation of an effortless easy shortcut to success with no efforts or minimum efforts (Khalil & Er, 2023). Cardon et al., (2023) conducted an exploratory survey of 343 business communication teachers to gain further insights into teachers' perceptions of AI-assisted writing tools. It was found that some faculty members resisted the change caused by the introduction of GenAI and found it problematic. They were mainly concerned because they felt that it was difficult to distinguish student work from AI-generated work. Because of this difficulty, they believe there will be more plagiarism and evaluation of work will be more difficult, resulting in less perceived authenticity and credibility. More than any other issue, teachers are concerned with the question of accountability. Around 83% of participants believe that generative AI will lead to more plagiarism (Cardon et al., 2023). Teachers who participated in this study also felt that GenAI would lead to less critical thinking and creativity, similar to the findings of the previous study (Habib et al., 2024). Faculty members were very concerned about students' use of AI in the classroom and writing assignments. They indicated that they had very little confidence in their ability to recognize the use of AI (Hostetter et al., 2023). Other concerns expressed by teachers in the previously mentioned study by Söğüt (2024), reported that students' heavy reliance on AI tools could lead to laziness and ignorance. They felt that if students use it as a shortcut to avoid hard work, it will impede learning and result in an ignorant society. On the other hand, they acknowledge some benefits of using GenAI, such as overcoming obstacles in writing and brainstorming (Söğüt, 2024). Teachers were particularly concerned about the careless use of GenAI by students that raise issues like academic dishonesty and credibility.

Research shows that educators see potential benefits of the use of GenAI tools for the development of learning. However, they are also deeply concerned about the impact of these tools on students' skills and academic integrity. This suggests the need to balance the use of these tools by students while ensuring the retention of essential skills so that GenAI is used responsibly and effectively.

1.3.5 The EFL Writing Classroom's Response to Generative AI

The rapid emergence of GenAI tools have led to the emergence of mixed perceptions among educators and researchers regarding strategies for balancing the positive and negative consequences of their use by students. According to Alharbi (2023), students are currently using GenAI and will continue to use it, and it is unrealistic for teachers to ban or ignore the use of these tools when they are so prevalent and accessible. Some studies, such as Gustilo et al. (2024), argue for a ban on its use for academic tasks into which GenAI can be integrated, like essays, reports, and research-related assignments. Others, like Kishore et al. (2023), argued that it should not be banned as GenAI has the potential to improve learning experiences, enhance innovation and creativity, increase accessibility and equity in education, and equip students for a technology-driven future. Despite the calls to ban GenAI both fully and partially,

some have proposed ways to tackle this issue. Research on more appropriate solutions for this new reality continues to grow, suggesting that assessment methods should be adapted accordingly (Grassini, 2023; Surahman & Wang, 2022; Söğüt, 2024; Hostetter et al, 2023; Hong, 2023; Moqbel & Al-Kadi, 2023). Surahman & Wang (2022) suggested that there should be a shift from conventional assessment towards oral and dynamic assessment.

Hong (2023) adds, high-stakes assessment should be conducted using pen-and-paper. Alternatively, writing tasks can be within larger assignments, that include other components such as collective writing, presentations, and audio/video recordings (Hong, 2023). Predominantly, it has been proposed that one should shift from purely quantitative evaluation to a combination of qualitative and quantitative evaluation where students focus on synthesizing relevant content rather than evaluating the learning product (Moqbel & Al-Kadi, 2023). Moreover, one should move from result-oriented exams to practice-based, process-oriented assessments (Söğüt, 2024). Hence, writing assessment should not be about the outcome, instead it should be about the process (Söğüt, 2024). Others also suggested that students should provide drafts for the written assignments to evaluate the process of writing (Ngo Conq-Lem et al. 2024). By re-examining how writing is assessed, educators can harness GenAI's positive contributions to learning while preserving the integrity of academic writing.

Research shows that educators hold different views on how to deal with the use of GenAI tools as they become increasingly dominant in education. Some say it's time to rethink our assessment methods. Those proposals were to shift from traditional assessment methods to dynamic, process-oriented assessments and to focus on qualitative rather than solely quantitative evaluations. By revisiting the assessment of students' work, educators can strike the right balance between the advantages and disadvantages of GenAI use in students' writing.

Although there is increasing research on generative AI in education, an important aspect is still missing. It is difficult to determine how students' and teachers' perceptions of GenAI influence the actual dynamics of the writing classroom. Though some research has focused on individual perspectives, including those of students' or teachers', there is limited exploration of how these different influences work in combination to shape the broader approach to teaching and learning writing.

1.3.6 Theoretical Framework

This research applies the CDST as a theoretical framework derived from complexity theory, which posits that systems are complex, interconnected, and constantly evolving (Larsen-Freeman & Cameron, 2008). Originating from the field of mathematics and physics, complexity theory has been applied to various disciplines, including education, to understand complex phenomena (Aimin & Rizen, 2014). The key aspects of this theory that make it suitable for this research are non-linearity, sensitivity to initial conditions, adaptations, attractors, emergence, historicity, and feedback loops. Together, these properties generate change and stability which are key aspects of CDST.

