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Using GenAI in English as a Second or Foreign Language (ESL/EFL) Learning and Teaching: Promises and Potential Concerns

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Abstract; Generative artificial intelligence (GenAI) has been rapidly reshaping human knowledge. Unlike other forms of artificial intelligence, GenAI is expanding in unprecedented leaps and affecting all fields of inquiry and practices. English as a second or foreign language (ESL/EFL) learning and teaching has been no exception. Yet, the exploration of its promises and potential risks are still under research and consideration. Having this in mind, the current paper explores GenAI in ESL/EFL learning and teaching. First, it explores the very concept of GenAI paradigm. Second, it surveys empirical research on ESL/EFL teachers' perspectives towards GenAI with reference to its merits as personalized, customizable, and flexible platform (Pokrivcakova, 2023) and potential concerns such as learning dehumanization, ESL/EFL learning autonomy, equality, and privacy (Almashrgy & Alburki, 2024). It also delves into ESL/FEL students' perceptions of GenAI integration. Then, it connects GenAI to key theoretical constructs that can help to expand understanding its integration in ESL/EFL learning and teaching such sociocultural theory and the concept of scaffolding (Hamidi & Bagherzadeh, 2018; Hammond & Gibbons, 2001), Kress's (2001) multimodality theory of learning and the concept of affordances. It conceptualizes how GenAI can serve as a scaffolder, as personalized environment, and as an affordances platform once used and directed purposefully in preparing ESL/EFL teaching and learning materials, methods, and assessment. It highlights "microlearning" through GenAI (Kohnke & Moorhouse, 2026). Finally, it concludes with a call for more practical training of ESL/EFL teachers on how to more productively engage their students with GenAI learning tools and emphasize deep learning.

Keywords: GenAI, ESL/EFL learning/teaching, multimodality, GenAI-scaffolding and affordances, ESL/EFL teachers'/students' perspectives, microlearning.

استخدام الذكاء الاصطناعي التوليد في تدريس وتعلم اللغة الانجليزية كلغة ثانية او كلغة اجنبية: الامال والمخاوف المحتملة

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المستخلص

أصبح الذكاء الاصطناعي التوليدي يعيد تشكيل المعرفة البشرية بشكل متسارع جدا. على عكس الاشكال الاخرى السابقة من الذكاء الاصطناعي, فان الذكاء التوليدي يمثل قفزات غير مسبوقة توثر على جميع حقول البحث وممارساته. ان تعلم اللغة الانجليزية كلغة ثانية او كلغة اجنبية واحدة من الحقول التي تاثرت بذلك. ومع ذلك فان استكشاف افاقه الواعدة والمخاطر الكامنة لايزال مدار البحث والاعتبار. اخذ هذا المسار في الحسبان, تهدف هذه الدراسة الى استكشاف الذكاء الاصطناعي التوليدي في تعليم وتعلم اللغة الانجليزية كلغة ثانية (او الانجليزية كلغة اجنبية). اولا, تستكسف هذه الدراسة مفهوم الذكاء التوليدي. ثانيا, تستكشف هذه الدراسة البحوث التجريبية في ادراكات التدريسين تجاه استخدام الذكاء التوليدي يالاشارة الى مزاياه مثل خلق مساحات تعلم فردية ومساحات مرنة (بوكريكاكوفا, 2023) والمخاوف الكامنة مثل نزع الصفة الانسانية, مسائل الخصوصية, استقلالية المتعلم, والمساواة في الوصول الى الذكاءالتوليدي (المشركي والبركي, 2024). هذه الورقة البحثة تستكشف اراء الطلاب في تعلم اللغة الانجليزية كلغة ثانية او كلغة اجنبية باستخدام الذكاء التوليدي. انها ايضا تربط الجوانب النظرية التي ممكن ان تساعد في توسيع فهم ادماج الذكاء التوليدي في تعلم وتعليم اللغة الانجليزية كلغة ثانية (او الانجليزية كلغة اجنبية) مثل النظرية الاجتماعية الثقافية, ومفهوم التيسير (حميدي و بكرزادي, 2018: هاموند وجيبسون, 2001), وكذلك نظرية الوسائط المتعددة للعالم كرس (2001) ومفهوم الامكانات. انها توكد على ان الذكاء التوليدي يعمل كميسر ومساحة فردية وخلق امكانات فيما لو استخدم بطريقة موجهة في اعداد المواد التعليمية, طرائق التدريس والتقييم. انها تسلط الضوء على مفهوم التعليم المصغر (كونكي و مورهاوس, 2026). اخيرا, تستنتج الدراسة الحالية بالدعوة الى مزيد من التدريب لاساتذة اللغة الانجليزية في كيفية تحفيز الطلبة باستخدام الذكاء التوليدي وادواته بما يعزز التعلم المعمق.

كلمات مفتاحية : الذكاء الاصطناعي التوليدي, تعليم وتعلم اللغة الانجليزية كلغة ثانية او كلغة اجنبية, نظرية الوسائط المتعددة, الامكاناتات والتيسر التوليدي, اتجاهات اساتذة وطلبة اللغة الانجليزية كلغة ثانية او كلغة اجنبية, التعليم المصغر.

