

#### **Forum for Linguistic Studies**

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#### ARTICLE

# Artificial Intelligence in Literature-Based Creative Writing: A Study with Story Live and AI Dungeon

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#### **ABSTRACT**

Technology integration is becoming increasingly popular in advanced EFL teaching. This study aims to investigate the efficacy of Story Live and AI Dungeon bots in improving Saudi EFL learners' writing in English literature. A mixed-methods approach was employed, combining tests to evaluate the impact of the tools with a survey to gauge student perceptions. The quantitative data were supported by semi-structured interviews conducted with 8 volunteering participants. The AI tools used in this study are Story Live and AI Dungeon integrated into the teacher's pedagogy, facilitated by the researchers through the planned writing activities. The sample comprised 24 high-achiever EFL learners enrolled in the elective writing course at Imam Mohammad Bin Saud Islamic University, KSA. Descriptive and inferential statistics, along with thematic analysis of the interviews, were used to assess the outcomes. The findings indicate that both AI Dungeon and Story Live add value to the literature-based creative writing class for Saudi EFL learners. When using AI tools that respond to prompts, learners tend to perform better in tasks that require guided writing with specific morphological and syntactic features. Moreover, these interventions had a significant impact on learners' performance. Learners' mean scores showed improvement from 35.79 in the pretest to 41.16 on the post-test,

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#### ARTICLE INFO

 $Received: 21\ June\ 2025\ |\ Revised: 30\ June\ 2025\ |\ Accepted: 15\ July\ 2025\ |\ Published\ Online: 15\ September\ 2025\ DOI: \ https://doi.org/10.30564/fls.v7i9.10615$ 

#### CITATION

Alkodimi, K.A., Al-Ahdal, A.A.M.H., 2025. Artificial Intelligence in Literature-Based Creative Writing: A Study with Story Live and AI Dungeon. Forum for Linguistic Studies. 7(9): 754–769. DOI: https://doi.org/10.30564/fls.v7i9.10615

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(Sig. = 0.000). Results indicated that students have high positive perceptions on the impact of SL and AID in developing their creative writing skills in the English Literature classroom. The study recommends the integration of AI tools into language learning and teaching practices to enhance students' linguistic and creative competence.

Keywords: AI; Creative Writing; Learning; Literature; Story Live; Teaching; Research Work

## 1. Introduction

The Integration of AI into education has the potential to revolutionize both the learning experience and learning outcomes <sup>[1,2]</sup>. As learning demands become increasingly dynamic, learner needs are also becoming more personalized and individualistic, such that the earlier 'one size fits all' model of teacher-centered learning is no longer viable <sup>[3]</sup>. Learners today are looking for tailor-made content that aligns with their learning styles and preferences. AI algorithms possess the unique ability to meet these personalized needs—capabilities that go beyond what even the best student-teacher ratio models can achieve <sup>[4]</sup>. Moreover, task and content difficulty levels can be adjusted with AI applications to provide a more satisfying and adequately challenging learning environment to the learners <sup>[2]</sup>.

From the teachers' perspective too, administrative inputs such as grading can be assigned to AI while teachers can devote their time to more directly beneficial activities, whether for learners or self-development <sup>[5]</sup>. Additionally, teachers can derive valuable insights from the large datasets generated by learner activities in platforms such as Blackboard, which store long-term usage data <sup>[6]</sup>. Lessons, materials, and pedagogies can accordingly be adjusted to achieve the learning objectives. In short, the pros of AI integration into educational settings are many and are worth exploring in different ways. AI is a digital representation of human intelligence that mimics human behavior. It is one of the driving forces behind the 4.0 industrial revolution's efforts to improve education and instruction is artificial intelligence.

The overarching goal of AI is to create systems—particularly robotics—that are as intelligent as, or even more intelligent than, humans, thereby simplifying everyday life, beginning with natural language processing. Interestingly, processing by AI includes perception, reasoning, object movement and manipulation, knowledge acquisition, and learning. The function of AI in ELT and its potential for AI

technology development are immense. Manimurasu notes that language acquisition is becoming simpler because of the expansion of online resources <sup>[7]</sup>. Everyone is open to the digital world now. In every sector, people are expanding and utilizing the use of AI as much as possible to enhance efficiency. Developments in computer and mobile technology will enable the use of artificial intelligence as well as the expansion of skills to a wider global population. Customized content is also a key component of digital learning technologies. We now have access to an adaptive system powered by big data and artificial intelligence. Depending on the needs and schedule of each user, we can select the most effective English language learning approach, nowhere is this truer than in the education sector.

AI has come to be seen as a panacea to many ills; education is no exception either. Since the pandemic hit the world, there have been irreversible changes in approaches to education with greater integration of technology as an educational tool <sup>[8]</sup>. Foreign language literature in the Saudi EFL context is a challenge in itself as it requires the learners to have at least two skills: Language proficiency, and cultural awareness of the target language <sup>[9,10]</sup>.

The main objective of this study is to inquire how AI resources can be harnessed in the literature classroom at a Saudi institution of higher education, and whether this change is sustainable. The education sector is now looking at an immersive technological experience; the concern is to evaluate the pros and cons of such immersion and develop suitable pedagogies and innovations for this accommodation. The study aims to answer the following research questions:

- 1. How do Story Live and AI Dungeon contribute to enhancing literature-based creative writing among Saudi EFL students, especially in achieving error-free writing in literature-based content?
- 2. What are the perceptions of advanced Saudi EFL learners about integrating AI tools to produce appropriate syntax of literature-based creative writing?

## 2. Literature Review

Artificial Intelligence (AI) is greatly reshaping the educational landscape by automating administrative tasks, thus alleviating the workload of teachers and enabling instructors to concentrate on more imaginative and student-focused pedagogies [11-13]. Intelligent tutoring systems, automated evaluation, and adaptive learning tools are among the noteworthy AI applications that are currently revolutionizing teaching strategies [14]. The rapid convergence of machine learning (ML) and artificial intelligence (AI)-driven tools is evident in international educational ecosystems, fostering both pedagogical creativity and system effectiveness [15].

