Abstract

This article explores how generative artificial intelligence (GenAI) tools such as ChatGPT, DALL·E, and Adobe Firefly are reshaping writing instruction in <u>TESOL</u> through digital multimodal composing (DMC). Grounded in theories of multiliteracies and task-based pedagogy, this study examines the capabilities and limitations of GenAI in supporting the <u>language development</u>, creativity, and <u>communicative competence</u> of L2 learners. It offers practical strategies for integrating GenAI into task design, adapting instruction across proficiency levels, and assessing multimodal compositions. The article also addresses pedagogical concerns, ethical implications, and future directions for <u>teacher training</u> and <u>curriculum development</u>. Findings underscore the importance of critical engagement with GenAI tools and advocate for pedagogically guided integration in second language writing instruction.

Table of Contents

- ¢
- <u>Abstract</u>
- Introduction
- Understanding Digital Multimodal Composing in TESOL
- Generative AI Tools: Capabilities and Limitations for TESOL Classrooms
- Designing DMC Tasks with GenAI: Practical Guidelines for Educators
- Language Development Through Multimodal GenAI Projects
- Promoting Self-Expression and Creativity in L2 Learners
- <u>Assessment Strategies for GenAI-Enhanced Multimodal Writing</u>
- Challenges and Future Directions for GenAI in TESOL Writing Instruction
- <u>Conclusion</u>

Introduction

The field of TESOL (<u>Teaching English</u> to Speakers of Other Languages) is undergoing a significant transformation, driven in part by the growing availability and integration of generative artificial intelligence (GenAI) tools. These technologies, including widely known platforms such as ChatGPT for text generation and DALL·E for image creation, are introducing new possibilities for how writing is taught and practiced in the language classroom. Traditional approaches to writing instruction in TESOL have primarily focused on textual composition, grammar accuracy, genre structure, and academic coherence. While these elements remain vital, recent shifts in digital <u>communication</u> practices suggest that educators must also consider how language learners compose meaning through multiple modes—text, image, audio, and video—often simultaneously.

This broader view of composition is known as digital multimodal composing (DMC). DMC refers to the integration of various semiotic resources, such as written language, visuals, sounds, and spatial arrangements, to create meaningful and cohesive messages. In a world where <u>social media</u> posts, digital storytelling, and multimedia <u>presentations</u> are the norm, learners are increasingly expected

Transforming Writing in TESOL: Digital Multimodal Composing with GenAI Tools

to communicate in ways that go beyond traditional alphabetic writing. This poses both a challenge and an opportunity for English language educators. On one hand, learners must acquire new literacy skills to navigate complex digital environments. On the other hand, teachers can use DMC to design engaging tasks that foster language development, creativity, and personal expression.

GenAI tools have made the multimodal composing process more accessible than ever before. For example, learners can use ChatGPT to co-construct narratives or refine academic texts, while DALL·E enables them to generate custom images that enhance storytelling or presentations. When used thoughtfully, these tools can scaffold learners' use of English and encourage experimentation with language in context. However, the integration of GenAI also raises important pedagogical questions. How can TESOL educators ensure that these tools are used ethically and effectively? What kinds of tasks support the development of both linguistic competence and multimodal communication skills? How can teachers assess students' work when it blends human and AI-generated content?

This article explores these questions in depth by examining the transformative impact of GenAI on writing instruction in TESOL through the lens of DMC. It begins by defining digital multimodal composing and its theoretical roots in multiliteracies. It then provides an overview of key GenAI tools and discusses their capabilities and limitations for classroom use. Practical guidelines are offered for designing multimodal writing tasks using AI, followed by an analysis of how such tasks contribute to <u>language learning</u> and self-expression. The article also addresses strategies for assessment and considers broader challenges in implementing GenAI-supported DMC. Through this discussion, the article aims to provide TESOL educators with a clear, research-informed roadmap for leveraging GenAI in ways that enhance both language instruction and <u>learner engagement</u>.

Understanding Digital Multimodal Composing in TESOL

Defining digital multimodal composing

Digital multimodal composing (DMC) refers to the process of constructing meaning using a combination of textual, visual, auditory, and spatial modes, typically mediated through <u>digital tools</u>. Unlike traditional writing tasks that rely solely on alphabetic text, DMC allows learners to integrate images, sounds, animations, video, and design elements into their work. This approach reflects the types of communication increasingly prevalent in the modern digital landscape, such as blog posts, digital stories, social media entries, and multimedia presentations, where language interacts with other semiotic resources to convey meaning.

In TESOL contexts, DMC is more than just a digital extension of writing. It is a pedagogical shift that redefines what it means to compose and communicate in a second language. Learners engaged in DMC are not only practicing grammar and vocabulary; they are also making rhetorical and creative decisions about how to organize, visualize, and support their messages. According to Yi (2014), DMC allows language learners to leverage their multiple literacies, cultural resources, and communicative competencies in creating personally meaningful texts that extend beyond traditional classroom writing.

DMC empowers learners to communicate using multiple semiotic modes meaningfully.

Theoretical foundations: multiliteracies and new literacies

The foundation of DMC lies in the theory of multiliteracies, first articulated by the New London Group (1996), which emphasizes the need for pedagogy to reflect the multiple modes of communication present in a globally networked society. The concept of multiliteracies expands the traditional notion of literacy to include various ways of making meaning, especially in digitally mediated environments. These literacies are not confined to reading and writing in print but also encompass visual, auditory, gestural, and spatial modalities that contribute to meaning-making processes.

Multiliteracies theory also introduces the idea of design in communication, which refers to how individuals actively shape and reshape meaning using semiotic resources. In language learning, this means that students do not merely consume language; they are designers of communication, making choices about how to combine language with other elements to convey intent and effect (Cope & Kalantzis, 2009). This approach aligns well with <u>communicative language teaching</u> and learner-centered pedagogy, as it empowers learners to participate in authentic and purposeful acts of meaning-making.

Closely related to multiliteracies is the concept of new literacies, which describes the dynamic, socially situated, and technology-driven nature of reading and writing practices today (Lankshear & Knobel, 2011). New literacies are often collaborative, iterative, and shaped by digital environments. For second language learners, engaging with new literacies through DMC offers an opportunity to develop not only linguistic competence but also critical digital skills required for academic, professional, and social contexts.