1. Introduction

The rapid development in the field of technology with the emergence of GenAI has started to reshape language teaching and learning. It offers tools for learners and teachers and creates different learning spaces. It has become a more "fundamental component of modern pedagogy" (Harakchiyska & Vassilev, 2024, p. 218). Yet, the expansive integration of GenAI is still associated with both opportunities and challenges. On the one hand, GenAI provides opportunities for "personalized learning, instant feedback, and support for various learning styles…[On the other hand, there are concerns about] students' access to technology, technological divide, as well as the over-reliance on technology" (Almashrgy and Alburki, 2024, p.29).

Whether seen with merits or demerits, GenAI is a paradigm that needs to first be problematized more deeply. There must be clear lines of this paradigm because it is fluid when seen as a construct. Second, GenAI's merits and potential demerits could be perceived differently by teachers and students. So, teachers' and teachers' perceptions and attitudes about GenAI need to be explored to make it more visible how to approach GenAI while considering these perspectives when preparing ESL/EFL materials, designing courses, teaching methods, and assessment. We can't assume that any possible merits which are perceived as so by teachers are still considered merits from students' perspectives and vice versa. Third, the empirical evidence of the merits and demerits of GenAI in ESL/EFL language teaching needs to be expanded and situated in theoretical constructs that have been influential in language learning and teaching. Thus, this paper will answer the following questions:

1- What is GenAI? And how is it defined?
2- What are ESL/EFL teachers' perspectives and perceptions of the use of GenAI in light of the established literature?
3- What are ESL/EFL students' perspectives and perceptions of the use of GenAI?
4- How can GenAI be theoretically connected to the sociocultural theory and its *scaffolding* construct as well as to the multimodality theory and its *affordances* construct in connection to ESL/EFL teaching and learning?
5- How can AI be connected to *micro-learning* in teaching ESL/EFL?

To answer these questions, this paper will follow a straightforward structure: Defining GenAI, surveying teachers' and students' perspectives and perceptions of the use and integration of AI in ESL/EFL, connecting GenAI to theoretical constructs (the sociocultural theory and its scaffolding construct, the theory of multimodality and its affordances construct), and finally exploring GenAI-assisted micro-learning in ESL/EFL teaching and learning. The findings and discussions foregrounded in this paper will help to equip ESL/EFL teachers with more nuanced understanding of GenAI and make them more efficient in capitalizing on capitalizing on GenAI when designing materials, teaching, as well as assessing ESL/EFL students.

2. GenAI Paradigms

Artificial intelligence (AI) is defined "as a system that can perform a command or task exactly like a human" (Varsamidou, 2024, p. 300). This expansive and ongoingly developing system is characterized by using data and input and processes simple and complex tasks in a very fast way. With the fast advancement of technology, more efficient forms of AI have emerged, especial generative AI (GenAI). Unlike other technology-assisted tools used, GenAI is highly adaptive tool that is expanding on a daily basis. It offers (sub)systems that resemble human thinking and problem solving to a large extent. It has been fundamental in modern education (Harakchiyska & Vassilev, 2024; Lee & Song, 2024) for the affordances and tools it provides.

In ESL/EFL teaching and learning, GenAI has been incorporated widely. For ESL/EFL students, it provides tools for paraphrasing, grammatical correction, vocabulary development, pronunciation training, detecting plagiarism, comparing their answers with AI-provided ones, and do self-assessment (Almashrgy & Alburki, 2024; Varsamidou, 2024). For teachers, it helps them to create personalized platforms, design curricula and activities (Varsamidou, 2024), assists in grading and assessment, and provides instant feedback (Almashrgy & Alburki, 2024). Yet, capitalizing on the integration of GenAI requires a development of digital and AI literacy skills and competences. These skills and competences are no longer supportive but rather fundamental since digital platforms have been shaping our lives. For instance, students have become more adept at using AI in a way that makes an ecosystem situated in parallel with classroom

and classic teacher-student interaction. In this respect, Varsamidou (2024) emphasizes that "new curricula should include technical elements (digital literacy, data science, content programming, accessibility) as well as non-technical elements (critical thinking development, ethics, content management, personal data)" (p. 300).

It is also important to note how teachers define AI themselves because this relates to how they respond to utilizing AI in their classrooms as well as their personal development. Here, participants in Varsamidou's (2024) study define AI "as direct access to a wide range of data and resources that can help the teacher to create their own material or have an 'assistant' in teaching." (p. 35). Yet, there is still "lack of clear criteria for assessing the educational value of AI-generated content and the persistent ethical concerns surrounding its use pose significant obstacles" (Lee & Song, 2024, p. 2). This means that the value of GenAI is still under consideration in order to better guide and enrich teachers and learners with the intention of accepting it as a valuable resource that needs debating and further exploration. The next section will shed light on ESL/EFL teachers' perspectives towards the use of GenAI.