The EFL Writing Classroom (EFL WC) can be viewed as a complex dynamic system as it possesses some aspects of complex dynamic systems. EFL WC is always changing, adapting,

and evolving in response to change. Recently, the introduction of generative AI in the EFL WC is challenging the conventional ways of teaching and learning. This research aims to explore the influence that this intervention has had on the EFL WC. CDST perspective can allow a nuanced exploration of the interactions between teachers, students, and technology innovations within the EFL WC. CDST can help explore emergent patterns and adaptive changes in teaching practices and students' outcomes due to the generative AI introduction. Therefore, incorporating both students' and teachers' perceptions provides a comprehensive view of the influence of GenAI on EFL WC.

1.3.5 Research Questions

This study aims to address its objective by seeking to answer the following research questions:

1) How do students perceive the use of generative AI in writing?

2) How do teachers perceive their students' use of generative AI in writing?

3) To what extent has students' use of generative AI influenced the process of learning writing?

4) To what extent has students' use of generative AI influenced the teaching of writing?

Answering these questions will provide valuable insights into understanding the potential influence of students' independent use of GenAI on the EFL WC. It will also offer guidance on how educators can effectively navigate the challenges and opportunities posed by GenAI in students' writing and inform strategies for enhancing the teaching and learning of writing skills in the presence of GenAI tools.

2. Method

2.1 Research Design

This qualitative research follows the interpretivism assumption that reality does not exist by itself but is created by people and shifts the focus to the feelings, beliefs, and thoughts of individuals (Creswell, 2009). This research employs a qualitative research design because it is suitable for exploring the interpretation and understanding of reality from the perspective of the people involved in the phenomenon under study (Molina & Eduardo, 2023). Therefore, the current study seeks a qualitative approach that aligns well with the objectives of the research, which revolve around exploring the influence of generative AI tools on the EFL WC from the perspective of both students and teachers.

2.2 Participants and Setting

The study involved twenty participants, both female and male, from Saudi Arabia, including thirteen students and seven instructors from a language institute in a Saudi University. All instructors had a minimum of eighteen years of teaching experience. Among the students, three were pursuing a master's degree in TESOL, while the remaining ten were foundation-year students from various academic tracks.

2.3 Sampling

All participants were selected using convenience sampling, a non-probability method in which individuals are chosen based on availability and ease of access (Creswell, 2009). This approach allowed for the selection of participants based on availability; however, it should be acknowledged that one of its limitations is the inability to generalize the findings.

2.4 Instruments

The study utilized semi-structured interviews as the primary data collection instrument. Participants had the opportunity to express their personal experiences, attitudes, perceptions, and beliefs related to the topic of the research through this method (Braun & Clarke, 2021). The focus was to select a type of interview that allows for questions to be set while also giving space for participants to bring up unforeseen but relevant topics; hence, semi-structured interviews were chosen. Semi-structured interviews were conducted either in person or online via Zoom, depending on participants' preferences and availability.

2.5 Procedure

After obtaining the ethical approval from the institute, the interview guide was developed according to the research questions and objectives and sent to three experienced instructors holding PhD degrees for their feedback. The guide was adapted to make it more effective based on their feedback. To guarantee the clarity, relevance, and reliability of the interview questions, pilot interviews were conducted for both students and teachers. During this phase, amendments were made to ensure the integrity of the data collection process. Next, the participants were recruited by convenience sampling via email and face-to-face method. A consent form was distributed that informed the participants of their rights and ensured the privacy and confidentiality of their information.

2.6 Data Analysis

Data collection was performed through semi-structured interviews with the participants. Interviews were conducted according to the availability of participants, some online via Zoom and some face-to-face. Each interview was audio recorded with participants' consent to ensure accuracy during data transcription. Analysis of the data was conducted according to Braun and Clarke's (2006) six-phase reflexive thematic analysis (RTA) process. The flexibility of the approach was considered an advantage, enabling the researcher to deploy this analysis using diverse theoretical frameworks and qualitative data types (Braun & Clarke, 2006). These processes were familiarization of the data, coding, initial theme generation, theme review, and refinement, defining and naming themes, and report production. The interviews were transcribed verbatim from audio recordings, and transcripts were imported into qualitative analysis software (Atlas.ti) for systematic coding. Based on Braun and Clarke's (2006) approach to TA, the researchers coded and analyzed patterns and themes from the full data set. The themes were then aligned with the research questions, theoretical framework, and literature review. Then the themes were reviewed and refined to ensure that the final themes accurately depicted the data and were aligned with the study's purpose. To strengthen the credibility of the findings, the researcher used reflexivity to critically consider potential bias during the

analysis process (Braun & Clarke, 2021). Finally, the generated themes were reviewed by an expert for validation.

3. Results

3.1 Major Recurring Themes

Table 1 presents the major recurring themes from the analysis.