Pedagogical significance for L2 learning

The pedagogical value of DMC in TESOL lies in its potential to foster more engaging, relevant, and cognitively demanding language learning experiences. Multimodal projects often require students to move beyond surface-level language use and instead engage in sustained, purposeful communication. For example, a student creating a digital story must draft a narrative (textual mode), design accompanying visuals (visual mode), and possibly record voice-overs or add sound effects (auditory mode). This process demands planning, revising, and reflection—key components of effective language learning.

In addition, DMC supports a more personalized approach to instruction. Learners can draw on their own experiences and perspectives, crafting texts that are meaningful and resonant. Such personalization contributes to learner motivation, as students often find multimodal tasks more enjoyable and less intimidating than traditional writing assignments (Hafner, Chik, & Jones, 2015). The multimodal format can also reduce linguistic pressure, as meaning is distributed across multiple modes rather than being reliant solely on written accuracy.

Another pedagogical benefit of DMC is that it promotes the development of metalinguistic and metacognitive skills. As learners design multimodal texts, they must consider audience, purpose, coherence, and the interplay of language and other modes. These skills are essential for advanced proficiency and are transferable across academic and professional domains. Moreover, by discussing and evaluating multimodal compositions in collaborative settings, learners gain exposure to peer feedback and multiple perspectives, further supporting their language development.

It is also important to consider the role of scaffolding in DMC. While multimodal tasks can be motivating, they can also be complex, particularly for learners with limited digital experience or lower <u>language proficiency</u>. Teachers need to provide appropriate support through modeling, guided practice, and clearly structured tasks. Research suggests that when DMC is scaffolded effectively, it can serve as a rich site for language input, output, and interaction (Dalton & Grisham, 2013).

In summary, digital multimodal composing represents a significant shift in how writing is conceptualized and taught in TESOL. Rooted in the theoretical frameworks of multiliteracies and new literacies, DMC challenges traditional views of writing and opens up new avenues for meaningful language learning. It allows learners to engage with English in ways that reflect real-world communication practices, supports creativity and personal expression, and fosters the development of both linguistic and digital competencies.

Generative AI Tools: Capabilities and Limitations for TESOL Classrooms

Overview of GenAI tools: ChatGPT, DALL·E, Adobe Firefly, and others

Generative artificial intelligence (GenAI) tools are emerging as transformative assets in educational environments, particularly within TESOL classrooms. These tools can generate human-like text, create realistic images, synthesize speech, and even compose music or video, depending on their

design. Among the most notable GenAI tools currently influencing <u>language education</u> are ChatGPT, DALL·E, and Adobe Firefly.

ChatGPT, developed by OpenAI, is a large language model that generates written text based on prompts. It is capable of composing essays, summarizing content, answering questions, translating languages, and engaging in dialogue on a range of topics. This tool can support second language (L2) learners by modeling writing structures, providing vocabulary suggestions, and offering corrective feedback in a low-pressure environment (Zou et al., 2023).

DALL·E, also developed by OpenAI, is an image-generation tool that converts written descriptions into visual outputs. For example, an L2 learner can input a sentence such as "a market in a small coastal town at sunset" and receive a corresponding visual representation. This capability allows students to pair their writing with personalized imagery, enhancing digital storytelling and visual literacy (Marquez & Cabrera, 2023).

Adobe Firefly is another multimodal GenAI tool that allows users to generate, edit, and remix images based on natural language prompts. With its design-oriented interface, it is particularly well suited for projects that require visual elements for communication and meaning-making, such as infographics or poster presentations.

Other notable GenAI platforms include Microsoft Copilot, Google Gemini, and Synthesia. These offer integrations for slide creation, speech synthesis, and video content generation. Their collaborative nature allows L2 learners to interact with AI in real time, improving writing fluency, oral performance, and multimodal <u>comprehension</u>.

GenAl supports multimodal writing but requires guided, ethical classroom integration.

How GenAI facilitates multimodal composition

GenAI tools significantly lower the barriers to multimodal composing by automating or assisting in the creation of various content types. Traditionally, multimodal projects in TESOL have required a degree of technical proficiency that can be daunting for both learners and teachers. With GenAI, learners can produce quality text, visuals, and audio with minimal experience in digital media production.

In writing tasks, ChatGPT can function as a brainstorming partner or a scaffold for L2 learners. For example, it can help a student develop a narrative structure for a personal story or offer grammar corrections during the revision stage. This not only boosts learner confidence but also encourages iterative writing processes that contribute to improved accuracy and coherence (Berglund et al., 2023).

In combination with image generators like DALL·E or Adobe Firefly, students can create illustrated stories or thematic collages to accompany their writing. These images help convey meaning beyond the linguistic mode, allowing for richer communication and deeper engagement with content. Learners can also use text-to-speech tools to narrate their stories or record podcasts, adding auditory elements to their compositions and practicing <u>pronunciation</u> and fluency in context.

When used collaboratively, GenAI also facilitates peer interaction and negotiation of meaning. Learners can co-construct texts by refining AI-generated drafts, evaluating image choices, or scripting video segments. These interactions support both <u>language acquisition</u> and <u>critical thinking</u> as students must make deliberate decisions about content accuracy, tone, and audience.

Moreover, GenAI tools can adapt to different proficiency levels, offering beginner learners sentence starters and vocabulary prompts while providing advanced learners with stylistic suggestions or discourse markers. This adaptability makes GenAI tools valuable assets for <u>differentiated instruction</u> in mixed-ability TESOL classrooms (Lee, 2023).

Pedagogical affordances and concerns

Despite their many benefits, the integration of GenAI tools into TESOL classrooms requires careful pedagogical consideration. Among the key affordances are improved accessibility, increased <u>learner</u> <u>autonomy</u>, and enhanced creativity. GenAI tools allow learners to experiment with language in real time and receive immediate feedback, making them useful for <u>self-directed learning</u> and language exploration (Hockly, 2023). They also support <u>task-based learning</u> by enabling students to generate artifacts—stories, posters, podcasts—that are authentic, purposeful, and communicative.

Another important affordance is motivational. The novelty of interacting with intelligent systems and the ease of producing high-quality content often increases learners' interest and willingness to participate in writing tasks. Additionally, by allowing learners to visualize their writing or hear it spoken aloud, GenAI tools help close the gap between abstract language learning and concrete communication goals.