3. Research Methodology

This paper uses a multi-layered methodology. The first layer is a literature review of the empirical research on ESL/EFL teachers' and students' perspectives and perceptions of the use of GenAI. The main focus here has been on studies covering 2023 on because this year represented the most noticeable advancement in the field of generative artificial intelligence (GenAI) which shows highly sophisticated processing. Then, the second layer represents building theoretical connections in light of the sociocultural theory, multimodality theory, and microlearning in connection to ESL/EFL teaching and learning.

4. Results and Discussion

4.1. ESL/EFL Teacher's perspectives toward the use of GenAI

ESL/EFL Teachers' perspectives toward the use of GenAI are highly important. These perspectives are key as those teachers are the leaders and facilitators of the learning journey. Knowing teachers' perceptions and attitudes toward the use and inclusion is essential in "the success and failure of applying AI in education" (Pokrivcakova, 2023, p. 100). Thus,

their perspectives play significant role in shaping that journey and leading the students to acquire language and develop their language competence. Those teachers are not only engaged in teaching, but also lead students through language practices, design activities, and provide teaching materials. They also guide the integration of students with activities and do the assessments. Teachers are also burdened with providing feedback to large numbers of students (Alharthy, et al, 2024).

Pokrivcakova (2023) explored 137 pre-service teachers' attitudes toward the use of AI in teaching EFL in Slovakia. She found that "(61.31%) admitted that they had no understanding. Even more students (87 students = 63.50%) admitted that they had no understanding of the limitations of AI" (p. 105). Yet, she underscored high positive expectations among teachers about how AI is reshaping their teaching.

In a similar study, Harakchiyska and Vassilev (2024) also explored 52 Bulgarian pre-service teachers' attutides toward using AI in EFL teaching. Considering AI as a "fundamental component of modern pedagogy" (Harakchiyska & Vassilev, 2024, p. 218), they found that 61.5% pre-service teachers agreed on AI integration in comparison to 15,6% showing disagreement, and 23,1% being unsure about the benefit of AI use. Teachers also articulated that applying AI could result in improving in language skills (63.4% agreement for speaking improvement, 55.8% for writing, and 63.4% for reading). Yet, 65,4% of teachers believed that AI would negatively affect EL tuition. Regarding pre-service teachers' concern about AI affect their jobs, 53,8% showed neutral perception. Participants' perceptions about AI showed that 65,4% agreed that students should not rely on AI in skills development while 53,8% reported concerns about teacher-student in-class interaction due to the use of AI. Third of the participants also disagreed that university training has supported them with the required AI competencies. Harakchiyska and Vassilev's (2024) study showed that pre-service teachers' perception about their use of AI in classroom was the highest predictor in comparison to both attitudes and knowledge of AI respectively. These findings show doubt about the provision of sufficient training about the use of AI. This means that digital and AI literacy skills of pre-teachers are not supported sufficiently in parallel with AI development. The study also reveals contradiction among teachers concerning AI use since 65,4% agreed on the use of AI while at

the same time 53.8% revealed concerns about teacher-student interaction due to AI integration.

In exploring teachers' attitudes, Almashrgy and Alburki (2024) focused on in-service Libyan EFL teachers. Using a mixed-method design, they surveyed twenty teachers. They were purposefully selected due to their regular utilization of AI tools in their teaching (60% utilization for language apps, 25% for grading, and 15% for virtual assisting). The participants highly perceived AI as increasing students' engagement, expanding personalized learning, and enhancing students' efficiency. For teachers, they reported AI to be very useful in grading and providing valuable teaching data. It is important to highlight grading and assessment since efficient assessment would definitely result in amending teachers' practices in teaching as well as in guiding students toward figuring out areas of strength and those in need for development. Yet, they also reported challenges associated with AI utilization like technical issues (35%), lack of training (35%), and resisting changes (30%). These challenges echo with their emphasis on training (80% agreement) whether being through workshops (60%), online training courses (20%), or webinars (10%). Yet, it is notable that participants in this study were purposefully selected based on being AI utilizers and that all of them have higher degrees in EFL (80% doctoral degree and 20% master's degree). This means that they have accumulated both experiences as AI utilizers as well as extensive training as high degrees holders. This might be different from novice or pre-service teachers whose age and engagement with AI as both EFL learners and then as teachers is deeper or more nuanced.

Varsamidou's (2024) studied EFL teachers' perspectives in Greece toward utilizing AI in their classroom. She surveyed 150 teachers (47% teaching English, 32% teaching French, and 21% teaching German). 60% of the participants were primary education teachers (60%) while 40% were secondary education teachers. There are important points to note in this study. First, 68.6% reported to have never or rarely used AI in foreign language teaching in comparison to 28.6% reporting that they sometimes used AI in teaching. Second, 70.6% stated that they never or rarely used AI in preparing lessons and/or in their daily teaching, while 26.7% pointed out using AI sometimes per month. Third, 79.9% of the teachers considered AI as not (or less) effective in developing students' language skills. Fourth,

81.3% pointed out that AI is not (or less) effective in assessing students. Fifth, concerning their perception of the effectiveness of using AI, 45.3% emphasized that it is never effective. This perception is associated with teachers' concerns about reduced interaction, excessive use, students' dependence on technology, fatigue, plagiarism, and cost. Teachers showed less competence in using AI with only 6% feeling (highly) competent. This lack of AI competence is also situated in the lack of (engagement with) AI training where 68.7% reported not attending or receiving any AI training.