Given this shifting digital education environment, Suleiman et al. highlight the increasing necessity to develop creative learning approaches [16]. AI not only improves curriculum presentation but also assists in instructional and administrative effectiveness globally. For example, in Rivers State tertiary institutions, AI incorporation into business education has spawned major employability skills, enriched curricula, and enhanced student engagement [17]. As Srinivasa et al. emphasize, AI plays a significant role in simplifying educational processes to satisfy the changing needs of modern learning environments [18].

In the context of English language teaching, Sharma examined the ways in which AI systems can be used to assess student performance and aid in instruction, especially in the development of language ability [19]. The study maintained that the ubiquitous presence of AI in human existence necessitates a re-examination of human agency and technological action, resulting in changes in educational epistemologies. As institutions transition from Web 2.0 to Web 3.0—and look to Web 4.0—the integration of technology into pedagogy is the call of the times. In the ESL context, India's New Education Policy (NEP) 2020 captures this transition by encouraging interdisciplinary, collaborative learning at all levels of education. Against this backdrop, teaching English literature needs to be reexamined to better suit evolving pedagogical demands. Roy and Putatunda argue that AI-enhanced classrooms, when complemented by reflective instructional design, can foster collaboration, interactivity, and pedagogical impact, turning AI from being an instrumental tool to being an engaged

contributor to the learning process while handling ethical and epistemological issues [20].

At the tertiary level, the emergence of AI-based language learning services has opened up new challenges and opportunities. These encompass the adoption of new pedagogical approaches, responding to changes in learner habits, and remodeling educator roles. Robert and Meenakshi highlight the increasing significance of cloud-based AI systems—such as translation software and robot-mediated spoken English modules—in redefining English teaching [21]. Prior to this, Dewi et al. performed a qualitative investigation, evidencing how AI tools can optimize both learning outcomes and testing in English language teaching [22]. Further research supports such assertions with the efficacy of AI-driven platforms, virtual reality technologies, and smart systems in enhancing the language skills of students [23–25].

Even beyond English and the humanities, interdisciplinary applications of AI in education have been demonstrated. Xu, for instance, showed that the integration of AI technologies into mathematics education led to improved motivation, academic achievement, and student progress, highlighting AI's broader curricular implications. These findings suggest that personalized, immersive, AI-enabled experiences have the potential to revolutionize both content delivery and learning outcomes across disciplines [25].

Despite these promising developments, several studies lack a focused analysis of specific AI tools' direct impact on English language acquisition and creative writing instruction. In the Saudi context, there remains a research gap in understanding how AI tools like StoryLive and AI Dungeon can be systematically embedded into curricula to support creativity, learner autonomy, and deeper engagement with high proficiency learners. Addressing this gap may unlock further potential in designing AI-supported pedagogies tailored to the evolving demands of English language and literature education.

### 3. Methods

#### 3.1. Research Design

This study was exploratory in nature, as the study sample was small; this was unavoidable since the creative writ-

aim was to investigate the effects of AI-assisted writing tools on high proficiency students' English writing skills. The intervention spanned eight weeks and was implemented in an English literature course at Imam Muhammad bin Saud Islamic University. Two groups were formed, one of which one used the StoryLive app and the other used AI Dungeon exclusively. The study aimed to compare the effectiveness of these AI-assisted tools in improving high proficiency students' story writing skills within a literature-based curriculum.

#### 3.2. Participants

The participants in this study were 24 male EFL students, all classified as advanced learners based on their performance on the university's mandatory English proficiency placement test. This standardized test evaluates listening, speaking, reading, and writing skills equally and is administered to all incoming students in Saudi universities. Purposive sampling was used to enrol participants to ensure a homogeneous group in terms of language proficiency.

#### 3.3. Implementation

Before the intervention, the researchers conducted orientation sessions to assess students' familiarity with AI tools and academic integrity practices. All participants reported regular use of ChatGPT in academic assignments and expressed awareness of the ethical implications of AI-generated content, given the integration of educational technology in Saudi Arabia, a mode of education imposed to overcome the hindrance of communication and contact due to COVID-19. Thus, the researchers were fortunate to have the groundwork all done as far as learners' technology readiness in education was concerned, including their readiness to follow ethical guidelines. This prior familiarity with AI tools allowed the study to focus directly on the applications of these tools to writing.

The two groups, referred to as SL (StoryLive) and AID (AI Dungeon), received instruction twice a week for eight weeks. These sessions were designed to supplement, not replace, a core English literature course. Each writing session was aligned with literary texts taught in the core curriculum, allowing students to draw on familiar content

ing course intake is limited at the university. The study's in creative writing assignments. The interventions emphasized that AI tools serve a supportive, rather than a replacement, function for classroom learning. This approach is consistent with educational research that calls for teacher engagement and sustainable integration of technology into teaching methods. The researchers scheduled meeting with the groups twice a week for the writing classes, which were basically a take-off from the English literature classes that the regular teacher conducted twice a week. Thus, the intervention was based on what the participants were reading with their other teachers.

> This arrangement allowed the researcher exclusive time for the intervention and gave adequate opportunity to the participants to work on their writing tasks. It was also clarified in the orientation that the tools would serve a supplementary rather than a substitute for the teacher. This served the dual aim of examining the efficacy of AI in the literature-based writing classroom as well as teachers' role as learning agencies. As previous research has proven, and as we understand, educational innovations are likely to be sustainable when teachers are equal partners in the change and not mere spectators or implementers.

### 3.4. Instruments and Data Collection

Writing tasks in this study were co-designed by the researchers and the course instructor to incorporate elements of storytelling, such as plot, character development, language use, and narrative structure, which were also the basis for assessment of writing quality. This assessment was carried out by the regular teacher since the same parameters are in place in the conventional writing assessment, and both teachers and students are familiar with it.