However, several pedagogical concerns must be addressed. First, the quality and accuracy of GenAI output can vary significantly. Language generated by tools like ChatGPT may contain subtle

grammatical errors, factual inaccuracies, or stylistic inconsistencies that require teacher intervention (Kasneci et al., 2023). It is important for educators to help learners critically evaluate AI-generated content rather than accept it uncritically.

Second, the ethical use of GenAI must be discussed openly in classrooms. Learners need to understand issues such as authorship, plagiarism, and transparency. If a learner uses ChatGPT to generate a paragraph, to what extent can that text be claimed as their own? Teachers must set clear guidelines about what constitutes appropriate use and emphasize the importance of original thinking and respectful engagement with AI-generated materials (Lo, 2024).

Third, there is a risk of overreliance on AI tools. When learners consistently defer to GenAI for vocabulary selection, sentence structure, or idea generation, they may become less confident in their own linguistic abilities. Educators should encourage balanced use, positioning GenAI as a support rather than a substitute for authentic learning processes.

Finally, technical access and training must be considered. Not all TESOL classrooms are equipped with reliable internet connections or up-to-date devices. Moreover, educators themselves may feel uncertain about how to use these tools effectively. Professional development in digital literacies and GenAI-specific applications is essential for sustainable and meaningful integration into pedagogy.

In conclusion, GenAI tools such as ChatGPT, DALL·E, and Adobe Firefly offer powerful opportunities for enhancing digital multimodal composing in TESOL classrooms. They provide learners with tools for written, visual, and auditory expression, support a range of proficiency levels, and foster creativity and engagement. However, their use must be guided by thoughtful pedagogical practices, critical evaluation, and ethical awareness. By embracing both the capabilities and limitations of GenAI, educators can support more dynamic and effective language learning experiences.

Designing DMC Tasks with GenAI: Practical Guidelines for Educators

Key principles for task design

Effective task design is central to integrating digital multimodal composing (DMC) with generative AI (GenAI) tools in second language (L2) classrooms. DMC tasks that involve GenAI must be grounded in sound pedagogical principles to support learners in meaningful language use, rather than simply showcasing technology. Tasks should be communicative, purpose-driven, and provide opportunities for both input and output. They should encourage students to engage in decision-making, reflection, and creativity while using English as the medium for composition and interaction.

One of the key frameworks that aligns well with DMC is <u>task-based language teaching</u> (TBLT), which emphasizes real-world, goal-oriented tasks that prompt learners to use language to achieve specific outcomes (Ellis, 2018). When designing DMC tasks with GenAI, educators should ensure that the tasks are authentic, cognitively challenging, and allow for learner autonomy. For example, rather than instructing students to simply describe an image generated by DALL·E, a more effective task might involve writing a short story based on an AI-generated image, sharing it with peers, and

Transforming Writing in TESOL: Digital Multimodal Composing with GenAI Tools

revising it based on peer and AI feedback. $% \label{eq:constraint}$

Additionally, it is important to provide learners with a clear sense of audience and purpose. DMC projects that are designed for real or simulated audiences, such as classroom blogs, school exhibitions, or online portfolios, tend to be more engaging and meaningful to learners (Hafner, 2015). Teachers should guide students in considering how their choices in language, image, layout, and sound contribute to <u>effective communication</u> with their intended readers or viewers.

Tasks should also include stages for planning, drafting, revising, and reflecting. GenAI tools can support each of these stages by offering scaffolds, generating ideas, providing language models, and enabling learners to visualize or rehearse their compositions before finalizing them. However, learners must remain active decision-makers throughout the process, using AI as a support rather than a substitute for their own thinking and language use.

Effective DMC tasks align GenAl use with learnercentered instructional goals.

Integrating GenAI into writing instruction

To effectively integrate GenAI into writing instruction, educators must align tools with instructional goals and ensure that their use complements rather than replaces pedagogical intent. One useful strategy is to incorporate GenAI during the pre-writing and drafting phases. For instance, learners can use ChatGPT to generate brainstorming lists, explore vocabulary related to a theme, or model the structure of a particular genre. These outputs can serve as starting points that learners adapt and refine.

Story scaffolding is one area where ChatGPT can be particularly valuable. For example, a teacher might prompt students to create a narrative based on a genre or theme, such as a travel adventure or a mystery. Students can input a brief description into ChatGPT, which then generates a plot

outline or sample dialogue. The students can then analyze the output, discuss alternatives, and revise the content to better suit their linguistic goals or personal ideas. This iterative process supports both language development and critical thinking (El-Dakhs, 2023).

Visual narratives can also be enhanced through the integration of image generators like DALL \cdot E or Adobe Firefly. Learners can write descriptive passages or scripts and then input those texts into an image generator to visualize their ideas. This process can be reversed as well: starting with an AI-generated image, students write a backstory, dialogue, or reflection, building their language output from a visual stimulus. This form of visual-textual integration promotes multimodal awareness and encourages learners to consider how language and imagery interact to convey meaning (Kukulska-Hulme & Lee, 2020).

For speaking and pronunciation-focused writing tasks, learners can use AI-generated text as scripts for digital storytelling, podcasts, or voice-over presentations. Tools such as NaturalReader or Microsoft Azure's text-to-speech features allow students to hear synthesized versions of their scripts, which they can then compare to their own recordings for <u>pronunciation practice</u>. These multimodal extensions reinforce the connection between written and spoken language, an essential component of L2 proficiency.

Adapting tasks for different proficiency levels

One of the advantages of using GenAI in writing instruction is its adaptability across different proficiency levels. Tasks can be designed or modified to align with learners' linguistic readiness, <u>cognitive development</u>, and learning goals, particularly when mapped to frameworks such as the Common European Framework of Reference for Languages (<u>CEFR</u>).

At A1–A2 levels, learners benefit from highly scaffolded tasks that emphasize basic vocabulary, sentence structures, and clear visual support. Teachers might provide sentence frames or key expressions that students input into ChatGPT to generate simple texts. For example, a beginner-level learner could use ChatGPT to complete a personal profile or describe a favorite place, then pair the output with an image generated by DALL·E. Such tasks focus on language form and content comprehension, with the AI output serving as a model for practice and imitation (Lee, 2023).

At B1–B2 levels, learners can take more control over content development. They might use GenAI to expand their drafts, request synonym suggestions, or refine transitions in essays and stories. Tasks at this level can involve collaborative editing of AI-generated drafts, critical evaluation of appropriateness, and integration of multiple modes (e.g., combining narrative text with timelines, visuals, or soundtracks).