Issues of AI and digital competences and skills are also underscored by other studies and represent one of the most salient challenges in adapting to AI by teachers. It could also relate to age range where more young teachers are more expected to engage or have engaged with AI-assisted activities in comparison to older teachers. Moreover, the teaching context is also relevant where some contexts or countries provide more training and support to the use and integration of AI. Additionally, teachers' attitudes about the future trends regarding AI integration in foreign language teaching revealed that the majority (92.3%) are worried about AI's role in the educational context. Varsamidou (2024) also categorized concerns into two types. First, the teacher-related concerns revolve around: reduced jobs, limited role, reduced need for foreign language learning, and anxiety related to the use of AI. Student-related concerns speak to: reduced critical thinking ability, passive learners, indifference to learning and knowledge, reduced students' creativity, lacking communication and language skills, issues of plagiarism, as well as health and addiction risks.

Bearing the conception that AI would play role in English teaching, Abed, Al-Tamimi, Ghanim and Nashmi (2025) explored Iraqi EFL teachers' perception about the use of AI in secondary and elementary public schools. Using qualitative approach, they found that 70% of the teachers believed that the use of AI could result in more engagement as well as increase students' proficiency. Yet, they reported challenges represented by limited access, insufficient training, and resisting change (63%, 58%, and 42% respectively). Regarding benefits to students, teachers stressed that AI would enhance students' motivation (67%), promote active participation (63%), and improve language skills (57%). They end up with calls for providing more technical and practical training for EFL teachers about the use and integration of AI in schools. The statistical analysis showed 21%

students' performance improvement and 20% increase of engagement in the AI post-intervention period. What needs to be noted about this study is that it uses purposeful sampling with the intention of recruiting all those who are already using AI in their teaching. This means that despite the richer exploration of the participants, it does not provide more realistic view about teachers AI use in the English classes in public schools. Moreover, the number of the participants and their age range is not mentioned which can affect our interpretation of their attitudes about the use of AI as well as the kind of AI apps and approaches they use or have used.

Like Abed, Al-Tamimi, Ghanim and Nashmi (2025), Dilzhan, (2024) also used qualitative design to explore eleven female teachers' attitudes toward the use of AI and ChatGPT in teaching English in Kazakhstan. The most notable findings in Dilzhan's study are: limited ChatGPT familiarity, the efficiency of using ChatGPT in language teaching, as well as the effectiveness of using ChatGPT especially in improving students' writing proficiency and providing feedback. Yet, using purposeful sampling where only participants with experience with using ChatGPT in teaching were recruited makes more nuanced understanding very restricted. That leads to the following question: How about those teachers who do not use ChatGPT in their teaching? Those teachers might have positive attitudes and attract attention to possible gaps that can help to guide more meaningful integration of AI tools and sources. They could refrain from using AI due to different institutional, social, cultural, and technological reasons.

Using Unified Theory of Acceptance and Use of Technology (UTAUT), Cennetkusu (2026) explored 187 EFL Turkish teachers' attitudes about AI use and integration in their teaching. The findings of this study

> suggest that teachers' acceptance of AI is shaped by multiple interrelated factors rather than by isolated demographic characteristics. The convergence of high willingness, favorable attitudes, and positive expectations—together with moderately positive experiential engagement—indicates that EFL teachers evaluate AI through a holistic lens that integrates perceived

usefulness, ease of use, contextual support, and professional relevance. (Cennetkusu, 2026, p.10)

In light of Unified Theory of Acceptance and Use of Technology, it is important to note that the integration and readiness to use AI is situated in multilayered perspectives. According to this theory, AI "acceptance is shaped by beliefs about usefulness and contextual readiness, even when facilitating conditions are still developing" (Cennetkusu, 2026, p.8). This resonates, to some extent, with Davis's (1989) Technology Acceptance Model (TAM) which stresses two key factors in using AI, namely; "perceived usefulness and perceived ease of use" (p. 319).

Surveying the literature, which is ongoing expanding, shows that different factors impact teachers' attitudes toward the use and integration of (Gen)AI in ESL/EFL teaching and learning. These factors include digital and AI competence, acceptance of AI, perception about the role of AI in enhancing students' motivations and engagement, and the assistance in tailoring and design personalized spaces for ESL/EFL students. Yet, teachers also show concerns about overreliance on technology, encouraging passive learners, issues of academic integrity, and uncertainty of deep learning, students' creativity, and critical thinking skills. In the next section, students' perspectives will be explored.