Table 1. Major themes

Themes	**Files**	**References**
1. Students' Engagement with Generative AI in Academic Writing.	13	334
2. Students' Perceptions of Generative AI in Academic Writing	13	84
3. Teachers' Concerns, and perceptions of students' use of GenAI	7	100
4. Perceived Influence of Generative AI on Learning the Writing Process	20	180
5. Perceived Importance of Developing Writing Skills in the Age of Generative AI	19	78
6. Teachers' Observations of Generative AI Usage in Students' Writing	7	80
7. Perceived Influence of GenAI on Teaching Practices	7	71

Analysis of the data revealed seven major themes, which I will detail alongside participants' quotes below:

3.2 Theme 1: Students' Engagement with Generative AI in Academic Writing

This theme emerged exclusively from students' interviews, reflecting their unique perspectives, motivations, and practices in engaging with generative AI for academic writing. Under this theme, there are two sub-themes:

3.2.1 Sub-Theme 1: Students' Practices in Using GenAI in Academic Writing

Students reported a wide range of practices for integrating generative AI into their writing process. In 29 references, students reported that they use GenAI to provide details and information about specific topics before beginning to write. As reported by one student, *"Details, examples, and facts... If there were statistics like that, I would take them, organize*

my thoughts, and write them down." This was followed by proofreading, which had 26 references, with students using AI tools to refine and polish their drafts. One student said, *"I will go back to the AI and ask it to check if I'm right, about what I just wrote. So these are the most like proofreading."* Some students admitted to abusing GenAI tools with 39 references; some of the uses are to ask GenAI to write a text or parts of the text and claim it is theirs. For example, a student shared, *"I took the text from here and put it into ChatGPT to rephrase it, and then I added some things and made adjustments like they say, giving it my own touch…. The same topic and everything. I might add some things, so it becomes mine."* Another student confessed, "Some *students, unfortunately including myself, use it as a method for cheating."*

3.2.2 Sub-Theme 2: Students' Motivations for Using Generative AI

Students identified various motivations behind their use of GenAI, which led them to the uses they acknowledged above. The most recurring motivation was weak writing skills with 25 references, where students acknowledged relying on AI to compensate for their perceived deficiencies in writing. For example, one student stated, *"My way of writing is not that good. So it helps me; for example, I ask how can I write this thing in an academic way. So it rewrites it in an academic way."* Another student commented, *"I struggle with ideas... how to, how to express, how to write. It helps me, it provides me with information and gives me ideas, other ways in writing. So it really helps me with the structure of writing."*

Another notable reason was laziness. In 10 references, students admitted to using AI as a shortcut when they lacked motivation to complete tasks independently. For instance, one student shared, *"Honestly, I feel like anyone who knows how to write and is lazy can use it."* Another student shared, *"I sometimes feel lazy, my brain is lazy and it wants to just take information from it."*

3.3 Theme 2: Students' Perceptions of Generative AI in Academic Writing

This theme explores how students perceive generative AI's role in academic writing. The theme is categorized into two sub-themes that provide a comprehensive view of students' perceptions.

3.3.1 Sub-theme 1: Awareness of the Nature of Generative AI

Students demonstrated an awareness of generative AI's limitations and risks, with 21 references. For example, one student stated, *"AI might have flaws and make mistakes. Not everything it tells you is correct. It fakes information all the time."* Another student shared, *"In the end, it's artificial intelligence. It operates using algorithms and specific data, and so on. At any moment, the research you are using could have been accessed by someone else, resulting in a high probability of repeating the same content. Just because it's artificial intelligence doesn't mean the same content won't be repeated."*

3.3.2 Sub-theme 2: Mixed Perceptions of Generative AI

Students expressed mixed views of GenAI tools usage in the writing process. Mostly they have positive perceptions regarding it as shown in 38 references. One student gratefully expressed, *"I love using them and I found them very helpful."* On the same note, another commented, *"AI*

is very helpful and students should be encouraged to use it." Students in 18 references perceived GenAI as inevitable and that we should accept it. A student noted, *"Teachers should accept that there are AI tools and the students are going to use them whether they like it or not".* They also saw it as a double-edged sword in 7 references, highlighting its dual nature . One student commented, *"But you know, as anything in our life. It has both sides, has positive and negative impacts."*

3.4 Theme 3: Teachers' Perceptions and Concerns about Students' Use of Generative AI

This theme shows how teachers perceive their students' use of GenAI in writing. Most teachers held more conditional views of their students' use of GenAI. They noted that the impact of AI is driven by student use . It could be an especially helpful tool for supporting student writing if it is used wisely. But when students abuse it, it can have an adverse effect on them. For example, one teacher remarked, *"If they use it wisely, with a purpose in mind, with a clear purpose in mind, with intention to learn, then it's going to affect their exam or their exams or their production positively. In a positive way. If they use it only to make it simple for them, for them not to work too hard, then in that case, it's going to affect them negatively, of course. It's depending on how they use it."*

All teachers expressed concerns about their students' use of GenAI. One of the most frequently referenced concerns, mentioned in 21 references, is AI trustworthiness. They believe it can provide misleading or incorrect information, which could misguide students due to hallucinations. As one teacher shared, *"We need human intervention to make sure that this machine is not hallucinating. So hallucinating or hallucination is a key term in artificial intelligence... Which means that the machine might give you false information or a distorted output."* Another teacher complained about how it gives fake information, *"It would give you the names of researchers or papers that have been published, and in AI it looks like perfectly legitimate, but once you search it on, like, let's say, on other research repositories, Google Scholar, things like that, you would not find them anywhere. These papers don't even exist."*