Advanced learners (C1–C2) can engage in critical engagement with GenAI tools. They might critique AI-generated content for stylistic or rhetorical quality, use GenAI to explore nuances of tone and register, or design multimodal advocacy campaigns that require persuasive writing, audience awareness, and multimedia design. At this level, the focus shifts from linguistic support to rhetorical and compositional sophistication.

Importantly, all tasks should include metacognitive components that prompt learners to reflect on the process and purpose of their writing. Questions such as "Why did you choose this image?" or

"How does the AI-generated suggestion change your tone?" can guide learners to think critically about their choices and foster greater linguistic and rhetorical awareness.

Designing effective DMC tasks with GenAI requires thoughtful planning and a clear understanding of both pedagogical goals and technological affordances. By grounding tasks in communicative and task-based principles, integrating GenAI in purposeful ways, and adapting tasks to different proficiency levels, educators can create learning experiences that support L2 learners' development in writing and beyond. GenAI should not replace the creative and intellectual work of learners but should instead serve as a tool that empowers them to engage with language, media, and ideas in new and meaningful ways.

Language Development Through Multimodal GenAI Projects

Language input and output in multimodal contexts

Multimodal projects that incorporate generative AI (GenAI) tools create authentic contexts for both language input and output, essential components of <u>second language acquisition</u> (SLA). Unlike traditional writing exercises that rely predominantly on textual composition, GenAI-supported multimodal tasks require learners to engage with various forms of input—text, images, audio—and to produce language in multiple formats. This interplay enhances language processing, particularly when learners must interpret, synthesize, and respond to different types of media.

GenAI tools such as ChatGPT can function as sources of comprehensible input, presenting texts that learners can analyze, adapt, and revise. For instance, students might prompt the AI to generate a sample email, narrative, or argumentative paragraph. By evaluating the AI-generated output, learners are exposed to vocabulary, grammar, and discourse structures that can then inform their own compositions. This aligns with Krashen's (1985) Input Hypothesis, which emphasizes the importance of exposure to slightly challenging language (i+1) in fostering acquisition.

At the same time, these projects offer opportunities for meaningful output. Learners respond to prompts, co-create stories, describe images, or script voiceovers—tasks that engage them in productive language use. According to Swain's (2005) Output Hypothesis, language production plays a critical role in helping learners notice gaps in their knowledge, test hypotheses, and refine linguistic forms. When learners must revise their texts or explain design choices in multimodal presentations, they are engaging in the kind of reflective output that strengthens linguistic competence.

The iterative nature of DMC with GenAI—composing, reviewing, and refining multimodal content—mirrors process-oriented writing approaches. Learners generate ideas, receive feedback (from peers, teachers, or AI), and make revisions. This cycle promotes deeper engagement with language forms and functions, particularly when learners compare their own output to AI-generated alternatives or collaboratively negotiate meaning during group work (Li & Hafner, 2022).

Multimodal GenAl projects enhance vocabulary, grammar, motivation, and language awareness.

Vocabulary acquisition and grammar awareness

<u>Vocabulary development</u> and grammatical accuracy are central goals in TESOL instruction, and GenAI-supported multimodal projects offer rich opportunities for growth in both areas. In creating digital compositions, learners often encounter unfamiliar words and structures, prompting them to explore and incorporate new language into their work. AI-generated texts can serve as lexical resources, offering synonyms, collocations, and sentence variations that expand students' productive vocabulary range.

For example, learners working on a digital travel brochure might use ChatGPT to explore ways to describe landscapes, cultural events, or historical sites. Through trial and error, they can test vocabulary choices, modify sentence patterns, and learn context-appropriate usage. Because learners are composing for communicative purposes—persuading, informing, narrating—they are more likely to remember and reuse vocabulary items meaningfully. Research supports the idea that vocabulary learned in context, especially through tasks with a creative or personal focus, is more likely to be retained (Webb & Nation, 2017).

Grammar awareness is also enhanced when learners interact with GenAI outputs critically. Rather than passively accepting AI-generated content, students are encouraged to evaluate and refine grammar and syntax. For example, they may spot subject-verb agreement issues or tense inconsistencies in AI suggestions and adjust them accordingly. This process promotes metalinguistic reflection, an important contributor to interlanguage development (Larsen-Freeman, 2015).

Moreover, multimodal tasks demand attention to coherence and cohesion across different semiotic modes. Learners must ensure that text, images, and audio are logically aligned and that transitions between elements are smooth and comprehensible. This encourages a broader awareness of

discourse-level features, such as paragraph structure, referential expressions, and logical connectors, that are often overlooked in isolated grammar exercises.

Enhancing motivation and learner autonomy

In addition to <u>cognitive benefits</u>, GenAI-supported multimodal projects foster affective gains, such as increased motivation, engagement, and learner autonomy. Many learners find multimodal composing tasks to be more enjoyable and less stressful than traditional academic writing. The ability to incorporate visuals, sound, and interactivity allows learners to express themselves in ways that reflect their interests and strengths, which in turn enhances task involvement and persistence.

The motivational benefits of using GenAI tools are well-documented. According to Zhou, Chen, and Wang (2023), learners who used ChatGPT and image generators in writing tasks reported higher levels of interest and confidence, citing the immediate feedback and creative possibilities as key motivators. These tools reduce anxiety by providing a non-judgmental space where learners can experiment with language without fear of public error.

GenAI tools also support learner autonomy by enabling students to take greater control over their writing processes. For instance, learners can use AI to generate initial drafts, ask for vocabulary explanations, or model sentence variations—actions that promote <u>independent learning</u> strategies. When learners can initiate tasks, make content choices, and reflect on their progress, they are more likely to develop a sense of ownership over their language development (Little, 2007).

Importantly, the use of GenAI does not mean that learners are left to work alone. On the contrary, when used in collaborative projects, GenAI can stimulate peer interaction and shared decision-making. Learners might compare their AI-generated drafts, debate which images best represent their ideas, or co-create podcasts. These collaborative processes enhance not only linguistic output but also interpersonal communication and teamwork skills (Chen & Hockly, 2023).

Nonetheless, educators must scaffold autonomy carefully. Learners should be guided in how to use GenAI responsibly, such as evaluating accuracy, recognizing bias, and revising content thoughtfully. Reflection prompts, revision checklists, and guided feedback sessions can help ensure that learners remain critically engaged with both the language and the tools.