4.2. EFL Students' Attitudes about the Use and Integration of AI in EFL teaching and learning

In their study of attitudes of AI tools use, Bouzayenne and Harizi (2025) explored the attitudes of 70 secondary school Tunisian pupils. Their study showed that the number of AI users has exceeded non-users revealing a tendency towards capitalizing on AI affordances. The pupils responses revealed correlation between the cognitive (strong understanding of AI learning benefits), behavioral (increased practice, and participation in activities), and emotional (enthusiasm, confidence, and motivation) levels. In a different context, Guo, Zhong, and Chu (2023) study the effect of using novel AI-supported tasks through AI chatbots regarding the teaching of argumentation in writing. They found that students' motivation noticeably increased as they engaged with this novel design.

In their study of the impact of the use ChatGPT on EFL students' motivation in their EFL learning, Munoz, et al. (2023) found that students' use of ChatGPT increased their motivation and interest in learning English. Their study included 350 participants (87 English teachers and 263 students). Both intrinsic and extrinsic motivation were shown to have increased as students engaged in online learning. Yet, It needs to be noted that those students were selected based on their engagement with ChatGPT. Moreover, extrinsic motivation was related to supportive environment (within family and in the teaching context). The survey of students' perspectives regarding the use of GenAI in this section shows more engagement with AI-assisted tools. This can be related to the age variable as students surveyed are GenAI generation. These results would encourage the use of integration of AI tools in the ESL/EFL teaching and learning contexts. In this respect, it is significant to expand the discussion of the use of GenAI in light of language learning theories including the sociocultural theory, the theory of multimodality, and micro-learning. Henceforth, the next sections will shed light these theories in connection to GenAI and ESL/EFL teaching and learning.

4.3. AI and the Sociocultural Theory and the Construct of Scaffolding

According to sociocultural theory, learning takes place when interaction is guided between students (as less skilled participants) and teachers (as more expert ones). Moreover, peer interaction is also key here as peers have differently skilled and equipped with different competences. This could result in scaffolding that enhances ESL/EFL students about their language skills and there is sufficient scaffolding (Hamidi & Bagherzadeh, 2018; Hammond & Gibbons, 2001; Gonulal & Loewen, 2018). In this respect, GenAI can operate as both a personalized space for ESL/EFL students supporting teachers' efforts to create an interactive environment for ESL/EFL students where they can engage with scaffolding whether from peers, or from teachers (as more expert members of community of practice). Despite the possible reduced authenticity of GenAI-provided materials and possible unreflective utilization of GenAI tools and resources, (Burkhard, 2022, as cited in Almashrgy & Alburki, 2024, p. 31), GenAI can play a dual role in students' learning and teaching. First, it can play the role of a scaffolder as it provides students with accessible linguistic input, novice-expert interaction, synchronous engagement,

instant and delayed feedback, self-assessment, and fast access to different modalities that enhance their development and competences. Second, it can also play the role of a scaffolding environment when used by teachers to design activities, provide authentic language materials, enhance their students' participation, motivation, and engagement when providing meaningful tasks and personalized spaces. This scaffolding is associated with the sociocultural theory which depicts knowledge as socially and jointly constructed.

Moreover, it is also very important to note that language learning is not only situated in the acquisition of language skills but also in a wider process of socialization into language in the students' respective disciplines (Darwish, 2018; Varsamidou, 2024) as those students are expected to respond to social exigencies through genres (written or spoken) (Miller, 2015). In this respect, GenAI helps to smooth that socialization process by enabling teachers to provide a better understanding, authentic materials, real situated communication, and personalized learning spaces. This process can be a recursive double socialization as teachers use GenAI to scaffold students' learning and at the same time GenAI operates as a scaffolder. There is a double socialization that students react to as GenAI represents the first layer of socialization while teachers are the second layer of socialization, or vice versa. Yet, these layers are recursive and interactive. That means teachers guide the use of GenAI and provide students with personalized learning spaces and secure them access to autonomy-raising activities. That resonates with the concept of *apprenticeship* where teachers (as expert or more skilled) facilitate and guide the learning process through interacting with students (novice and less skilled) as well as through creating interaction space (Rogoff, 1990) that can be represented by GenAI-generated spaces.

Building on positive perspective towards GenAI as a valuable source in the classroom, "it is important to acknowledge that AI-powered tools cannot fully replace teachers and exert complete influence over the entirety of the educational process" (Fatalaki, et al. 2025, p. 3). It also indicates that ESL/EFL teachers can work to secure *deep learning* through the use of GenAI and assist with providing students with the opportunity of not only acquiring language related skills but also making these skills transferrable to other contexts. This is specifically significant with high level ESL/EFL

students who engage in more complex tasks such as research writing, reports preparation, analyses, etc. This takes the discussion of using GenAI in ESL/EFL context into far more nuanced areas where primary communicative language skills are already acquired.