Since writing is perceived as the most challenging of the four language skills in English, this study devised literature-based writing tasks in consultation with the teacher to develop learners' creative expression and application of theoretical knowledge to writing by using the unique features of SL and AID to support the writing tasks.

The main targets of these tasks were the elements of plot, characters, language, and narrative design of storytelling. StoryLive allowed students to generate images and narratives from text prompts, encouraging collaborative or independent storytelling. StoryLive is an engrossing tool, as it allows users to generate narratives or images based on

input and supports both pair and group tasks. In AI Dungeon, which is a free tool, users can create unique characters, situations, and worlds, allowing them to choose any favorite literary character and create a whole new world around it. AI Dungeon provided an interactive environment in which students could create customized characters and literary scenarios.

Learners were encouraged to discuss their writing with peers freely, opt for pair collaboration, use their inputs, and critically evaluate their own and others' work. During the writing process, students were encouraged to explore both tools freely, collaborate with peers, and revise their drafts using AI-generated feedback. The researcher was accessible for assistance, but still motivated them to be at their creative best and use their imagination as they liked. One writing task was assigned every week during the intervention, which is also the mandated writing output in this course.

A structured questionnaire was developed using inputs from previous literature to collect quantitative data regarding students' perceptions of AI tool efficacy in improving Saudi EFL learners' general engagement with English literature as reflected in their writing proficiency. The items were grouped into four subscales/factors: AI in enhancing general writing output (6 items); AI tools in content generation (5 items); AI tools in formulating appropriate syntax (5 items); and AI tools in writing error-free language (4 items).

In the last phase of the study, the researcher conducted semi-structured interviews with one-third (08) of the participants on a purely voluntary basis. This interaction aimed to secure in-depth data on their experiences with the tools, the outreach of technology as such in education, whether human agency can be totally dispensed with by AI, the potential of AI to make the literature classroom less teacher-centric, and the role of technology in achieving learning autonomy and motivation.

## 4. Results

Both SL and AID are text-completion models in which bach's Alpha for in the user can initiate a composition, which can then be completed by the bot with or without the former's prompts, i.e., from the original que keywords around which they would like the narrative to Cronbach's Alpha verun or develop. The rationale behind choosing these two the value improved tools was: First, they are available for free; second, they is shown in **Table 1**.

support the composition of images to text and vice versa, adding fun to learning. The writing exercises were limited to the following types based on the literature content that the participants were engaged with:

- Interchange the characters in two stories and build a new storyline
- 2. Change the genre of the story, e.g., from suspense to comedy
- 3. Add a new angle to the plot and develop the story from there
- 4. Compose a poem on any event from the story
- 5. Place the story in another era, such as the Shake-spearean era and modify the environment.
- 6. Choose any favourite character from your culture and fit them into a narrative.

With all the tasks, the researchers aimed to engage the participants with technology and encourage them to use AI outputs as launchpads for their creative writing: They were required to base their writing on the ideas that AI-generated and not to copy them word for word. In this way, the researcher ensured that the tools were used to supplement learners' knowledge rather than make them dependent on AI. Participants were asked to share their writing with their peers, who then discussed and critically analyzed the writing as a kind of feedback which could be used to achieve better writing in the next task.

In the next stage and at the end of the intervention spanning eight weeks, the researcher administered a self-designed twenty-item questionnaire to answer the research questions. The questionnaire found its theoretical basis in earlier literature but was adapted to the Saudi EFL literature-based creative writing needs as observed by the researcher in conventional classrooms. Though the study sample was small at 24 (this was the maximum number of students enrolled in the elective writing course), the researcher took adequate precautions to ensure instrument reliability by conducting a pilot study. Thereafter, Cronbach's Alpha for internal consistency of items was computed using SPSS (26th version). Some items were redacted from the original questionnaire (comprising 32 items) as Cronbach's Alpha value was low at 0.60. Post-redaction, the value improved to 0.838. The value of each dimension

were used to determine whether the data were normally distributed. Table 2 and the histograms show that the data were normally distributed, so the parametric test was used for the data analysis.

After ensuring the reliability and normal distribution, the questionnaire was administered in person.

RQ1: How do Story Live and AI Dungeon contribute to enhancing literature-based creative writing among Saudi EFL students, especially in achieving error-free writing in literary content?

Table 3 demonstrates students' writing improvement due to the interventions. They scored 35.79 in the pre-test, with a standard deviation of 2.94, indicating that the scores were closely clustered. In the post-test, students' performance improved to 40.16 with a standard deviation of 2.82. The mean difference between the post-test and pre-test scores is 4.37.

Also, Kolmogorov-Smirnov and Shapiro-Wilk tests A t-test was conducted to determine whether the intervention led to a statistically significant improvement in students' writing.

> **Table 4** displays the Paired Sample test results. The Sig. 2 tailed value is significant as it has reached 0.000, which affirmed that students scored higher than before due to the intervention.

> Table 5 below summarizes the learners' perceptions of the use of AI in enhancing general writing output based on literature components.

**Table 1.** Reliability of the questionnaire.

Cronbach's Alpha	N of Items
0.798	6
0.707	5
0.677	5
0.556	4
838	20

Table 2. Tests of Normality.

Dimensions	Kolmog	orov-Smi	rnova	Shapiro-Wilk			
Dimensions	Statistic	df	Sig.	Statistic	df	Sig.	
AI in enhancing general writing output	0.148	24	0.184	0.934	24	0.122	
AI tools in content generation	0.122	24	0.200 *	0.944	24	0.205	
AI tools in formulating appropriate syntax	0.086	24	0.200 *	0.967	24	0.603	
AI tools in writing error-free language	0.119	24	0.200 *	0.977	24	0.844	

<sup>\*</sup> This is a lower bound of the true significance.

Table 3. Paired samples statistics.