GenAI-supported multimodal projects offer valuable opportunities for language development across multiple dimensions. By engaging learners in cycles of input and output, these tasks promote vocabulary growth, grammar awareness, and communicative competence. The creative and interactive nature of multimodal composing also boosts learner motivation and supports greater autonomy. To fully realize these benefits, educators must design tasks that balance creativity with linguistic focus and offer sufficient support for responsible tool use. When thoughtfully implemented, GenAI-enabled DMC can be a powerful vehicle for meaningful, enjoyable, and effective L2 learning.

Promoting Self-Expression and Creativity in L2 Learners

Voice, identity, and agency in GenAI-supported composing

Digital multimodal composing (DMC) supported by generative AI (GenAI) provides L2 learners with expanded opportunities to express themselves in ways that extend beyond traditional text-based tasks. By engaging with visual, auditory, and spatial modes, learners are better able to construct narratives that reflect their interests, perspectives, and life experiences. This shift not only enhances engagement but also enables learners to assert voice and agency in their second language (L2), positioning them as active meaning-makers rather than passive language recipients.

In traditional academic writing, L2 learners may struggle to convey nuanced opinions or personal experiences due to linguistic limitations. However, GenAI tools such as ChatGPT and DALL·E allow learners to scaffold their ideas and access multimodal representations that support meaning-making. For instance, a learner creating a personal story can use ChatGPT to generate a narrative outline, refine the text with iterative prompts, and then pair it with custom-generated imagery from DALL·E. These tools support the construction of a coherent and expressive digital product, even when learners are working with limited language resources.

Such composing experiences help learners develop a sense of authorship and ownership. According to Canagarajah (2015), voice in academic and creative writing emerges when writers can integrate personal experiences and cultural references into their work. GenAI tools can serve as catalysts for this process by allowing learners to articulate complex ideas with AI assistance and then revise or reshape them according to their intentions. The presence of multiple modes also reduces pressure on linguistic output, enabling learners to express meaning through design, imagery, and sound, thereby expanding their communicative repertoire.

Furthermore, these multimodal projects contribute to learner agency by offering choices in topic, medium, and format. When learners decide what story to tell, how to tell it, and what tools to use in its creation, they are empowered to make pedagogically meaningful decisions. Such decision-making promotes cognitive engagement and fosters greater investment in the writing process (Hafner & Ho, 2020).

Learners express identity and voice through guided, creative GenAl composition.

Encouraging originality and respectful use of AI-generated content

As learners engage with GenAI tools, it is essential to encourage originality and respectful authorship practices. One potential concern is the overreliance on AI-generated content, which may limit learners' personal input or result in generic outputs that lack individuality. To counter this, educators should design tasks that prompt learners to critically modify and expand AI outputs rather than accept them uncritically.

For example, if ChatGPT provides a paragraph describing a city, students can be asked to revise the content by inserting personal experiences, adjusting the tone, or adding cultural references. Similarly, when using visual generators like Adobe Firefly, learners should be encouraged to create images based on their own ideas or descriptions, ensuring that the visual content aligns with their message. This practice reinforces creativity and personalization while maintaining a focus on language development.

Teachers should also promote a culture of reflection and critique. Class discussions or written reflections on how AI tools supported the creative process can help learners distinguish between what was generated by AI and what they contributed themselves. Such metacognitive tasks help develop learners' awareness of authorship and originality, encouraging them to take pride in their contributions while recognizing the role of AI as a tool, not a substitute.

Moreover, learners must be taught to use AI-generated content in a way that respects intellectual integrity. This includes acknowledging when AI has been used and understanding when it is appropriate to incorporate external content. Similar to citing sources in academic writing, learners should be guided to disclose the use of AI assistance, particularly when it significantly influences the final product. By embedding these practices into the instructional process, educators can model

responsible and respectful use of GenAI tools (Lo, 2024).

Ethical guidance in creative writing

Ethical considerations in GenAI-supported composing are vital, particularly when learners engage with sensitive themes, public audiences, or representations of people and places. Teachers have a responsibility to provide clear guidance on ethical boundaries, including how to generate appropriate content, evaluate AI outputs, and avoid offensive or misleading material.

For instance, when learners use image generators like DALL·E to create representations of people, they must be aware that AI tools can produce biased or inaccurate imagery based on problematic training data. Educators should facilitate critical conversations about how images and narratives are constructed and how visual content can shape interpretation and meaning. These discussions not only promote media literacy but also help students become more discerning in their use of technology.

Plagiarism is another ethical issue that must be addressed. Some learners may assume that AIgenerated text is "free" content that can be used without attribution or revision. Teachers should clarify that while AI can provide support, learners are responsible for ensuring that their final work reflects their own ideas and effort. Assignments can include stages that require students to document their creative choices, explain how AI was used, and reflect on their editing process (Zou et al., 2023).

Privacy and consent are also important topics, especially when learners publish their work online or collaborate through digital platforms. Instructors should help learners consider who will view their work, what information is being shared, and how to protect their digital identities. These conversations align with broader goals of ethical digital citizenship and can be integrated into language lessons through <u>role plays</u>, debates, or reflective writing.

Finally, ethical writing instruction must promote respect for differing viewpoints and communication norms. When learners compose narratives or opinion pieces, especially with GenAI support, they may encounter content that does not align with their values or cultural norms. Teachers should encourage respectful dialogue and emphasize the importance of adapting language for different audiences and contexts. This kind of ethical awareness not only supports responsible AI use but also strengthens interpersonal communication and global awareness.

Digital multimodal composing with GenAI provides powerful avenues for self-expression, creativity, and personal engagement in L2 learning. By combining text, visuals, and sound, learners can share their perspectives in ways that reflect their experiences and interests, even when their language proficiency is developing. To fully support these outcomes, educators must foster originality, guide respectful use of AI-generated content, and address the ethical dimensions of creative writing. Through thoughtful task design and critical reflection, TESOL classrooms can harness the creative potential of GenAI while promoting responsible language use and meaningful learner voice.

Assessment Strategies for GenAI-Enhanced Multimodal Writing

Challenges in evaluating multimodal texts

Assessing multimodal compositions created with the support of generative AI (GenAI) presents new complexities for TESOL educators. Unlike traditional essays or written reports, digital multimodal composing (DMC) products blend textual, visual, auditory, and interactive elements. This integration of modes raises important questions about how to evaluate not only language proficiency but also the effectiveness of multimodal communication, the use of AI tools, and the learner's original contribution.