As teachers assist their students with acquiring and developing communicative and intercultural competence, they enhance students' communicative competence through cultivating "skills (linguistic, communicative, pragmatic, lexical) and literacies (visual, digital, social, informational)" (Varsamidou, 2024, p.301). With GenAI-assisted teaching and learning, it is important to argue that teachers can more flexibly smooth the introduction of materials and personalized language input that help students to develop language communicative skills. Moreover, students can engage in more authentic language input through receiving exposure to different literacies. This exposure could both activate their natural language situations as well as make them interactive and motivated to respond to the language associated with these different literacies.

4.4. GenAI and Multimodality Theory and the Construct of Affordances

Kress's (2001) multimodality theory of learning and the construct of affordances are key in the integration of (Gen)AI as it approaches language in parallel with other semiotic ways of representation and communication. Kress, Jewitt, Ogborn and Tsatsarelis (2001) argue that communication is not language-only situated process. They argue that language is communicative and representational only when considered within a broader context containing other forms of communication, especially multimedia. These multimedia include different forms of visual and non-visual forms that are affordances to meaning-making. Their approach is based on the conception "that meaning is made in all modes separately, and at the same time, that meaning is an effect of all modes acting jointly" (Kress, Jewitt, Ogborn & Tsatsarelis, 2001, p.1). It means that language does not operate in a vacuum and that other modes of communication are key in real communication and in responding to that communication. Moreover, Jewitt and Kress (2010) also highlight multimedia (such as images, diagrams, sound, and other visual and audial forms) as not only assistive to language in communication but rather constitutive of that communication whose exclusion can raise serious problems in the very

process of human communication. Within the context of ESL/EFL teaching and learning, multimodality theory provides affordances and conceptual framework for ESL/EFL teachers to incorporate different multimedia in teaching students. These multimedia are affordances that ESL/EFL teachers can capitalize on when designing, teaching, and assessing their ESL/EFL students. Thus, GenAI tools represent very valuable affordances that need to be utilized in ESL/EFL teaching and learning.

Moreover, it is important to realize that ESL/EFL teachers' anxiety associated with insufficient (or lack of) training in GenAI tool does not validate building arguments against the integration of GenAI in ESL/EFL teaching-learning context. This anxiety has been reported in different studies (see Varsamidou, 2024). For instance, one of the participants in Kohnke and Moorhouse's (2026) study about English language pre-service teachers' response to AI multimedia-assisted learning explicitly states: " 'I learn visually, and I really enjoyed how the AI tools presented the same language concept in a video, short story, or comic strip. It provided me with various means of comprehension'" (p. 153).

Another important point to highlight is that ESL/EFL teachers need to conceive of the fact that digital and AI spaces are no longer additional ones in students' lives. Rather, most activities and real communication situations in ESL/EFL require, at least partially, some form of multimedia. Based on this argument, it is significantly relevant to depart from the conception that AI is an extra layer in human communication and language learning. Despite all potential risks, like all other forms of teaching-supportive tools, it is more plausible to try to build models and activities that benefit from GenAI and technology affordances. In this respect, Kress (2000) noticeably emphasizes: "It is time to unsettle this commonsense notion. It is now impossible to make sense of texts, even of their linguistic parts alone, without having a clear idea of what these other features might be contributing to the meaning of a text" (p. 337). Having said so, ESL/EFL teachers can build on different conceptualizations and teaching approaches when integrating GenAI in teaching ESL/EFL. One of the key approaches here is the use of GenAI-assisted microlearning. Not only can this approach increase ESL/EFL students' engagement and motivation, but also help them gain deep learning if utilized wisely. Thus, the next section will highlight this approach with some empirical support.

4.5. GenAI-assisted Micro-learning

Microlearning refers to the breakdown of language activities into shorter, smaller accessible chunks that can reduce cognitive load. It "is flexible enough to support several learning modalities and may be tailored to each student's requirements" (Ghafar, et al. 2023, p. 45). It is important to note that GenAI tools help to provide highly flexible, adaptive, and interactive microlearning activities. It fosters scaffolding and facilitates the learning process for ESL/EFL students through a series of attainable, processible, and cognitively accessible activities (Kohnke & Moorhouse, 2026). This concept of micro activity and micro-learning is explicitly adopted in some ESL/EFL teacher training programs, like Greece, to help to introduce teachers to understand and expand their knowledge and utilization of digital resources and tools in teaching ESL/EFL and increase their students' motivation and engagement (Varsamidou, 2024).

The construct of GenAI-assisted microlearning has been researched by Kohnke and Moorhouse (2026). Kohnke and Moorhouse explored the usefulness of GenAI-assisted microlearning modules (with a short period course). These modules included multimedia-supported (infographs, voice-recording, short reading, etc.) micro-activities. They found that their EFL participant pre-service teachers (14 undergraduate students majoring in English teaching in Hong Kong) had high positive perceptions on "how GenAI-supported microlearning shaped their expectations of content delivery, interactivity, and feedback mechanisms in language learning, and inform core design principles for effective implementation" (Kohnke & Moorhouse, 2026, p. 151). This microlearning approach, thus, resonates with both sociocultural scaffolding construct and Kress's (2001) multimodality in supporting language learning (discussed earlier in this paper). Moreover, the findings also reveal how microlearning activities can create affordances and smooth scaffolding that speak to the need of students and reduces cognitive load for ESL/EFL students. Yet, these GenAI-microlearning activities need to be used with caution in order to provide opportunities for deep language learning.

