



International Journal of Artificial Intelligence and Machine Learning

Publisher's Home Page: <https://www.svedbergopen.com/>



Research Paper

Open Access

Developing Students' Reflective Writing Skills Through E-Portfolios in an EFL Context

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Abstract

This study explores the impact of e-portfolios on the reflective skills of EFL learners, the nature of reflections in e-portfolio entries, and the challenges they face when using e-portfolios. This study uses a qualitative case study design employing thematic analysis, and semi-structured interviews to explore the use of e-portfolios by thirteen MA (EFL) learners at King Faisal University in Saudi Arabia across 16 weeks. Analysis of themes coded in students' portfolio entries using TAGUETTE qualitative coding software showed qualitative evidence of growth in EFL students' reflective and descriptive writing in diverse genres. Findings indicated that the use of e-portfolios facilitated transition to learner-centered pedagogy, improved learners' metacognitive development, and supported their professional development. Further, although learners appreciated feedback from their instructors and benefited from peer collaboration and support, they preferred interactive pedagogical approaches to the Grammar-Translation Method to alleviate language-learning anxiety. The study concludes that digital technologies, such as e-books and multimedia, contribute to increasing learners' communicative confidence, while barriers identified in portfolio reflection entries highlight the need for more effective reflection prompts and teaching strategies to facilitate genuine self-expression.

Keywords: E-Portfolios, Reflective Writing Skills, EFL Contexts; Metacognition, Learner Autonomy

INTRODUCTION

Digitization of classrooms has changed the fundamental equation between learners and learning by ensuring the former's engagement, making them active participants in the learning process (Garrison & Kanuka, 2004). One such tool that has gained significant academic attention is the e-portfolio, which has been proven to have great potential as an assessment, learning, and employability tool (Ciesielkiewicz, 2019). It is also a tool that supports continuous learning and self-assessment by providing a longitudinal view of learners' development (Song, 2021). In language education, e-portfolios enable students to record their progress in real time, receive targeted feedback, and engage in a recursive process of reflecting on their linguistic journey (Le et al., 2024).

Reflection is widely considered a key constituent of effective learning and is particularly vital in writing development. It is regarded as an important element for those enrolled in higher education as it transforms learners into analytical practitioners of language who are aware of their own cognitive processes (Akbari, 2007; Buckingham Shum et al., 2016). However, some challenges remain in the EFL context, such as learners' struggle to produce meaningful reflections, often limiting their responses to surface-level descriptions rather than engaging in critical evaluation, which is required for deep learning (Yun et al., 2024).

AI tools help manage these overarching issues to some extent, with some being more efficient at providing a real-world language experience for learners and enabling them to bring their classroom experience beyond the classroom. TalkPal, ELSA Speak, and ChatGPT Voice Mode are applications that provide learners with immediate feedback on grammar and pronunciation, thereby creating a conducive environment for learner reflection. AI in education has also been linked to personalize learning and data-driven strategies that can assist students based on their specific requirements (Mounkoro et al., 2024). E-portfolios provide learners with a tangible basis in the form of data to identify shortcomings in their writing and, hence, empower them with self-correction opportunities. In other words, the use of e-portfolios to boost EFL learners' reflective writing skills makes their efficacy worth

exploring in contexts that have so far not been covered, such as Saudi postgraduate EFL learners. The study addresses the following questions:

1. What is the impact of e-portfolios on EFL learners' reflective writing skills?
2. What levels of reflection do EFL learners demonstrate in their e-portfolio entries?
3. What obstacles to reflective writing do learners face when engaging with e-portfolios?

LITERATURE REVIEW

SLA research upholds the significance of learner autonomy and metacognitive involvement in language acquisition. As a process, reflection closely aligns with these components because of its central characteristic of engaging learners in critical thought while learning. In other words, during reflective learning the learner constructs meaning, identity, and narrative, thus emulating discourse. However, unguided reflective learning engages learners in descriptive reflection while guided reflection empowers them for analytical reflection.

E-portfolios have been shown to promote learner engagement and responsibility, but their effectiveness depends largely on task design, feedback, and scaffolding. More research is needed to understand how these elements influence the depth of student reflection.