Group	Mean	N	Std. Deviation	Std. Error Mean
Pretest	35.79	24	2.94	0.601
Posttest	40.16	24	2.82	0.576

Table 4. Differences between students' scores in the pre- and post-tests.

Group	Mean	T	df	Sig. (2-Tailed)
Pretest	35.79	7.020	22	0.000
Posttest	40.16	-7.939	23	0.000

**Table 5.** AI in enhancing general writing output.

No.	Statement	SD	D	N	A	SA	Mean	Std. D
1	AI tools have improved my literature-based creative writing.	8.3	37.5	16.7	16.7	20.8	3.04	1.334
2	AI tools have improved the quality of my creative writing.	8.3	37.5	16.7	16.7	20.8	3.83	1.090
3	Using AI tools has expedited the process of formulating ideas into writing.	8.3	4.2	33.3	37.5	16.7	3.50	1.103
4	AI tools have increased the creativity in my literature-related writing output.	4.2	8.3	29.2	41.7	16.7	3.58	1.018
5	AI tools have assisted in identifying my writing weaknesses.		4.2	29.2	45.8	20.8	3.83	0.816
6	Using AI tools has expanded the scope of ideas I can use in my creative writing.	4.2	20.8	20.8	41.7	12.5	3.04	1.334

**Table 5** displays students' perceptions of the role of AI supporting content development. in enhancing general writing output. The means for these items, as summarized in **Table 5**, are 3.04, 3.83, 3.50, 3.58, 3.83, and 3.04, with low standard deviation values, indicating that the sample held consistently positive perceptions. It is evident that most of the participants are in agreement that the AI tools used in this study for literature-based creative writing have benefited their general writing output. Collating leading themes from the semi-structured interviews, the biggest takeaway for participants was reported to be the freedom to modify content spontaneously when using SL and AID. This flexibility was reportedly less accessible in conventional teacher-student interaction. Two interviewees also reported that writing was faster and visibly when using the tools than in physical classrooms. They added that the AI tools could easily access the literature components relevant to the tasks, effectively linking the creative output with the assigned literary content. The next factor examined by the survey tested was the efficacy of AI tools in content generation—an area particularly challenging for foreign language learners due to limited cultural familiarity with the literature, resulting in a lack of authentic ideas for writing. The questionnaire included items specifically designed to evaluate the effectiveness of AI tools in

Table 6 shows that Saudi students perceived SL and AID positively, with a mean score of 3.83 and a standard deviation of 1.204. The sub-items under this factor received mean scores of 3.38, 3.58, 3.83, and 3.54, all with low STD.D values. These items focused on aspects such as variety, originality, and relevance of ideas. Respondents rated most of these highly, except for the item on identifying relevant content, which had a lower mean score of 2.83. Respondents noted that when using AI for creative writing, they did not encounter the typical problem of running out of ideas, despite their limited cultural exposure, which was mostly shaped by films that they felt were often unrealistic. One of the respondents also noted that he most liked the freedom to choose one or more ideas from the suggestions, as he only needed to add prompt words to generate additional ideas while using SL. Further, this freedom gave him the autonomy to work on the tasks as well as kept him motivated. To the same question, a respondent from the AID group reported that he even added some images to his writing by using prompts, which was not only fun but also a unique addition to his work. This was also appreciated by his peers during the feedback and discussion session.

**Table 6.** Al tools in content generation.

	Statement	Sd	D	N	A	SA	Mean	Std. D
1	Using AI tools has added variety to my content in writing.	4.2	8.3	29.2	41.7	16.7	3.38	1.096
2	AI tools have helped in generating better creative ideas related to my literature class.	8.3	41.7	20.8	16.7	12.5	3.58	1.018
3	AI tools like Story Live and AI Dungeon have facilitated the identification of relevant content for creative writing.	4.2	12.5	4.2	54.2	25.0	2.83	1.204
4	I find AI tools easy and fun to use in creative writing as they give unique suggestions.	8.3	4.2	29.2	41.7	16.7	3.83	1.090
5	I find the suggestions and recommendations of AI tools useful in writing.	4.2	8.3	29.2	37.5	20.8	3.54	1.103
	Total						4.62	0.38

learners in integrating AI tools to produce appropriate syntax of literature-based creative writing?

To answer this research question, Table 7 below summarizes the learners' perceptions on the efficacy of AI

RQ2: What are the perceptions of advanced Saudi EFL producing appropriate syntax was perceived very positively. The items collected data on how effective the AI tools were in helping the respondents formulate appropriate syntax. Typically, foreign language learners stick to simple constructions, which sets their writing apart from that tools in formulating the appropriate syntax for the writing of native-like users, whose syntax tends to be more comtasks. Table 7 displays that the integration of AI tools in plex. In this study, the mean scores for these items were

generally in the "agree" category, except for the last one, that the AI responses were better. All eight interviewees which fell into the disagree category. During interviews, all the respondents highly appreciated the AI tools for the native-like sentences that they generated. Three respondents added that they intended to keep using AI for writing tasks, as even with their advanced proficiency, they felt

noted that AI tools were a valuable aid in supplementing their education, providing greater autonomy and maintaining high motivation. The final aspect in which the efficacy of AI was evaluated in this study was its ability to provide grammatical support to writers.