One significant challenge is determining authorship and originality. When learners rely on tools such as ChatGPT for content generation or use DALL·E for visuals, it can be difficult to distinguish what was created by the student and what was produced by the AI. As a result, evaluators must assess not only the final product but also the learner's decision-making process, including how they selected, adapted, or modified AI-generated content (Lo, 2024).

Attribution is also a concern. Learners may not always understand when or how to acknowledge the use of AI tools. Unlike traditional citations of textual sources, referencing AI-generated content requires new conventions that are still emerging in educational settings. Teachers must explicitly teach learners to identify and explain their use of GenAI tools within their projects. Failure to do so could result in academic dishonesty or unfair grading.

Moreover, the subjective nature of multimodal work complicates evaluation. In traditional language assessments, criteria such as grammatical accuracy and cohesion are relatively straightforward to apply. In multimodal projects, however, teachers must consider how well different modes work together to convey meaning. This includes evaluating layout, visual design, audio clarity, and the appropriateness of digital elements in relation to the overall communicative goal (Hafner, 2015).

Assessing GenAl writing demands multimodal rubrics and formative reflection practices.

Rubrics and evaluation frameworks

To address these challenges, educators can use flexible and transparent rubrics tailored specifically to multimodal GenAI-enhanced writing tasks. Such rubrics should include criteria for both languagerelated and multimodal elements, as well as learner engagement with the GenAI tools themselves. An effective rubric might include categories such as language use, content development, multimodal coherence, creativity, and ethical use of AI-generated material.

For example, the "language use" criterion can assess grammar, vocabulary, and sentence structure, while "content development" focuses on organization, relevance, and clarity of ideas. "Multimodal coherence" would evaluate how well text, images, audio, or video elements complement each other and contribute to the message. "Creativity" can address originality and thoughtful integration of GenAI support, and "AI use and attribution" ensures that students are using tools responsibly and transparently (Hubbard & Romeo, 2020).

Performance descriptors should also be included for each level of achievement. Rather than using binary scales such as correct/incorrect, rubrics for DMC should reflect gradations in quality and complexity. For instance, a high-performing composition may demonstrate strong integration of modes and well-edited language, while a mid-range performance might show solid ideas with limited multimodal cohesion or minor language issues.

Teachers may also consider using analytic rubrics, which allow for the separate scoring of each component, providing learners with detailed feedback. Analytic rubrics are particularly helpful when learners need to improve in specific areas, such as visual design or grammatical accuracy, and when teachers need to track learner progress over time.

Transforming Writing in TESOL: Digital Multimodal Composing with GenAI Tools Importantly, rubrics should be shared with students before they begin their projects. When learners are aware of the assessment criteria in advance, they can better plan their work and make more

Fostering formative feedback and learner reflection

informed choices throughout the composing process (Reyna, 2021).

While summative assessment provides a final evaluation of student performance, formative feedback plays a crucial role in supporting learning during the composing process. GenAI-enhanced DMC tasks are particularly well suited for formative approaches because they involve multiple stages of drafting, revising, and refining. Teachers can intervene at various points to offer constructive guidance that helps learners improve both their language and multimodal choices.

Formative feedback should focus on encouraging learner autonomy and awareness. For example, teachers might pose reflective questions such as: "How does your choice of image support your main idea?" or "What changes did you make to the AI-generated text, and why?" These prompts guide learners to think critically about their composing decisions and develop greater control over their language and content (Lee & Lim, 2023).

Peer feedback can also be highly effective in multimodal writing tasks. Structured peer review sessions allow learners to exchange perspectives, suggest improvements, and learn from each other's strategies. Teachers can scaffold these sessions with checklists or guiding guestions to ensure feedback is focused and respectful.

In addition to teacher and peer feedback, self-reflection should be built into the assessment process. Learners can be asked to write a short reflection after submitting their project, explaining how they used GenAI tools, what challenges they encountered, and how they addressed them. Such reflective writing not only informs the teacher's evaluation but also encourages learners to take ownership of their work and assess their own progress.

Digital portfolios are another effective tool for integrating reflection and assessment. By collecting multiple drafts, AI interactions, visual assets, and final compositions in a single portfolio, learners and teachers can track development over time. Portfolios support longitudinal assessment and provide a fuller picture of each learner's engagement, improvement, and creativity.

Ultimately, effective assessment of GenAI-enhanced multimodal writing requires a balanced approach—one that values both the product and the process. It must consider language proficiency, multimodal expression, and ethical tool use, while supporting learners through clear criteria and reflective practice.

As GenAI tools become increasingly embedded in TESOL writing classrooms, the need for responsive and thoughtful assessment strategies grows. Evaluating multimodal compositions requires educators to expand traditional frameworks, incorporating criteria that reflect the complexity and originality of GenAI-supported tasks. Transparent rubrics, formative feedback, peer review, and reflective writing can together create an assessment environment that fosters learning, creativity, and responsibility. By prioritizing both the quality of the final product and the decisions learners make throughout the process, educators can support meaningful language development in a digital age.7

Challenges and Future Directions for GenAI in TESOL Writing Instruction

Institutional and technological barriers

Despite the growing promise of generative AI (GenAI) tools in supporting language learning through digital multimodal composing (DMC), several institutional and technological barriers limit their effective implementation in TESOL writing instruction. One of the most immediate challenges is unequal access to digital infrastructure. Not all educational institutions have the bandwidth, devices, or licenses needed to support widespread use of AI-driven platforms such as ChatGPT, DALL·E, or Adobe Firefly. In many regions, TESOL classrooms are still limited by outdated hardware, intermittent internet connectivity, or restricted access to cloud-based services (Hockly, 2023).

Moreover, even where technical access is available, institutional policies regarding data privacy, copyright compliance, and responsible AI use may restrict the adoption of GenAI tools. Concerns over student data protection, especially in relation to cloud-based tools that process inputs through external servers, have led some institutions to block or limit AI tool use. Administrators may also be wary of the potential for misuse, such as plagiarism or overreliance on AI-generated content, prompting the need for clearer policy frameworks (Kasneci et al., 2023).