E-Portfolios in Learning

Portfolios were used primarily to save students' assignments or projects during their studies (Gülbahar & Tinmaz, 2006). E-portfolios include personal learning plans in which learners arrange their learning goals, write reflective journals to assess their development against those goals, and reflect on their learning experiences (Yang et al., 2016). The value of e-portfolio lies in helping learners think critically, be self-regulated and independent, and in providing structured opportunities for learners to trace their progress, recognize their their own strengths and weaknesses, and closely observe improvement over time (Yastibas & Yastibas, 2015). These gains have also been reported in another study (Lam, 2022). Furthermore, as reported by Huang et al. (2022), learners may feel discouraged when doing assignments independently, whereas social endorsement from both teachers and peers, such as that available in e-portfolios, helps enhance self-identity and fosters a strong connection with learning. Duong (2021) noted that e-portfolios have been shown to help learners develop their writing abilities as well as increase their learning autonomy through goal setting, planning, reflection, and peer evaluation. Learners are more inclined to actively participate on online platforms when they believe that learning objectives are personally meaningful and socially supported (Ryan & Deci, 2000), thereby transitioning from passive to active learners through this interaction.

E-Portfolios and Learner Autonomy

The importance of learner autonomy has been recognized in educational contexts (Thanasoulas, 2000). Çakıcı (2015) stated, "Learner autonomy grows out of the individual learner's acceptance of responsibility for his/her own learning. This means that learner autonomy is a matter of explicit or conscious intention: one cannot accept responsibility for her/his own learning unless s/he has some idea of what, why, and how s/he tries to learn." Autonomy in learning underscores the importance of teamwork, with others serving as resources for learners (Naude et al., 2014). This partnership is central to increasing autonomy, as highlighted by Alzieni (2020) and Saadi (2026). E-portfolios in the university context help learners "to compile, organize, and formulate a digital presentation across various types of media that can be updated and adapted over time for different purposes and audiences" (Ciesielkiewicz, 2019).

Multimodal Reflection and Digital Literacy Integration

Multimodality is built into newer versions of EFL e-portfolios, which include visual and auditory records, as highlighted by Cheng (2022), who showed that platforms like Wix not only assist learners with writing but also give them the creative freedom to design their content, thereby better engaging with learning. In addition, this creative process enriches and strengthens the reflective acts too. Cheng (2023) notes, "the convenient and customized characteristics of e-portfolios allow learners to have an authentic audience and explore technical flexibility in displaying their written works." Contemporary communication is marked by its time and space signature, which is available in e-portfolios where learners can not only use multimodality in writing, but they can also add hyperlinks to denote their research endeavors on the topic. In other words, learners' linguistic journey is represented by the reflective content, a rich repository of their experiences which the teacher can use to identify shortcomings that need addressing.

The Interplay of Cognitive and Technical Challenges

Notwithstanding their many proven benefits, reflection per se and via digital platforms places certain demands leading to a complex interplay of learners' cognition and digital hurdles. For instance, learners may need to learn new skills to efficiently use new software and in this process, overlook reflective writing. Similar concerns have been reported in research on AI-based technologies, where technological complexity and continuous interaction

with digital systems can create additional demands on users (Patra and Singh, 2026). These hurdles and challenges may be unique to every learning environment which mandates careful evaluative research. In a study with thirty Vietnamese freshmen, Thao and Hoang (2026) found that reflection with e-portfolios significantly enhanced learners' task achievement and grammar, but only moderately impacted organization and vocabulary. Students noted the benefits of e-portfolios in reflecting on their work and tracking their progress, despite facing initial challenges in reflection and peer feedback. Overall, students viewed this method positively, recognizing e-portfolios as effective tools for supporting writing development through ongoing practice and feedback.

Al-Ahdal and Hameed (2025) investigated how writing portfolios affect intermediate-level novice EFL learners' accuracy and fluency. As a process-oriented evaluation method, writing portfolios provide room for self-examination, editing, and progressive development—features lacking in most conventional assessment models. Sixty male students from a public university in Saudi Arabia were split into two groups using a mixed-methods approach; the experimental group employed writing portfolios, while the control group received discrete writing assignments without the benefit of editing. Results indicated that when reflective feedback was coupled with revision and self-assessment of writing output, the portfolio group's accuracy and fluency improved noticeably. The study also notes that reflection enables learners to track their writing strategies, thus optimizing cognitive awareness to enhance writing. Moreover, process-oriented assessment in language instruction is upheld by the study to enhance EFL learners' writing.