**Table 7.** AI tools in formulating appropriate syntax.

No.	Statement	SD	D	N	A	SA	Mean	Std. D
1	AI tools like Story Live and AI Dungeon have added to the organization and structure of my creative writing.		4.2	29.2	50.0	16.7	3.63	1.056
2	Using AI tools helped me formulate balanced sentences.	4.2	20.8	20.8	50.0	4.2	3.79	0.779
3	I believe AI tools have positively impacted the connectivity of my writing.	4.2	8.3	29.2	54.2	4.2	3.29	0.999
4	Using the AI tools, I can make my writing cohesive.	8.3	41.7	20.8	16.7	12.5	3.4583	0.88363
5	AI tools have made collaboration with peers better in formulating ideas into connected sentences.	4.2	12.5	4.2	54.2	25.0	2.8333	1.20386

The effect of Story Live and AI Dungeon in achieving writing-free errors of literature-based writing was also assessed by the questionnaire; the results are summarized in Table 8 below. Table 8 shows that the use of AI tools significantly helps learners produce error-free writing. The group means for these items were 3.8333, 3.5417, 3.6250, and 3.7917 with low STD.D values. However, during the interviews, seven respondents stated that they did not rely heavily on AI tools for grammar assistance. This was an

expected outcome, as the respondents are high-achieving, advanced English learners, and grammar instruction tends to dominate in Saudi EFL classrooms. Overall, the respondents noted that though AI tools were very much a part of their learning journeys in contemporary times, they also enjoyed the human touch that the literature reading class with the teacher offered. Six of the respondents were keen that there should be a balanced blending of the teacher and technology as agencies in their learning.

Table 8. AI tools in writing error-free language.

No.	Statement	SD	D	N	A	SA	Mean	Std. D
1	AI tools helped eradicate my peculiar grammar errors.	8.3	4.2	29.2	41.7	16.7	3.8333	1.09014
2	AI tools have aided in identifying potential grammar issues in my writing.	4.2	8.3	29.2	37.5	20.8	3.5417	1.10253
3	AI tools that I used have reduced errors in my creative writing.	4.2	29.2	50.0	16.7	4.2	3.6250	1.05552
4	AI tools have improved the clarity and quality of language in my creative writing.	4.2	20.8	20.8	50.0	4.2	3.7917	0.77903

## 5. Discussion

The findings show that the Story Live (SL) and AI Dungeon (AID) apps improve students' writing skills. Students' writing scores improved from 35.79 in the pre-test to 40.16 in the post-test. This finding highlights the importance of using AI tools in the teaching/learning process among English language learners. Many studies confirm this result, including those conducted by Dewi et al. [22] and

Xu [25]. Dewi et al. found that AI platforms significantly contribute to language acquisition by improving communication skills, providing incentives, offering training, and providing feedback [22]. This shows that the role of AI extends beyond facilitating conversations, as it also supports language learning through motivation, guidance, and constructive feedback. Selvi Thamel and Ramaya also confirmed that AI-based learning and teaching systems help students become better proficient in English [24].

AI tools, it is essential to critically engage with theoretical constructs such as humanistic learning and AI-integrated pedagogy to contextualize these results. Humanistic learning theories emphasize the importance of fostering creativity, autonomy, and emotional engagement in learners, which aligns with the observed improvements in students' creative writing abilities. AI has also become a valuable ally in teaching creative writing. Applications like StoryLive and AI Dungeon provide dynamic, decision-based storytelling spaces that allow learners to experience narrative frameworks, test developments in plot lines, and participate in world-building. These sites facilitate critical thinking, creativity, and interaction using real-time feedback and branching storylines [26-28]. Additionally, AI-assisted editing tools enable clear and polished writing while making storytelling an inclusive medium for various learners. Selvi, Thamil, and Ramya add that these tools can vastly enhance not just language skills but also the quality of narratives, emotional richness, and even the commercial viability of student-writers' narratives [24].

Integrating AI tools within this framework could further enhance their effectiveness by ensuring that technological interventions complement rather than overshadow human-centric educational practices. The study also reported that using Story Live and AID, as reported by students, contributed to developing students' writing to a very high extent by enhancing general writing output based on literature components, content, appropriate syntax, and producing error-free output. These findings align with Gillani et al., who note that even before the now wellknown ChatGPT, AI had made inroads into education [29]. Their study, however, reinforces the need for educators to develop literacy around these capacities as they characterize 21st-century learning. The findings also agree with Brynjolfsson, who shed light on the biggest pro of AI as a means for augmenting human educators and not necessarily substituting them [30]. Similar thoughts are voiced by Hasselberger in a review when he states that human capacities are integral to existence and cannot be replaced by the ability of AI to mimic humans<sup>[31]</sup>. These perspectives underscore the importance of balancing AI integration with the preservation of human creativity and critical thinking, in higher learning institutions has become a trend that is

However, while these findings highlight the benefits of particularly in creative writing contexts.

Despite the advantages, potential challenges of using AI tools in creative writing within EFL contexts must be addressed. For instance, over-reliance on AI-generated outputs may hinder the development of original thought and creativity, as students might prioritize efficiency over the creative process. Additionally, ethical concerns such as plagiarism and the authenticity of student work must be carefully managed. These challenges highlight the need for educators to adopt a critical approach when integrating AI tools, ensuring that they are used as supplements to, rather than replacements for, traditional pedagogical methods.

The findings of the current research hold substantial implications for EFL literature educators. Story Live and AI Dungeon are conversational AI tools that enhance classroom discussions by providing immediate access to literary insights, facilitating real-time analysis, and encouraging students to articulate their thoughts more effectively. Furthermore, they allow for tailored learning experiences that cater to the individual needs and preferences of each student, thus promoting inclusivity in the EFL classroom, even with a group of high-achieving individuals. This has been the biggest finding of this study. Almusaed et al. recommended that employing AI can transform hybrid education, as it improves both student and instructor autonomy while nurturing a more engaging and interactive learning setting [32].

A number of intelligent learning tools and systems were chosen to examine the application of artificial intelligence (AI) in instructing a course on translating specialized materials into English. These include ChatGPT, Google Translate, DeepL Translator, Grammarly, Microsoft Translator, and SDL Trados Studio. The study was carried out in phases, with distinct techniques and instruments for gathering and analyzing data in each phase. To analyze student comments and gauge the caliber of translations, statistical techniques and qualitative analysis were used. Descriptive statistics (see Table A1 in Appendix A; Figures A1-A4 in Appendix B) were used to examine survey data in order to find broad patterns and student satisfaction levels. Findings indicated that integrating cutting-edge artificial intelligence tools with English translation instruction

unavoidable with the arrival of the digital age, increasing teaching effectiveness, encouraging individualized learning, and offering intelligent tutoring.