In respect to GenAI-assisted microlearning activities, it is important to note that with low level ESL/EFL students who are still in the process of developing pre-sophisticated language skills, these activities can boost up their engagement and motivation and provide them with language

materials and tasks in a more accessible way. They get exposed to natural language within different multimedia spaces and thus they need to respond to various language-situated contexts like an infograph, a short video, a short reading passage, and mini writing task. To help to maximize benefits of GenAI-assisted micro-learning, ESL/EFL teachers need to receive sufficient training on using such AI-assisted multimedia modules in order to enable their ESL/EFL students' capitalize on the gains and not to fall into the trap of cognitive overloading that this approach warrants against.

5. Conclusions and Recommendations

5.1 Conclusions

This paper aimed to explored (Gen)AI tools in ESL/EFL teaching and learning. It started with conceptualizing (Gen)AI and its practical definition. Next, it shed light on ESL/EFL teachers' attitudes and perceptions towards GenAI. Some of these attitudes were very positive and encouraging such as students' engagement, motivation, personalized learning spaces, reduced teachers' workload, transparency in grading/assessment, instant feedback provision, and the preparation of teaching materials. Yet, others showed concerns especially in relation to students' creativity, critical and communicative language skills, deep learning, academic integrity, lack of agency, and over-reliance on technology. ESL/EFL teachers' negative attitudes were situated in parallel with their digital and AI literacy and competence where less competent teachers revealed anxiety and refrainment from the use of AI in their classroom.

The paper, then, moved forward towards exploring empirical perspectives regarding ESL/EFL students' perception about the use of AI tools and spaces. Studies surveyed in this paper show increased motivation and engagement on the side of students. This can be related to the age variable where students are GenAI generations. This encourages and supports the integration of GenAI in the ESL/EFL teaching and learning context. After that, this paper expanded the discussion of the use of GenAI in parallel with the concept of scaffolding situated in the sociocultural theory, the concept of affordances positioned in Kress et al.'s multimodality theory as AI tools can help to create spaces for capitalizing on GenAI affordances and use AI as a scaffolding space for learning (co)construction. It highlights the use of GenAI-assisted microlearning in

ESL/EFL teaching and learning to reduce potential cognitive load. It ends with pedagogical recommendations to establish more inclusive and supportive learning environment with the use of GenAI.

5.2. (Pedagogical) Recommendations

1- ESL/EFL teachers need to receive sufficient technical training to help them to develop digital and GenAI literacy skills and competence. This can increase their acceptance to use and integrate AI tools in teaching their ESL/EFL students.
2- ESL/EFL teachers need to be guided through the design of AI-assisted micro-learning activities in their ESL/EFL teaching. Once guided efficiently, they can more easily move forward towards expanding their use of such micro-activities that increase their students' motivation and reduce potential cognitive load on the side of their students.
3- ESL/EFL teachers need to be engaged in seminars and webinars that expand the discussion concerning the use and integration of AI tools. This can encourage them to connect with other colleagues and peers in different contexts and across different countries.
4- ESL/EFL teachers need to be supported by administrators to adopt GenAI-supported tools. This can relieve any possible concerns those teachers might have in respect to working against traditional teaching approaches and orthodoxies.
5- ESL/EFL teachers need to be involved in revisiting their assessment methods as those methods might be a source for anxiety about what to assess once relying on AI-based activities and tasks. This can boost their willingness to utilize more formative and task-based assessment and grading that finally counts towards the accumulative grades of their ESL/EFL students. This point has to be situated in a wider institutional and departmental context in order to increase such forms of assessment and grade-yielding practices.
6- ESL/ EFL teachers need to be encouraged to involve their students in the design, delivery, and assessment of GenAI-based practices. This can build an inclusive learning environment and make students responsible for their learning process.

References

Abed, I. N., Al-Tamimi, R. S. A., Ghanim, K. S., & Nashmi, B. H. (2024). A qualitative study of English language teachers' perceptions on teaching English language through artificial intelligence in public education in Iraq. *International Conference on Intelligent Systems, Blockchain, and Communication Technologies* (pp. 125-136). Cham: Springer Nature Switzerland.