Tsai (2025) assessed 116 EFL learners' perceptions of the effects of reading portfolio evaluation and corrective feedback on their language and individual growth and which form of constructive criticism they preferred. Three open-ended questions, teacher comments on reflective writing, and a four-dimensional questionnaire were used to gather data. Results indicated learners' positive perceptions of reading portfolio evaluation as a tool for enhancing their writing abilities, reading comprehension, and personal growth. Perceptual data findings were confirmed by pre- and post-test results. With preferences being shown for direct criticism (19%) and metalinguistic explanations (60%), the study established the educational benefits of reading portfolios and constructive criticism in enhancing learners' writing and enriching their development.

Estaji and Ghiasvand (2024) confirmed that e-portfolios are reflective and process-oriented, and that their application in L2 education and research has grown recently. E-portfolios are being used by many academics to gather data on a variety of L2 teaching and learning topics. A recent and significant book named *Using Digital Portfolios to Develop Students' Writing: A Practical Guide for Language Teachers* was produced by Routledge in light of the popularity of technology and e-portfolios in teaching L2 writing explaining the theoretical foundations of e-portfolios and how using them in L2 contexts might improve the caliber of English writing instruction.

METHODOLOGY

Research Design

This study employs a qualitative case study design grounded in qualitative thematic analysis. No control group, pre-test, or post-test was employed; accordingly, this study does not make causal claims about the effect of e-portfolios but instead documents learner experiences and perceived changes in reflective writing through qualitative evidence. Thematic analysis of students' e-portfolio entries — treated as primary reflective writing samples — was conducted using TAGUETTE, an open-source qualitative coding application. Additionally, semi-structured interviews were used to elicit deeper insights into student engagement with the e-portfolio process.

Participants

The study was conducted over a 16-week semester with 11 female and 2 male MA (EFL) learners enrolled in a linguistics course at King Faisal University, Saudi Arabia. Participation was voluntary and written informed consent was obtained from all participants. All data was anonymous to protect student identity, and digital artefacts were stored on a secure, password-protected server accessible only to the research team.

Data Collection and Analysis

Data was collected from three principal sources: (1) students' e-portfolio entries, submitted and maintained throughout the 16-week semester; (2) semi-structured interviews conducted at the end of the intervention; and (3) informal reflective written responses submitted by participants in their native language (Arabic) and subsequently translated. The portfolio links were shared by participants and are catalogued in Appendix A.

Thematic analysis followed an inductive coding process. All portfolio entries were imported into the TAGUETTE platform (<https://app.taguette.org/project/203179>), coded for emerging themes, and subsequently organized as per higher-order thematic categories. Member-checking was employed to enhance the credibility of the interpretations.

Findings

This research investigated the efficacy of e-portfolios as a pedagogical tool for enhancing reflective writing of MA

(EFL) learners. Based on data from student portfolios, this analysis employed a thematic approach using the TAGUETTE application for qualitative coding. The following sections present the study findings.

Reflective Practice and E-Portfolios

Participants in this study expressed positive gains from the application of e-portfolios, especially when used over a longer duration. One participant reported, *'Portfolio assessment from my point of view is the fairest because it is not a sudden one shot to show our knowledge as student, but it allows us to showcase our proficiency and work over a longer period of time.'*

Participants generally opined that reflective writing through e-portfolios helped them showcase their journey, from initial philosophy to peer critiques and creative projects. They viewed the e-portfolio as more than a digital storage space, as a "dynamic and highly interactive" environment that reshaped their relationship with learning. The e-portfolio reflective writing process forced students to move beyond memorization, which often leads to boredom and adversely impacts motivation.

Impact on Reflective Writing Skills (RQ1)

Results indicate that e-portfolios were associated with qualitatively observed changes in EFL learners' reflective writing in several ways: they triggered a shift in their status from knowledge consumers to reflective practitioners. In other words, there were clear signs of a shift towards learner-centered pedagogies, with students reimagining the teacher's role changing from "sage on the stage" to "guide on the side" - a conceptual repositioning that aligns with Fischer and Hänzle's (2019) findings on the importance of student-activating pedagogies in postgraduate studies.

The integration of technology proved significant: students identified the impact of e-books and multimedia resources in showcasing dynamic representations of real-life communication with native speakers, supporting Fitria's (2022) claim that technology boosts learner confidence to communicate.

Levels of Reflection (RQ2)

Concerning the second research question, learners exhibited a range of reflection levels in their portfolio entries, from descriptive through critical to, in its early stages, transformative. At the highest levels, learners demonstrated the ability to critically assess the integration of technology, which included doubts about the effectiveness of AI in achieving curricular goals, advanced analytical ability in line with strategic approaches to education design. The e-portfolio was used as an online gallery of each learner's journey, enabling them to move from rote learning to long-term narrative-themed reflection and identity building.