Several teachers worry about students abusing these tools, as one teacher said, *"Abusing these tools is one of the biggest, it's a very big concern*." One of the most frequently referenced concerns raised by teachers is the potential for students to misuse AI as a shortcut in their learning. As one teacher stated, *"They want to do things easily. Once there is something that can be done for them, without any effort, this is normally their preferable direction."*

Teachers also voiced concerns about specific abuses of AI by students. For example, one said, *"Educators in particular have their own concerns because these tools could be abused by the students. I mean, they could be used for sort of like academic misconduct, plagiarism, etc."* Additionally, three teachers expressed concern about students relying on AI for memorization. One teacher shared, *"Students here in Saudi are very good at memorizing, okay? They're very good at memorizing. So many students here, they know the Quran by heart. So they can memorize. It's a wonderful skill they have. Sometimes they use it to memorize a whole paragraph, and they come to class with this paragraph in mind, ready-made, ready to be transferred to a piece of paper and given in exam."*

3.5 Theme 4: Perceived Influence of Generative AI on Learning the Writing Process

This theme explores how both students and teachers perceive the role of generative AI in shaping the process of learning to write. The analysis reveals a mix of positive and negative influences, with a significant number of references from both groups.

3.5.1 Students' Perspective

In students' interviews, generative AI was often seen as a beneficial tool for improving writing skills. The most frequently mentioned positive impact was that AI enhances students' writing abilities, making writing tasks easier and more manageable. With 46 quotations supporting this idea, many students expressed that AI helped them produce a well-structured and coherent text. One student noted, *"Before AI, my level in writing was so bad, but after it, I started to improve little by little."* While another student stated, *"I think my writing has been, you know, clear. The ideas, my ideas, I think that I started to write in a clear way. Before, I felt like I was writing in too much detail, going into the details of the details of the details, and like the coherence, cohesion of my writing, I felt like it wasn't as good as it is now after using AI. I feel that with AI, after you use it a lot and see how the writing it produces, how the sequence of ideas is clear, how from A to B to C, just like that, you feel the words are organized. I feel that I learned this thing, now I know how to write. For example, academic writing, how is it supposed to be my writing? How am I supposed to write? So, yeah, I found AI, it changed. After using AI."*

Beyond improving writing skills, some students reported that AI helped them increase their vocabulary size, with 6 quotations emphasizing this benefit. A student remarked, *"It is a good thing that you benefit from it, as happened with me, that I learned new words in the health track."* Additionally, 6 quotations highlighted that AI reduced costs by providing a free or low-cost alternative to traditional writing support services, making it more accessible. As one student put it, *"Before AI tools, we used to go to our teachers or some paid services to get feedback or to check our writing or to make the tone of the text more academic. But now with AI tools, we don't need to do that anymore."*

Despite these positive effects, students also voiced concerns about the drawbacks of using AI in writing. The most commonly cited issue was writing skill loss, with 48 quotations suggesting that overreliance on GenAI weakened their ability to write by themselves and made them more dependent on these tools. They started to find themselves relying on AI too much, making them less engaged in independent writing. One student admitted, *"As a student, I think I'm being so dependent on these tools sometimes that I don't know how to make a text on my own. I have to check for each text with AI tools. I have to rewrite any text with AI tools. So it makes me more dependent."* Another explained, *"I felt like I was completely dependent on it. It was correcting me, and I started to feel like I was going to lose it, that I might forget grammar and pronunciation and stuff. So, I immediately stopped."* A student shared, *"I was so independent before using AI tools, but after them, I became so dependent on them."* Some students expressed that they became so dependent on the level of addiction, as one student mentioned, *"I can't do without it right now, with my homework, with everything, even on a normal day."* Additionally, one participant, whose experience was reflected in 3 quotations, expressed that AI usage increased their sense of isolation from traditional learning environments, stating, *"I*

don't talk to my family anymore, even my classes, last semester. I skipped them. I became all the time with it 24 hours."

3.5.2 Teachers' Perspective

Teachers also had mixed perceptions of the influence of AI on students' writing development. Many teachers stated that GenAI has the potential to enhance students' performance in writing tasks and assessments if they use it wisely, with 17 quotations supporting this view. One teacher stated, *"AI can significantly improve students' writing skills."* While another remarked, *"If they use it wisely, with a purpose in mind, with a clear purpose in mind, with intention to learn, then it's going to affect their exam or their exams or their production positively."* Also, they agreed that AI expands the students' vocabulary size, as one teacher noted, *"It can support non-native English speakers like my students in constructing clear sentences with time when they get many, many feedback from the AI. It also expands their vocabularies."* A smaller number of teachers (2 quotations) also mentioned that AI reduced costs for students, offering a more affordable alternative to traditional, often expensive, writing resources.