In conclusion, the integration of AI tools such as Story Live and AI Dungeon into EFL education offers significant opportunities for enhancing creative writing and language proficiency. However, educators must critically engage with theoretical frameworks and address potential challenges to ensure that these tools are used effectively and ethically. Future research should explore the long-term impact of AI tools on creativity and originality in writing, as well as strategies for mitigating their limitations within diverse educational contexts.

## 6. Conclusions

Pedagogical innovations in education often aim to improve learning outcomes, as reflected in achievement tests. In this study, despite participants already demonstrating high academic achievement, pre- and post-test data were compared to assess the impact of two AI applications on students' creative writing. Pre-test scores from the first semester and post-test scores from the second semester were analyzed using a paired t-test. The results revealed a statistically significant difference (*p*-value = 0.00), indicating the effectiveness of the AI-based intervention in improving creative writing skills.

The integration of AI tools such as Story Live and AI Dungeon, not only improved students' creative writing skills but also demonstrated AI's potential to provide personalized learning experiences. These tools provide immediate feedback, encourage iterative improvement, and facilitate the development of clear and error-free writing. This reflects a growing consensus in the literature that AI applications can significantly enhance language skills and creative outcomes by offering learner-centered, adaptive support.

The implications of this study extend beyond the immediate context of creative writing. AI-based tools have the potential to transform English as a Foreign Language (EFL) teaching by enhancing inclusivity, increasing student engagement, and addressing individual needs. This

aligns with recent research advocating for the integration of AI into education to improve outcomes beyond academic achievement. Future research should explore the long-term impact of AI interventions on students' creativity, originality, and autonomy, as well as strategies to mitigate their limitations.

In summary, the findings of this study contribute to the growing body of evidence supporting the effectiveness of AI in improving creative writing and language learning outcomes. By thoughtfully and ethically integrating AI tools, educators can unlock new avenues for innovation and efficiency in EFL teaching, paving the way for more personalized, engaging, and impactful learning experiences.

#### 6.1. Recommendations

The study recommends the following:

- There is a need to examine the efficacy of new technological tools in imparting learning of different language components before they can be fully integrated into pedagogy.
- 2. In the Saudi context, research with AI tools needs to be replicated with different learner groups, as the variations in proficiency are immense.
- Technological readiness is present in the Saudi education sector; institutions need to encourage teachers to experiment with what works best for their learners.
- 4. SL and AID can be integrated into the advanced learners' writing curriculum, given the positive feedback from this study.

#### 6.2. Limitations

Given the segregated classrooms in Saudi Arabia, the study was carried out with only male participants. Therefore, the results may not be generalizable to the female learners. The study was largely exploratory in nature, as the sample size was small due to the limited number of students enrolled in the course.

## **Author Contributions**

Both the authors have done an even job in this regard: They have gone about preparing the final manuscript bringing it into its present shape with an equal amount of zest and zeal, with the theoretical part being done by Prof. Al-Ahdal and the practical/ analytical part carried out by Dr. Alkodimi.

# **Funding**

This work was supported and funded by the Deanship of Scientific Research at Imam Mohammad Ibn Saud Islamic University (IMSIU), grant number [IM-SIU-DDRSP2504].

# **Institutional Review Board State**ment

Not applicable.

## **Informed Consent Statement**

University guidelines were strictly adhered to during

the course of this study. Participants were duly informed of their right to voluntary participation as well as quitting the study at any point of time, formal consent was obtained from with the assurance that all information would be kept confidential and used strictly for the purpose of the research only.

# **Data Availability Statement**

Information about data and materials used in the study is available.

# Acknowledgments

The authors would like to extend the gratitude to the Deanship of Scientific Research at Imam Mohammad Ibn Saud Islamic University (IMSIU), grant number [IM-SIU-DDRSP2504].

## **Conflicts of Interest**

The authors declare no conflict of interest.

# Appendix A

Table A1. Descriptive Statics of Survey Responses.

			Statistic	Std. Error
	Mean		3.1925	0.31091
	95% Confidence Interval for Mean	Lower Bound	2.5494	
	95% Confidence Interval for Mean	Upper Bound	3.8357	
	5% Trimmed Mean		3.2706	
	Median		3.5961	
	Variance		2.320	
Fir	Std. Deviation		1.52314	
	Minimum		-0.86-	
	Maximum		5.63	
	Range		6.49	
	Interquartile Range		1.45	
	Skewness		-0.772-	0.472
	Kurtosis		1.196	0.918

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			Statistic	Std. Erron
	Mean		3.6361	0.18300
	050/ C-uf-l-u Int1 f-u-M	Lower Bound	3.2576	
	95% Confidence Interval for Mean	Upper Bound	4.0147	
	5% Trimmed Mean		3.6311	
	Median		3.5025	
	Variance		0.804	
Se	Std. Deviation		0.89649	
	Minimum		2.22	
	Maximum		5.16	
	Range		2.95	
	Interquartile Range		1.51	
	Skewness		0.270	0.472
	Kurtosis		-0.961-	0.918
	Mean		3.7052	0.23575
	050/ G . C.1	Lower Bound	3.2175	
	95% Confidence Interval for Mean	Upper Bound	4.1929	
	5% Trimmed Mean		3.7031	
	Median		3.7744	
	Variance		1.334	
thi	Std. Deviation		1.15493	
	Minimum		1.76	
	Maximum		5.71	
	Range		3.95	
	Interquartile Range		1.91	
	Skewness		-0.008-	0.472
	Kurtosis		-1.056-	0.918
	Mean		3.1442	0.26523
	050/ G . C.1	Lower Bound	2.5955	
	95% Confidence Interval for Mean	Upper Bound	3.6928	
	5% Trimmed Mean		3.1278	
	Median		3.0881	
	Variance		1.688	
fiu	Std. Deviation		1.29935	
	Minimum		0.79	
	Maximum		5.93	
	Range		5.15	
	Interquartile Range		1.80	
	Skewness		-0.017-	0.472
	Kurtosis		-0.382-	0.918