Challenges in Reflective Writing (RQ3)

The third research question focused on EFL students' difficulties in reflective writing using e-portfolios. Essentially, learners expressed considerable difficulty shifting focus from abstract, generalized learning related to course content towards genuine self-reflection. Emotional factors, such as grade pressure and fear of evaluation by others, were found to be significant hindrances to creative self-reflection. Table 1 below summarizes the challenges faced by the participants in reflective writing with their opinions on how their correction can be ensured. These views were shared in one-to-one interviews.

Table 1: Key Challenges in Reflective Writing and Recommended Instructional Interventions

Challenge Category	Specific Difficulty	Impact on Reflective Writing	Recommended Intervention
Cognitive Transition	Shift from abstract learning to personal reflection	Surface-level descriptions instead of deep analysis	Scaffolded prompts; examples; reflection modelled
Psychological Barriers	Grade anxiety; fear of negative evaluation	Suppression of creativity; inhibited self-expression	Low-stakes formative tasks; positive feedback loops
Identity Reconstruction	Moving from passive student to active professional	Resistance to reflective tasks; lack of engagement	Authentic tasks linked to career goals; peer mentoring
Technology Integration	Uncertainty about AI tools; platform navigation difficulties	Misalignment between tool capabilities and learning outcomes	Digital literacy workshops; clear instructor-provided guidelines
Prompt Design	Poorly structured reflection prompts	Vague, unfocused entries lacking critical depth	Structured frameworks (e.g., Gibbs Reflective Cycle; DEAL model)

Note. Challenges were identified through thematic analysis of portfolio entries and semi-structured interview data.

These findings are graphically depicted in Figure 1 which shows the gains reported by the participants in this study.

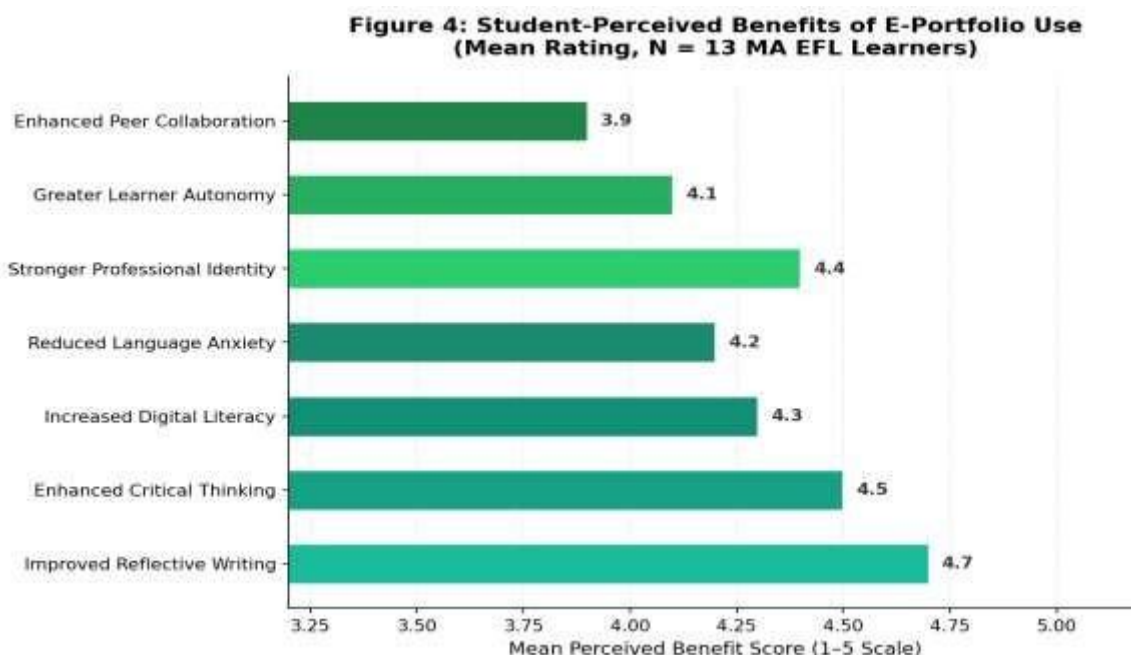


Figure 1: Perceived Benefits of E-Portfolio in reflective writing (Mean Rating, N = 13 MA EFL Learners)

DISCUSSION

Findings in this study indicate that with the application of e-portfolios in engaging EFL learners in reflective writing, there was a decided shift in the learning process that brought learners into the center and the teacher's role too was transformed into that of a facilitator. This finding aligns with Fischer and Hånze (2019) which examined the impact of teacher-centric classrooms on students' engagement, cognition, and language acquisition and concluded its positive impact on these.