<u>Curriculum integration</u> is another barrier. Most TESOL curricula were not developed with GenAI in mind and may lack the flexibility to incorporate multimodal AI-assisted tasks. Teachers are often required to adhere to strict syllabus guidelines or standardized assessments, leaving limited space for experimental or <u>creative writing activities</u> involving AI. Until curricula are revised to accommodate evolving literacies, the potential of GenAI to enrich writing instruction will remain underutilized.

Wider GenAl adoption requires infrastructure, teacher training, and focused research.

Teacher training and digital literacy

A significant factor in the successful implementation of GenAI tools is the readiness of teachers to use them effectively. Many TESOL practitioners lack sufficient training in <u>digital literacy</u>, especially in relation to AI-enhanced pedagogies. While some educators may be familiar with basic digital tools like word processors or presentation software, fewer have experience with AI-driven platforms or the pedagogical strategies needed to integrate them into writing instruction (Yoon, 2023).

Professional development in this area must go beyond tool demonstrations. Teachers need support in understanding how GenAI works, its pedagogical affordances, its limitations, and the implications for learner engagement and assessment. They must also be equipped to guide students in ethical AI use, helping them develop critical awareness of issues such as authorship, attribution, and content reliability.

Workshops, online courses, and institutional training programs can help bridge this gap. However, for these initiatives to be effective, they must be ongoing, practical, and embedded in teachers' daily instructional contexts. Peer collaboration, mentorship, and communities of practice focused on GenAI in TESOL can also provide valuable support and promote sustainable innovation (Petersen & Sachs, 2022).

Furthermore, teacher preparation programs must begin incorporating AI literacy into pre-service training. As new generations of language teachers enter the profession, they must be equipped not only with <u>language teaching</u> methodologies but also with the skills to navigate AI tools, evaluate their effectiveness, and use them in ways that enhance learner agency and achievement.

Emerging research and development needs

While interest in GenAI for language education is growing rapidly, empirical research into its effectiveness, best practices, and long-term outcomes remains limited. Much of the current discourse is anecdotal or exploratory, with relatively few longitudinal or classroom-based studies that rigorously examine how GenAI tools affect writing proficiency, learner motivation, or instructional quality (Zou et al., 2023). As a result, more evidence is needed to guide educators, policymakers, and curriculum developers in making informed decisions.

Research should investigate how different learner profiles—such as age, proficiency level, and prior digital experience—interact with GenAI tools. Comparative studies examining learner outcomes across AI-supported and traditional writing tasks can help identify effective integration strategies. In addition, studies that explore learner perceptions, autonomy, and feedback preferences in AI-mediated writing contexts can provide valuable insights into learner engagement and satisfaction.

Another area of future research involves the ethical and legal dimensions of AI use in TESOL. Questions of data ownership, transparency in AI-generated content, and accountability in AI-driven feedback require interdisciplinary investigation involving education, technology, and law. As GenAI tools continue to evolve, their design must also be informed by educational research to ensure that they serve instructional goals rather than drive them.

From a technological perspective, there is a need for the development of language learning-specific AI tools that are aligned with pedagogical principles. Current GenAI platforms were not originally designed for education and may not always prioritize linguistic accuracy, learner safety, or instructional transparency. Collaboration between educators, linguists, and developers can lead to the creation of purpose-built tools tailored to the needs of L2 learners and teachers.

While GenAI holds considerable promise for transforming TESOL writing instruction, its implementation is currently constrained by institutional, technological, and pedagogical challenges. To harness its full potential, educators and institutions must address access barriers, invest in sustained teacher training, and support research that informs evidence-based practice. By aligning technological innovation with instructional design and professional development, TESOL professionals can ensure that GenAI becomes a meaningful and sustainable component of <u>language education</u>.

Conclusion

The integration of generative AI (GenAI) tools into TESOL writing instruction marks a significant shift in how language educators can approach the teaching of writing. Through digital multimodal composing (DMC), learners are not only acquiring linguistic competence but are also developing the ability to communicate using a range of semiotic resources, including text, image, audio, and design. This article has explored how GenAI tools—such as ChatGPT, DALL·E, and Adobe Firefly—can support this pedagogical transformation by facilitating personalized, interactive, and creative writing experiences for L2 learners.

At the heart of this shift is the recognition that writing in the digital age involves far more than

Transforming Writing in TESOL: Digital Multimodal Composing with GenAI Tools

producing grammatically accurate sentences. Learners must be prepared to express themselves across various modes and platforms, making intentional choices about language, structure, and visual communication. GenAI tools offer learners powerful support in this process, helping them brainstorm ideas, visualize narratives, experiment with genre, and refine language in ways that were previously difficult to achieve without extensive scaffolding.

Throughout the article, key strategies have been outlined for designing effective GenAI-enhanced DMC tasks. These strategies are grounded in task-based and communicative approaches that prioritize learner engagement and purposeful language use. Whether adapting tasks to different proficiency levels, encouraging originality, or supporting ethical tool use, the goal remains the same: to create meaningful opportunities for learners to practice, reflect on, and take ownership of their language development.

Assessment has also been highlighted as a critical component of GenAI-supported writing instruction. Evaluating multimodal texts requires educators to rethink traditional rubrics and adopt more holistic and process-oriented approaches. By integrating formative feedback, peer review, and learner reflection, educators can foster a classroom environment that values growth, creativity, and responsible digital practice.

At the same time, the adoption of GenAI tools must be thoughtful and pedagogically informed. Challenges related to technological access, institutional policies, teacher preparedness, and emerging ethical concerns cannot be overlooked. As GenAI technologies continue to evolve, educators must remain critical and adaptive, ensuring that these tools are used to enhance—not replace—human interaction, creativity, and instructional purpose.

Ultimately, the use of GenAI in TESOL is not about embracing technology for its own sake, but about leveraging its capabilities to create richer, more engaging, and more effective learning experiences. When integrated with care, GenAI-supported DMC can empower learners to explore new dimensions of expression, deepen their understanding of language, and participate more fully in the digital world's communicative practices. The future of writing instruction in TESOL will depend on educators' ability to balance innovation with pedagogical integrity, always keeping learners' needs, voices, and development at the forefront.

References

Berglund, P., Forsberg, E., & Holmbäck, C. (2023). Generative AI as a writing tool in language learning: Opportunities and tensions. *Language Learning & Technology*, 27(1), 12–25.

https://www.lltjournal.org/item/3281

Canagarajah, A. S. (2002). *Critical academic writing and multilingual students*. University of Michigan Press.