However, a significant number of teachers were concerned about GenAI's negative influence on writing development. One of the primary concerns, with 18 quotations, was that AI decreased students' performance in exams. Teachers worried that because students had become accustomed to AI-generated assistance, they struggled when required to write independently in test settings. One teacher explained, *"Last year, I've seen tremendous students providing super excellent writing, but when it comes to the exam, they failed."* Another teacher complained, *"During the assignments, their work is perfect. When it comes to face-to-face exams, they don't do anything. They barely can write a full sentence correctly."* Illustrating how AI dependency negatively affected students' ability to generate ideas and structure essays under exam conditions. Another 18 quotations pointed to the idea that AI hindered learning. One teacher remarked, *"Like the way that it is used in a negative way by just getting information from there and submitting them to the teachers no learning is happening at all."* Another commented, *" If they do it this way, how they will write by themselves if I just need a computer to do the mission instead of me? So what I need to learn in this case, the whole learning process will go down and the students will finish their term, know nothing."*

3.6 Theme 5: Perceived Importance of Developing Writing Skills in the Age of Generative AI

3.6.1 Students' Perspective

Only a small portion of students, 4 references, suggested that the importance of writing might decrease or diminish. As one student stated, *"Why should I tire myself when I have AI to write for me?"* The majority, including those who admitted to using AI for questionable reasons, agreed that writing remains a critical skill in 30 references. As one student stated, *"It's essential! If, God forbid, you don't know how to write and you go somewhere, are you going to rely on AI to write for you? No! You have to know how to write, not just in English, in all languages. If you don't know how to write, it means you're not proficient in the language! It's not just about speaking; writing is necessary. Like in airports, God forbid, if they give you papers to fill out in their language, sure, you know how to speak, but that's not enough!"* Another student

agreed, *"One of the fundamentals of learning a specific language is having writing skills. For example, if you can say something, you must also know how to write it."*

3.6.2 Teachers' Perspective

All teachers, with 44 references, highlighted the significance of writing as they saw that it is linked to intellectual growth, critical thinking, and overall academic and professional success. They see that having strong writing skills is an irreplaceable role even in the AI age. For example, a teacher shared, *"Sloppy writing is indicative of sloppy thinking. So if somebody doesn't know how to write, then this somebody doesn't know how to, how to think."* Another teacher emphasized, *"We have to encourage our students to think. So writing is all about thinking. If you don't think, you cannot write."* Also, another teacher stated, *"We have to encourage our students to think. So writing is all about thinking. If you don't think, you cannot write."* Moreover, *"We have the intellectual property and intellectual property here. Okay? So, we have to protect that. I think we have to protect. We have to be very careful to protect it."*

3.7 Theme 6: Teachers' Observations of Generative AI Usage in Students' Writing

All teachers have observed noticeable changes in the quality and style of their students' writing, many of which are attributed to the influence of generative AI tools. As one teacher stated, *"All the teachers, almost all the teachers, have pointed to this change in their students' writing."* Some teachers observed improvements in their students' writing; as one teacher remarked, *"I feel generative AI has noticeably influenced students' writing ability."* However, teachers also noted a mismatch between students writing assignments and their level of English and production in writing exams. As one teacher noticed, "It *changed it for the better, but it's not theirs. So, they give you a product, an end of good quality, of very good quality, but this good product doesn't reflect the way they master, or they speak, or they write, or they use English in general."* Another teacher stated, *"Suddenly, with the advent of AI, we could see that there were perfect paragraphs appearing in the learning management system, and then initially I was a little surprised, and then I quickly took out some of the paragraphs and run them through AI detectors, and I found out that this was totally written by AI."* These reported changes show that across all seven teachers with 60 references, it was consistently noted that teachers could tell when generative AI had been used in students' writing. This was confirmed by what this teacher said, *"When they give me their writing, I know that this is not their writing. I know. They couldn't deceive me at all."* Another teacher confidently said, *"Of course, I know if this is, I mean, the production of a student, or if this is the production of somebody else, whether this somebody else is a human being, a homeroom teacher, or a ChatGPT, or a machine, I can tell."*

3.8 Theme 7: Perceived Influence of Generative AI on Teaching

This theme is found in teachers' interviews and highlights the noticeable influence of students' use of generative AI on teaching practices. It shows that teachers have made changes in the areas of assessment and classroom instruction. The changes are as follows:

3.8.1 Pen-and-Paper Assessments

As a response to the potential misuse of GenAI, foundation year (FY) teachers shifted to pen-and-paper assessments to ensure that students demonstrate their own thinking and writing skills without external help. One teacher reported, *"The higher management had to take some action, which was change of policy, and the paragraph writing activity or task in Blackboard was entirely removed and the students were asked to write with the help of a pen and paper in their class using of course their own English language."*

3.8.2 Personalized Questions

As for homework, a teacher started personalizing questions to reduce the chances of students using AI to generate answers. According to him, *"This time is the time that we need to revisit our assessments, and we need to revise the questions that we give to our students, specifically their homework, so that they might not be able to wholly rely on AI for producing their answers. So one of the ideas was that to personalize the questions, don't generalize the questions, because AI is able to produce answers for general questions, but AI is not able to produce answers for very, very specific personal questions."*