In alignment with Fitira (2022), this study found that the e-portfolio technology is a transformative educational force. Specifically, Fitira found that e-books and multimedia enhance learners' interaction proficiency and pronunciation in addition to positive gains reported in learners' confidence. At the same time, learners expressed some doubt about the ethical questions around the use of technology in education. However, most participants in this study reported the efficacy of "digital gallery" in the e-portfolios as a great feature in their writing journey. The e-portfolios encouraged deep thinking and forced a move away from the boredom of memorization. Transitioning from conventional teacher-driven classrooms, e-portfolios offered a novel experience to the language learners. Interview data showed that the process of reflection completely redefined the language learning experience for learners at more than one level. Whereas the conventional classroom was a source of anxiety and stress, learners reported positive psychological inputs from the e-portfolio based reflective writing. This transition also made more space for critical thinking and self-correction for the learners.

CONCLUSION

This study investigated the impact of e-portfolios on the reflective writing skills of MA (EFL) learners at King Faisal University, Saudi Arabia. Thematic analysis of e-portfolio entries and semi-structured interview data indicated that learners engaged effectively with the e-portfolio process, with qualitative evidence suggesting perceived growth in narrative and descriptive writing over the 16-week intervention. Notably, as evidenced through participants' own reflective accounts, e-portfolio functioned as a catalyst for the development of reflective depth, learner identity, and metacognitive awareness — shifting learners' orientations from passive academic compliance to active, self-directed professional engagement.

The study confirmed that while learners appreciated instructor guidance and peer collaboration, they preferred dynamic, interactive pedagogical strategies over conventional approaches. Integration of digital technologies, particularly e-books and AI tools, was acknowledged as transformative in building communicative confidence, though the challenges identified in maintaining deep, authentic reflection emphasize the continuing need for carefully designed reflective prompts and sustained instructional scaffolding.

RECOMMENDATIONS

The study recommends that to establish stronger causal associations between e-portfolios and the improvement of reflective writing skills, future studies should use true experimental designs that involve randomly assigning control and intervention groups. A longitudinal database of the same cohorts over several semesters or academic years would provide useful evidence of the long-term effects of e-portfolio practice on metacognitive development. Since the quality of findings may be context-specific, comparative approaches between various Arab nations, EFL education systems, and distinct socio-institutional implications are also necessary to determine how far the identified advantages and obstacles might be culturally dependent and generalizable to EFL populations on an international level.

The interaction between AI writing aids and automated feedback devices with the e-portfolio process needs to be systematically studied in the future, with special focus on the circumstances in which AI integration improves, rather than deteriorates, the development of an authentic reflective voice and critical self-evaluation. Future studies may also explore the possibilities of multimodal e-portfolios, where learners integrate written reflection with audio, video, and visual modes to determine whether such media can enhance or diversify the quality of learner reflection and contribute to a richer theoretical conceptualization of digital literacy in EFL settings.

Lastly, as the current paper only involved 11 female and 2 male (MA) EFL learners, future research should investigate whether the benefits and challenges of reflection noted here apply universally to all EFL learners and explore the possibility of gender differences in reflective orientation and e-portfolio use in Arab settings. Addressing this gap would significantly enhance the applicability and reliability of the results, helping to broaden current knowledge to provide a holistic and inclusive view of e-portfolio-mediated reflective writing by a diverse range of EFL users.

LIMITATIONS

This research has such limitations that must be considered when discussing its findings and their generalizability to broader cultural education practices. The sample size in the study was limited in number as they were only 11 female and 2 male (MA) EFL learners which restricts the generalizability of results. Moreover, the study was carried out in a specific context, which cannot be generalized to other Arab, Middle Eastern, and non-Arab EFL contexts. The qualitative case study design employed in this research does not include a control group, pre-test, or post-test; consequently, causal claims about the impact of e-portfolios cannot be made, and findings should be interpreted as exploratory and descriptive rather than as evidence of causation. Finally, student reflections were in Arabic and were translated by the researcher, and therefore, some aspects of meaning might have been modified during translation.

ACKNOWLEDGEMENTS

I am really thankful to the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia, for their financial support.

FUNDING

This work was funded through the Ambitious Researcher Track- Review Articles by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Al-Ahsa, Saudi Arabia [Grant Number KFU265640].

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