Chen, H., & Hockly, N. (2023). Collaborative writing and AI: Enhancing group interaction through digital tools. *Language Teaching Research Quarterly*, *27*(2), 34–50. <u>https://doi.org/10.32038/ltrq.2023.27.2.3</u>

Cope, B., & Kalantzis, M. (2009). "Multiliteracies": New literacies, new learning. *Pedagogies: An International Journal*, 4(3), 164–195. <u>https://doi.org/10.1080/15544800903076044</u>

Dalton, B., & Grisham, D. L. (2013). eVoc strategies: 10 ways to use technology to build vocabulary. *The Reading Teacher*, *66*(5), 306–317. https://doi.org/10.1002/TRTR.01127

El-Dakhs, D. A. S. (2023). Enhancing <u>EFL</u> learners' writing using ChatGPT: Scaffolding story generation and revision. *Journal of Language and Linguistic Studies*, *19*(3), 432–447. <u>https://doi.org/10.17263/jlls.1281280</u>

Ellis, R. (2017). *Reflections on task-based language teaching*. Multilingual Matters.

Hafner, C. A. (2015). Remixing multiliteracies: Theory and practice from a digital composition project. *TESOL Quarterly*, *49*(3), 486–509. <u>https://doi.org/10.1002/tesq.238</u>

Hafner, C. A., & Ho, W. Y. J. (2020). Creating and evaluating digital multimodal compositions in <u>English for academic purposes</u>: A case study of undergraduate students in Hong Kong. *TESOL Quarterly*, *54*(2), 313–341. https://doi.org/10.1002/tesq.553

Hockly, N. (2023). AI in ELT: Uses and implications. *Modern English Teacher*, *32*(2), 18–22. https://www.modernenglishteacher.com/ai-in-elt-uses-and-implications

Hubbard, P., & Romeo, K. (2020). Assessment of technology-mediated language learning. In C. A. Chapelle & S. Sauro (Eds.), *The handbook of technology and second language teaching and learning* (pp. 293–307). Wiley-Blackwell.

Kasneci, E., Sessler, K., Küchenhoff, H., Bannert, M., & Fischer, F. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Instruction*, *86*, 101747. https://doi.org/10.1016/j.learninstruc.2023.101747

Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Laredo Publishing Company.

Kukulska-Hulme, A., & Lee, H. (2020). Mobile collaborative language learning with multimodal input. *ReCALL*, *32*(2), 212–231. https://doi.org/10.1017/S0958344020000012

Lankshear, C., & Knobel, M. (2011). *New literacies: Everyday practices and social learning* (2nd ed.). Open University Press.

Larsen-Freeman, D. (2015). Saying what we mean: Making a case for "language acquisition" to become "language development". *Language Teaching*, 48(4), 491–505. https://doi.org/10.1017/S026144481400001X

Lee, J. S. (2023). Using artificial intelligence for language scaffolding: Practical applications for differentiated instruction. *Language Learning & Technology*, 27(1), 70–89. <u>https://www.lltjournal.org/item/3286</u>

Lee, J. S., & Lim, C. M. (2023). Integrating AI-generated content in EFL writing instruction: Assessment and feedback strategies. *Language Learning & Technology*, 27(1), 50–68. <u>https://www.lltjournal.org/item/3285</u>

Li, Z., & Hafner, C. A. (2022). Multimodal composing for language learning: The affordances of digital storytelling with artificial intelligence support. System, 108, 102864. https://doi.org/10.1016/j.system.2022.102864

Little, D. (2007). Language learner autonomy: Some fundamental considerations revisited. Innovation in Language Learning and Teaching, 1(1), 14–29. https://doi.org/10.2167/illt040.0

Lo, Y. Y. (2024). Ethical considerations of using AI tools in English writing instruction. *ELT* Journal, 78(1), 45-53. https://doi.org/10.1093/elt/ccad050

Marquez, M., & Cabrera, M. (2023). Visual storytelling with AI: Engaging L2 learners in multimodal expression. *Language and Literacy*, 25(2), 34-49. https://journals.library.ualberta.ca/langandlit/index.php/langandlit/article/view/30084

Petersen, M., & Sachs, M. (2022). Digital literacies for language teachers: Preparing for emerging technologies in language education. Computer Assisted Language Learning, 35(7), 1423-1440.

https://doi.org/10.1080/09588221.2021.1964393

Reyna, J. (2021). Assessing multimodal assignments: A theoretical model for practice. Assessment & Evaluation in Higher Education, 46(1), 79–93. https://doi.org/10.1080/02602938.2020.1737580

Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook* of research in second language teaching and learning (pp. 471-483). Routledge.

Webb, S., & Nation, P. (2017). How vocabulary is learned. Oxford University Press.

Yi, Y. (2014). Possibilities and challenges of multimodal literacy practices in teaching and learning English as an additional language. Language and Linguistics Compass, 8(4), 158-169.

https://doi.org/10.1111/lnc3.12076

Yoon, H. (2023). Teachers' perceptions and use of AI tools in EFL classrooms: Professional development implications. Language Teaching Research Quarterly, 26(3), 95–113. https://doi.org/10.32038/ltrg.2023.26.3.6

Zhou, H., Chen, Y., & Wang, D. (2023). Exploring the motivational impact of AI in English writing instruction. *Computer Assisted Language Learning*. Advance online publication. https://doi.org/10.1080/09588221.2023.2223171

Zou, B., Wang, D., & Xu, S. (2023). Exploring ChatGPT's impact on EFL learners' writing performance and perceptions. *Computer Assisted Language Learning*. Advance online publication.

https://doi.org/10.1080/09588221.2023.2206272

Cite this article

APA: EFL Cafe. (2025, June 4). Transforming Writing in TESOL: Digital Multimodal Composing with GenAI Tools. EFLCafe.net.

https://eflcafe.net/transforming-writing-in-tesol-digital-multimodal-composing-with-genai-tools/ In-text citation: (EFL Cafe, 2025)

MLA: EFL Cafe "Transforming Writing in TESOL: Digital Multimodal Composing with GenAI Tools." EFLCafe.net, 4 Jun. 2025,

https://eflcafe.net/transforming-writing-in-tesol-digital-multimodal-composing-with-genai-tools/. *In-text citation:* (EFL Cafe)