3.8.3 Guided Use of GenAI

Teachers began integrating AI into their classrooms by guiding students on how to use it effectively. A teacher shared, *"I realized that there could be a very good solution for that, which is use of technology in the class in the presence of a teacher."* Another teacher explained, "I *usually give the prompts to my students with the rubric requirement, then they can use it. This targeted guidance and will help students engage more with the AI in a more constructive way rather than being just dependent on the AI tool."*

3.8.4 In-Class Writing

Teachers reported that they started asking students to write inside the classroom, focusing on in-class writing activities where students were expected to produce work without the assistance of AI tools. The in-class writing included group work and drafting. As one teacher explained, *"What I would do usually, for example, in writing, what I would do is that I would ask them to write and submit in class. So we write and we would do the drafts and I go through them… And then we do it in groups as well. We would discuss topic sentences and all of these things, different examples, so we take a longer time."* Another teacher said, *"So it's a good idea to make them, to force them, to make them write in class. And then do rounds and see what, that's what I do every day. I go to every single student. You can ask them if you know my students. You can ask them. I go to every single student and make sure he wrote something. And I would give them feedback on everything."*

4. Discussion

4.1 Research Question 1: How do students perceive the use of generative AI in writing?

Students have mixed perceptions of GenAI in the writing process. Many students are aware of its limitations and risks, understanding that it is a double-edged sword. This understanding is a

good sign, as it demonstrates a discerning approach to the tool. In addition, most students had positive views about GenAI. They considered it useful, especially for saving time, effort, and money. In fact, some of the students even stated that it reduced the necessity of private tutoring.

Moreover, it was observed that the students' perceptions of GenAI, which can be either positive or negative, drove their use of it. Some students, like the one who commented that she does not use AI in the writing process, had negative perceptions toward it, thinking that it would adversely affect her writing performance. As for the other students who expressed some appreciation for AI, whether as a double-edged sword or knowing both the positive and the negative influences, all used AI in completely different ways. The ones who viewed it positively used it responsibly to brainstorm, learn specific vocabulary (e.g., medical terms), paraphrase samples, help them understand different writing forms, practice writing before exams, proofread their work, and receive constructive feedback. This aligns with similar findings by Alharbi (2023), Tian (2024), and Wang (2024), who identified similar uses of GenAI by students. However, certain students abused GenAI, using it to cheat or do their homework. These students rationalized their use of GenAI due to weak writing skills, laziness, or lack of motivation, similar to the findings of Ahmad et al. (2023) and Söğüt (2024). Some students even said they used GenAI because it made them less stressed or anxious about writing tasks, especially when they were unmotivated or when instructions were not clear. This introduces a new dimension to the discussion of GenAI, associating it with emotional and motivational aspects in students' writing behavior.

Students' perceptions of generative AI as a writing tool show a nuanced understanding of its potential and dangers. But as a new assistance tool, it requires awareness and a systematic mechanism for utilizing it responsibly. These insights into students' motivations and practices that are uncovered in this study are crucial for educators and institutions. These suggest that educators need to raise the awareness of students to help understand the negative consequences emerging from its misuse. The two-sided aspect of GenAI in academic writing necessitates that we perform balanced methodologies to ensure that it is used reliably to develop their thinking skills instead of impeding them.

4.2 Research Question 2: How do teachers perceive their students' use of generative AI in writing?

Teachers have major concerns about students' use of generative AI in writing. These include issues about the credibility of AI, and the accuracy and reliability of the content produced by those tools. It is a good sign that some students are also aware of the limitations and unreliability of generative AI. However, most teachers are concerned that students could misuse these tools, as a shortcut to escape hard work or even for cheating. These concerns echo those expressed by teachers (Cardon et al., 2023; Khalil & Er, 2023; Wang, 2024). A few students reinforced these worries, admitting that they were using AI for questionable purposes, such as getting the tool to do their homework for them with zero effort. Academic integrity and the misuse of GenAI are great concerns according to teachers now, reflecting the challenges in maintaining integrity in the face of advanced AI tools.

Another concern voiced by teachers is rooted in the strong memorization culture in Saudi

Arabia. Even if exams change to a pen-and-paper format, teachers are concerned that students with advanced knowledge about the exam topic might use AI to generate text, memorize, and replicate it during exams. Such an approach raises concerns regarding fostering superficial engagement and reinforcing reliance on AI at the cost of critical thinking. Such worries echo those proposed by Khalil and Er (2023) and Cardon et al. (2023) and others, who voiced similar concerns around the potential effects of generative AI technology on academic integrity and genuine learning. In addition, teachers have guarded opinions about students' use of GenAI. GenAI could enhance students' writing if used properly. At the same time, it can disrupt their learning if not used wisely. This viewpoint is consistent with those of the students interviewed, many of whom characterized AI as a "double-edged sword" that can create both value and harm depending on how it is put to use.

On the whole, teachers tend to be especially concerned about how students use generative AI, particularly with regard to issues of academic and shallow learning. Some of these teachers recognize the potential benefits of GenAI when in the right hands, while others worry about its misuse by students, such as cheating or over-reliance on it.

4.3 Research Question 3: To what extent has students' use of generative AI influenced the process of learning writing?

The findings show that both students and teachers recognize the potential of AI to either enhance students' writing skills if used wisely or hinder their learning if overly relied upon or used irresponsibly. From the analysis, it became clear that students are divided into two groups based on how they engage with generative AI, which supports this assumption.