Al Harthy, S. R., Darwish, A. S., Yacoub, M. A. and Alnwairan, M. A. (2024). Written corrective feedback and EFL students' use of prepositions, articles, punctuation and capitalization. *International Journal of Arabic-English Studies, 24*(2), 415-436. https://doi.org/10.33806/ijaes.v24i2.526

Almashrgy, A. A. and Alburki, H. F. (2024). Teachers' perceptions on the impact of artificial intelligence on English language learning in Libyan EFL classrooms. *Malaysian Journal of Industrial Technology (MJIT), 8*(4), 28-44. https://doi.org/10.70672/157qsn23

Bouzayenne, A. and Harizi, R. (2025). Artificial intelligence tool use and learners' attitudes toward EFL learning. TESOL Communications, 4(2), 103-118. https://doi.org/10.58304/tc.20251001

Cennetkusu, N. G. (2026). EFL teachers' attitudes toward artificial intelligence in language teaching: A mixed-methods study in Türkiye. *Social Sciences & Humanities Open, 13*, 1-12. https://doi.org/10.1016/j.ssaho.2026.102580

Darwish, A. S. (2018). *Exploring academic and disciplinary literacy socialization and enactment of seven international undergraduate business students*. [Doctoral Dissertation, Indiana University of Pennsylvania, USA].

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly 13*(3): 319–340. https://doi.org/10.2307/249008

Dilzhan, B. (2024). *Teaching English and artificial intelligence: EFL teachers' perceptions and use of ChatGPT*. Master's thesis, SDU University, Kazakhstan. https://doi.org/10.35542/osf.io/fwy92

Ghafar, Z. N., Abdullkarim, S. T., Mhamad, L. M., Kareem, R. A., Rasul, P. A., & Mahmud, T. I. (2023). Microlearning as a learning tool for teaching and learning in acquiring language: Applications, advantages, and Influences on the language. *Canadian Journal of Educational and Social Studies, 3*(2), 45-62. https://doi.org/10.53103/cjess.v3i2.127

Gonulal, T. and Loewen, S. (2018). Scaffolding technique. In J. I. Liontas (Ed.), *The TESOL encyclopedia of English language teaching,* (pp. 1-5). John Wiley & Sons, Inc. https://doi.org/10.1002/9781118784235.eelt0180

Gunther Kress, G., Jewitt, C., Ogborn, J., and Tsatsarelis, C. (2001). Multimodal teaching and learning: The rhetorics of the science classroom. Continuum.

Guo, K., Zhong, Y., Li, D., & Chu, S. K. W. (2023). Effects of chatbot-assisted in-class debates on students' argumentation skills and task motivation. *Computers & Education, 203*, 1–19. https://doi.org/10.1016/j.compedu.2023.104862

Hamidi, E. and Bagherzadeh, R. (2018). The logical problem of scaffolding in second language acquisition. *Asian-Pacific Journal of Second and Foreign Language, 3*(19), 1-14. https://doi.org/10.1186/s40862-018-0059-x

Hammond, J. and Gibbons, J. (2001).What is scaffolding? In J. Hammond (Ed.), *Scaffolding: Teaching and learning in language and literacy education* (pp. 1-14). Primary English Teaching Association.

Harakchiyska, T. & Vassilev, T. (2024). Pre-service teachers' perceptions of AI and its implementation in the foreign (English) language classroom. *Strategies for Policy in Science and Education, 32*(5), 218-232. https://doi.org/10.53656/str2024-5s-22-pre

Jewitt, C., and Kress, G. (2010). Multimodality, literacy and school English. In D.

Kohnke, L. and Moorhouse, B. L. (2026). Principles of GenAI-assisted microlearning: perspectives of pre-service language teachers. *ELT Journal, 80*(1), 148-160. https://doi.org/10.1093/elt/ccaf066

Kress, G. (2000). Multimodality: Challenges to thinking about language. *TESOL quarterly, 34*(2), 337-340. https://doi.org/10.2307/3587959

Lee, S. and Song, K. (2024). Teachers' and students' perceptions of AI-generated concept explanations: Implications for integrating generative AI in computer science education. *Computers and Education: Artificial Intelligence, 7*, 1-13. https://doi.org/10.1016/j.caeai.2024.100283

Miller, C. R. (2015). Genre as social action (1984), Revisited 30 years later (2014). *Letras & Letras, 31*(3), 56-72. https://doi.org/10.14393/LL63-v31n3a2015-5

Munoz ˜ S, Gayoso G, Huambo A, Tapia R, Incaluque J, Aguila O, Cajamarca J,

Muñoz, S. A. S., Gayoso, G. G., Huambo, A. C., Tapia, R. D. C., Incaluque, J. L., Aguila, O. E. P., ... & Arias-Gonzáles, J. L. (2023). Examining the impacts of ChatGPT on student motivation and engagement. Social Space, 23(1), 1-27.

Pokrivcakova, S. (2023). Pre-service teachers' attitudes towards artificial intelligence and its integration into EFL teaching and learning. *Journal of Language and Cultural Education, 11*(3), 100-114. https://doi.org/10.2478/jolace-2023-0031

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context.* Oxford University Press.

Varsamidou, A. (2024). Integration of artificial intelligence in foreign language teaching: Exploring views and beliefs of Greek foreign language teachers. *International Journal of Language and Literary Studies, 6*(3).299-320. http://doi.org/10.36892/ijlls.v6i3

Wyse, R. Andrews, and J. Hoffman (Eds.), *The Routledge international handbook of English, language and literacy teaching* (pp. 342-352). Routledge.