# Appendix B

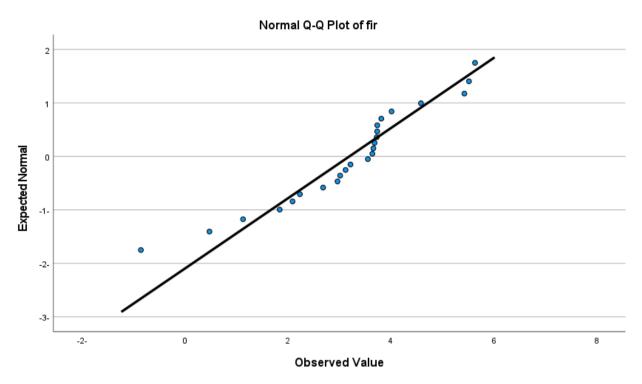


Figure A1. Distribution of scores AI in Enhancing General Writing Output.

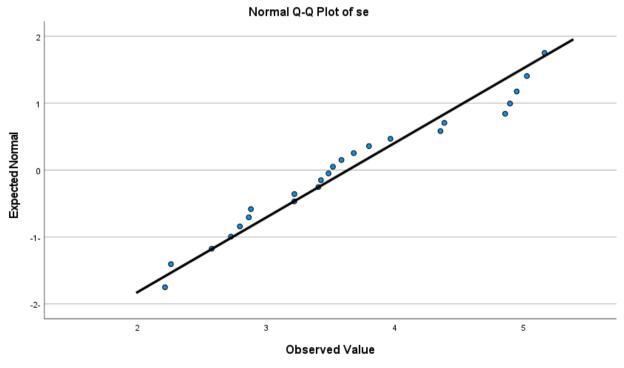


Figure A2. Distribution of scores AI in Content Generation.

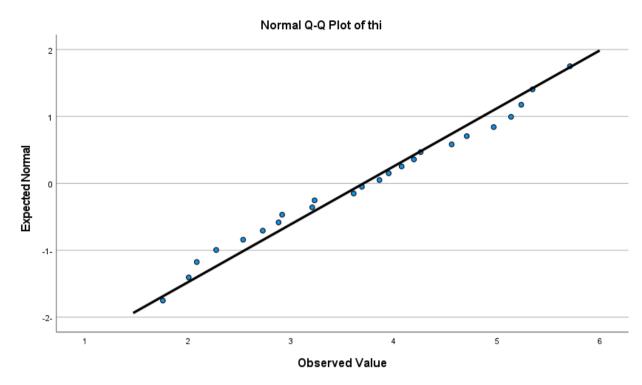


Figure A3. Distribution of scores AI in Formulating Appropriate Syntax.

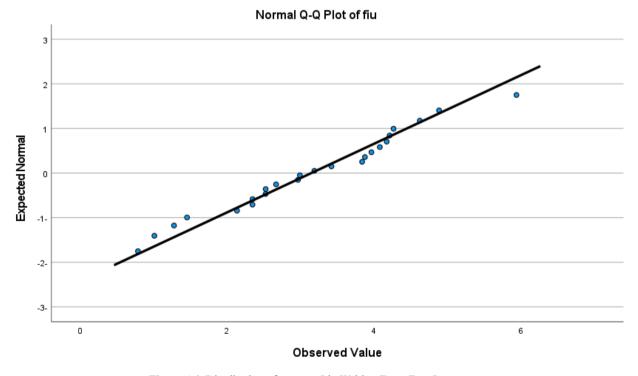


Figure A4. Distribution of scores AI in Writing Error-Free Language.

## References

- [1] Aljabr, F.S., Al-Ahdal, A.A.M.H., 2024. Ethical and pedagogical implications of AI in language education: An empirical study at Ha'il University. Acta Psychologica. 251, 104605. DOI: <a href="https://doi.org/10.1016/j.actpsy.2024.104605">https://doi.org/10.1016/j.actpsy.2024.104605</a>
- [2] Chen, L., Chen, P., Lin, Z., 2020. Artificial intelligence in education: A review. IEEE Access. 8, 75264–75278.
- [3] Jones, M., McLean, K., 2018. Personalising Learning in Teacher Education. Springer: Singapore.
- [4] Bin-Hady, W.R.A., Ali, J.K.M., Al-humari, M.A., 2024. The effect of ChatGPT on EFL students' social and emotional learning. Journal of Research in Innovative Teaching & Learning. 17(2), 243–255. DOI: https://doi.org/10.1108/JRIT-02-2024-0036
- [5] Al Husseiny, F., 2023. Artificial intelligence in higher education: A new horizon. In: Kaddoura, S. (ed.). Handbook of Research on AI Methods and Applications in Computer Engineering. IGI Global: Hershey, PA, USA. pp. 295–315. DOI: http://dx.doi. org/10.4018/978-1-6684-6937-8.ch014
- [6] Caspari-Sadeghi, S., 2022. Applying learning analytics in online environments: Measuring learners' engagement unobtrusively. Frontiers in Education. 7, 840947. DOI: https://doi.org/10.3389/fed-uc.2022.840947
- [7] Manimurasu, K., 2024. Use of technical intelligence in English teaching and learning. International Journal for Multidisciplinary Research. 10, 25–27.
- [8] Dwivedi, Y.K., Hughes, D.L., Coombs, C., et al., 2020. Impact of COVID-19 pandemic on information management research and practice: Transforming education, work and life. International Journal of Information Management. 55, 102211. DOI: https://doi. org/10.1016/j.ijinfomgt.2020.102211
- [9] Albelihi, H.H.M., Al-Ahdal, A.A.M.H., 2024. Over-coming error fossilization in academic writing: Strategies for Saudi EFL learners to move beyond the plateau. Asian-Pacific Journal of Second and Foreign Language Education. 9(1), 75. DOI: https://doi.org/10.1186/s40862-024-00303-y
- [10] Alshammari, H.A., Ahmed, E.A., Shouk, M.A.A., 2020. Challenges to studying English literature by Saudi undergraduate EFL students as perceived by instructors. English Language Teaching. 13(3), 8–19.
- [11] Bin-Hady, W.R.A., Al-Kadi, A., Hazaea, A., et al., 2023. Exploring the dimensions of ChatGPT in English language learning: A global perspective. Library Hi Tech. DOI: https://doi.org/10.1108/LHT-05-2023-