The first group consists of students who use generative AI responsibly to their advantage. These students reported that their writing skills had benefited from the use of AI. This is consistent with the results of Tian (2024), who found that AI tools such as ChatGPT are beneficial for students as they can reduce cognitive load and enable students to solve higher-order or challenging issues such as idea development and expression. According to Wang (2024), generative AI also positively impacts students by allowing them to write faster, create new learning opportunities, and provide instant feedback. This fits with the responsible use seen in this group of students, who used AI to support their writing without compromising their development as writers.

In contrast, the second group comprised students who negatively rely on AI. These students acknowledged copying directly from GenAI or relying heavily on AI-generated content without engaging in the writing process themselves. Some students in this group even stopped using AI altogether after they found that it was making them too reliant causing a decline in their writing skills and confidence. This aligns with Habib et al. (2024), whose study revealed that students were concerned that being over-reliant on technologies such as AI would take over their thinking process and decrease their levels of self-confidence. The finding is also in agreement with Ahmad et al. (2023), who suggest overuse of GenAI erodes students' capacity to critically engage with writing tasks.

Teachers have noticed inconsistencies in their students' writing, reflecting the adverse effect of

over-relying on GenAI. For instance, teachers noted that some students submit perfect online assignment paragraphs, and teachers assume it to be AI-generated. They were correct in their assumption because these students were not able to write with a similar quality on physical tests. Other teachers observed that these students cannot write decent paragraphs on their own, clearly indicating that getting AI to write for them undermines their ability to learn how to write. Wecks et al. (2024) found that students who used GenAI tools for writing tasks exhibited reduced writing proficiency. Specifically, the use of GenAI by students led to lower exam scores, particularly among higher-achieving students, suggesting that these tools might hinder the development of essential cognitive skills such as critical thinking and independent writing.

This raises an important question: Does the availability of generative AI diminish the importance of acquiring or developing writing skills? While a small number of students believe that learning to write has become or will become obsolete, this way of thinking has led them to misuse AI. Some have expressed sentiments such as, *"Something that was invented to make our lives easier, why don't they let us use it?"* or "Why should I tire myself when I have AI to write for me?"

However, most teachers and students strongly disagree. They stressed that writing skills are still vital to personal and intellectual growth. One student argued that writing is an essential part of a knowledge process that cannot be replaced. They added that over-reliance on AI tools is dangerous as AI may not always be accessible and, thus, people will be lacking both tools and ability. Likewise, teachers highlighted how writing ability is linked to intellectual development, asserting that writing reflects thinking. As one teacher explained, *"Sloppy writing is indicative of sloppy thinking."* They stressed that students should continue to learn and write in order to maintain their skills and not depend on an AI.

In conclusion, the findings highlight a split in students' use of generative AI in writing. While some students use AI responsibly, enhancing their writing skills, others rely on it too heavily, risking their development. The teachers have noticed these contrasting patterns, with over-reliance on AI hindering students' progress in developing independent writing. Students and teachers alike believe that writing should be taught and honored for the sake of students' intellectual and personal development and insist that AI should serve as a support tool, not a substitute, in student learning.

4.4 Research Question 4: To what extent has students' use of generative AI influenced the teaching of writing?

The research findings suggest that the teaching of writing skills has been heavily influenced by generative AI since its introduction. The most visible difference comes in the form of first-year students having to take their exams using pen-and-paper to limit their use of AI. In addition, a few teachers have revised their assessment techniques and started focusing on giving students more personalized questions which AI would be hard-pressed to answer, making it a more accurate representation of students' writing skills. Such change in assessment was recommended by prior studies (Grassini, 2023; Surahman & Wang, 2022; Söğüt, 2024; Hostetter et al, 2023; Hong, 2023; Moqbel & Al-Kadi, 2023). Beyond assessment, classroom instruction has evolved to adapt to generative AI, as well. Instead of prohibiting its use

altogether, some educators have embraced guided AI activities to teach students how to leverage the technology wisely and effectively. Their objective is to help students build on their critical thinking skills, showing students how to use AI as a learning support, not a replacement. At the same time, many have adapted their own pedagogy to include more in-class writing as a focus. Now, teachers guide students during structured activities like drafting or group work or step-by-step guidance in order to ensure that students can develop their skills independently. They also provide continuous feedback and support to help students build confidence in completing exams without relying on AI.

This shift has also highlighted teachers' awareness of their students' writing. By closely observing students' writing habits and progress, teachers have become adept at recognizing when AI has been used. Many confidently assert that they can identify AI-generated work without the need for detection software. Their familiarity with students' writing styles has enhanced their ability to detect AI use. This does not align with previous studies (Perkins et al., 2023; Hostetter et al., 2023), which stated that teachers were not able to detect AI use in writing. This could be because GenAI has been around for a while, whereas the studies were conducted when generative AI was still new, and teachers were not as experienced with it as they are now.

5. Conclusion

5.1 Theoretical Connections

This study highlights the sudden changes that have emerged from the introduction of generative AI in the EFL writing classroom, including changes in student writing behavior, teacher instruction in the classroom, and assessment practices. These shifts reflect the key aspects of CDST, indicating that the writing classroom could be considered a complex, adaptive system.