0200

- [12] Javaid, M., Haleem, A., Singh, R.P., et al., 2023. Unlocking the opportunities through ChatGPT tool towards ameliorating the education system. Bench-Council Transactions on Benchmarks, Standards and Evaluations. 3(2), 100115. DOI: https://doi.org/10.1016/j.tbench.2023.100115
- [13] Li, X., Jiang, Y., 2024. Artificial intelligence in education: Opportunities, current status, and prospects. Geographical Research Bulletin. 3, 146–174.
- [14] Rizvi, M., 2023. Investigating AI-powered tutoring systems that adapt to individual student needs, providing personalized guidance and assessments. The Eurasia Proceedings of Educational and Social Sciences. 31, 67–73.
- [15] Hannan, E., Liu, S., 2023. AI: New source of competitiveness in higher education. Competitiveness Review: An International Business Journal. 33(2), 265–279.
- [16] Suleiman, M., Aliyu, M., Yakubu, S., et al., 2024. Effects of increased adoption of artificial intelligence (AI) on educational systems: Challenges and benefits. In Proceedings of the 17th International Multi-Conference on ICT Applications (AICTTRA 2024, Conference Hall OAUICT-Drive Knowledge Park, OAU, Ile-Ife, Osun State, Nigeria, 27–30 October 2024.
- [17] Ukata, P., 2024. Application of artificial intelligence (AI) in teaching business education courses in Rivers State tertiary institutions. In Proceedings of the Artificial Intelligence in Business Education and Entrepreneurship Practice, Abuja, Nigeria.
- [18] Srinivasa, K.G., Kurni, M., Saritha, K., 2022. Harnessing the power of AI to education. In Learning, Teaching, and Assessment Methods for Contemporary Learners: Pedagogy for the Digital Generation. Springer Nature Singapore: Singapore. pp. 311–342. DOI: http://dx.doi.org/10.1007/978-981-19-6734-4 13
- [19] Sharma, P., 2023. The use of AI in English learning among students: Case study in English Department. Conference: The Use of AI in English Learning among Students: Case Study in English Department. Global Institute of Technology and Management: Haryana, India.
- [20] Roy, D., Putatunda, T. 2023. From textbooks to chatbots: Integrating AI in English literature classrooms of India. Journal of e-Learning and Knowledge Society. 19(3), 65–73. DOI: https://doi.org/10.20368/1971-8829/1135860
- [21] Robert, R., Meenakshi, S., 2024. Investigations on the use of AI in English language instruction: A study at

- tertiary level education. In Modern Trends IN Multidisciplinary Subjects, Volume 2. Red'Shine Publica- [27] Nimo, J.A., Ravishankar, K., Rajagopal, N.K., 2024. tion Pvt. Ltd.: London, UK, pp. 97–103.
- [22] Dewi, H.K., Putri, R.E., Rahim, N.A., et al., 2021. The use of AI (Artificial Intelligence) in English learning among university students: Case study in English Department, Universitas Airlangga. DOI: https://doi.org/10.31235/osf.io/x3qr6
- [23] Ross, D., 2018. Why the four Cs will become the foundation of human-AI interface. Getting Smart. Available from: https://www.gettingsmart. com/2018/03/04/why-the-4cs-will-become-the-foundation-of-human-ai-interface/ (cited 21 May 2025)
- [24] Selvi, V.T., Ramya, P., 2024. Application of AI in literature: A study on evolution of stories and novels. Recent Research Reviews Journal. 3(2), 346-356.
- [25] Xu, Z., 2024. AI in education: Enhancing learning experiences and student outcomes. Applied and Computational Engineering. 51, 104–111. DOI: https://doi. org/10.54254/2755-2721/51/20241187
- [26] Alowedi, N.A., Al-Ahdal, A.A.M.H., 2023. Artificial intelligence-based Arabic-to-English machine versus human translation of poetry: An analytical study of outcomes. Journal of Namibian Studies: History Poli-

- tics Culture. 33, 1523-1538.
- AI for character creation and storytelling in marketing. In Balancing Automation and Human Interaction in Modern Marketing. IGI Global: Hershey, PA, USA. pp. 39-58. DOI: https://doi.org/10.4018/979-8-3693-2276-5.ch003
- [28] Pataranutaporn, P., Danry, V., Leong, J., et al., 2021. AI-generated characters for supporting personalized learning and well-being. Nature Machine Intelligence. 3(12), 1013–1022.
- [29] Gillani, N., Eynon, R., Chiabaut, C., et al., 2023. Unpacking the 'black box' of AI in education. Educational Technology & Society. 26(1), 99-111.
- [30] Brynjolfsson, E., 2022. The Turing trap: The promise & peril of human-like artificial intelligence. Daedalus. 151(2), 272-287.
- [31] Hasselberger, W., 2021. Can machines have common sense? The New Atlantis. 65, 94-109.
- [32] Almusaed, A., Almssad, A., Yitmen, I., et al., 2023. Enhancing student engagement: Harnessing "AIED"'s power in hybrid education—A review analysis. Education Sciences. 13(7), 632. DOI: https://doi. org/10.3390/educsci13070632