As a complex, dynamic system, its nonlinearity is evident in the ways students and teachers react differently to the introduction of generative AI. Some students are using it to improve their writing skills, but others simply use it in ways that hinder their skills development. Teachers' instructional strategies also differ from one to another, with some teachers integrating AI tools into writing instruction and others resisting its influence as an example of how sensitive the system can be to its initial conditions.

The findings show that there are adaptation and emergent patterns in the way that students and teachers are both adjusting to the availability of GenAI. Teachers are changing their practices, while students are developing new ways of integrating GenAI into their writing process. The introduction of generative AI has led to the emergence of new classroom dynamics, including new assessment methods and new practices in the writing process by students.

Feedback loops can be observed in how teachers view students' use of AI, which, in turn, influences how teachers teach and assess their students. On the other hand, students adapt their writing techniques according to their perceptions. All of this, in turn, has contributed to shaping policies and guidelines for AI inside the institute.

The writing classroom exhibited both change and stability. The changes in writing classroom

instruction, and assessment of students' approaches to writing practices demonstrates the changing nature. On the one hand, teachers began to shift to traditional writing practices (e.g., pen-and-paper writing for academic integrity) in an act of resistance against AI. And on the other, stability is found in the ongoing emphasis on the importance of developing writing skills despite the availability of GenAI.

To sum up, the introduction of generative AI is not a simple linear transformation but an open-ended, iterative process of evolution. As students' writing practices become increasingly integrated with AI, the writing classroom, as a complex, dynamic system, will keep evolving, going through processes of change balanced by processes of stability. Understanding these dynamics is of value to educators and policymakers interested in the influence of the role of AI in EFL writing classroom.

In the next section, practical recommendations for students, teachers, and policymakers will be presented based on these findings.

5.2 Pedagogical Implications and Recommendations for Practice

5.2.1 Recommendations for Teachers

Teachers need to give handwriting practice to students and require writing in class by everyone. This would be particularly helpful, if pen-and-paper exams were introduced. Exposing the students to group work and drafting are types of strategies that would help improve students' writing. In addition, there should be guided AI use inside the classroom to help students learn how to use it as an assistant, not a text generator, supporting activities like practice, providing samples, and getting feedback. However, instructors must highlight the risks of AI over-reliance on students' writing skills and educate them to use it responsibly. As for exams, the required topics should be within students' academic area of study or provide sufficient background information for scientific topics. Another suggestion is to personalize the questions not only to make it harder for AI to answer but to give learners the opportunity to express themselves effectively. Additionally, providing students with clear instructions, samples of desired content, and rubrics as guidelines for writing tasks will set parameters for the unknown and reduce dependency on GenAI. Finally, teachers have to get to know their students' writing levels and understand AI-generated structure so that they can detect whether AI is being used and ensure that the tool does not get in the way of the intellectual development of their students.

5.2.2 Recommendations for Students

Students have to be aware of the significance of developing writing skills. More importantly, they should participate in their development rather than over-relying on these tools. Students can utilize GenAI to learn, get feedback, clarify concepts, expand their vocabulary, and to analyse sample structures. But they should refrain from using GenAI to generate entire texts. Besides, practicing writing is very important, especially for those who have paper and pen exams. There is also the issue of how dependent GenAI will make them in the future, which students should understand, too. Finally, they have to understand that relying too much on such tools may stunt their intellectual growth and therefore, influence their overall academic performance.

5.2.3 Recommendations for Policymakers

A well-defined policy and guidelines for the usage of responsible AI should be established by institutions. These policies should comply with their national guidelines. For example, in Saudi Arabia, SDAIA has created guidelines and policies related to using generative AI. Additionally, policymakers should establish an iterative feedback loop in which policy is regularly reviewed and refined based on insight from stakeholders so that AI can be integrated into education while still preserving students' writing ability. Moreover, it is suggested that each teacher create their policies with proper guidelines suitable for his/her course conditions that are approved by their institution. Policymakers need to be sure it works, so they need to include all stakeholders, students and teachers alike, in shaping these policies. Policies need to be as flexible as the technology they seek to regulate. Flexibility must be built into policy and policies must be continuously updated based on stakeholder feedback. Above all, students must understand these guidelines and that they were not set to restrict them, but to encourage responsible use of AI and protect integrity and intellectual growth.

6. Limitations of the Study and Recommendations for Further Research

Several limitations were identified that may have influenced the study results. The first limitation affecting the generalizability of the findings is the small sample size. Additionally, little can be said about the actual long-term influence of generative AI. Future research should focus on the longitudinal impact of generative AI on the EFL writing classroom, as perceptions may change over time. Another limitation is the exclusive use of qualitative data. Future research should incorporate more quantitative methods. For example, collecting students' and teachers' observations of the positive or negative influence of generative AI writing could be complemented by quantitatively measuring its impact, such as tracking changes in students' scores and exam performance. Furthermore, expanding the study to include a more diverse group of participants varying in proficiency levels, genders, and ethnic backgrounds would improve the reliability of the findings.

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