

E-portfolios in English language learning: A systematic review of pedagogical impacts and assessment innovations

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Abstract

This study systematically reviews recent empirical research on the integration of e-portfolios in English language learning, focusing on their pedagogical impacts and assessment innovations. Using a thematic synthesis approach, ten peer-reviewed studies published between 2020 and 2025 were analyzed. The review identifies four major functions of e-portfolios in EFL education: promoting learner autonomy and metacognitive development, enhancing writing skills through iterative feedback, improving vocabulary retention via formative assessment, and fostering digital literacy through reflective pedagogical practices. Results indicate that e-portfolios contribute to deeper learner engagement, improved language performance, and authentic assessment practices across diverse educational contexts. Despite these benefits, several gaps were identified, including limited research on grammar acquisition, oral communication, and longitudinal outcomes. The study highlights the need for more scalable and structured e-portfolio frameworks, particularly in secondary education and under-resourced environments. It concludes that e-portfolios represent a transformative tool in language pedagogy by aligning assessment with personalized learning and calls for greater institutional support to maximize their potential in enhancing English language proficiency.

Keywords: e-portfolios, English language learning, formative assessment, reflective pedagogy, learner autonomy.

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Contribution to Literature: This study offers an integrative synthesis of recent e-portfolio research, highlighting their pedagogical and assessment roles across four core domains often treated in isolation in previous studies.

1. Introduction

In the digital era of language education, the integration of e-portfolios into English as a Foreign Language (EFL) instruction has become increasingly prominent. E-portfolios offer a platform for learners to curate artifacts that reflect their linguistic development, while simultaneously fostering reflection, autonomy, and self-assessment (Lorenzo & Ittelson, 2005; Yastibas & Yastibas, 2015). Unlike traditional assessments that emphasize static, summative evaluations, e-portfolios provide opportunities for learners to document progress through dynamic, multimodal tasks that incorporate writing, speaking, visual, and auditory media (Goldsmith, 2007; Rhodes, 2010). This shift aligns with 21st-century learning goals, which stress the importance of digital literacy, lifelong learning, and learner agency.

Growing attention from scholars and practitioners reflects the pedagogical value of e-portfolios as formative tools in language learning (Barrot, 2021; Gonzalez, 2009). They enable personalized learning pathways and promote metacognitive awareness by encouraging learners to critically evaluate their language use. Furthermore, the inclusion of feedback loops within portfolio design, whether from teachers, peers, or self-reflection, supports sustained engagement and improvement (Pardo, 2021; Reese & Levy, 2009). These characteristics make e-portfolios especially suitable for fostering holistic language development beyond isolated drills or test-based instruction.

Despite the promising outcomes reported in several studies, the existing literature remains fragmented. Many investigations focus on specific outcomes, such as vocabulary acquisition (Nourdad & Banagozar, 2022; Sharifi et al., 2017) or writing skills (Cong-Lem, 2019) without offering an integrated view of how e-portfolios function across language domains. Furthermore, research tends to emphasize implementation in higher education, particularly among English majors or pre-service teachers, while underexploring broader contexts such as secondary education or differentiated proficiency levels (Hyland & Hyland, 2019; Ngui et al., 2019).

Additionally, the scope of assessment innovation through e-portfolios remains underexamined. Although some studies discuss their potential for formative and alternative assessment (Afrianto, 2017; Lam, 2018), few provide comparative insights into how e-portfolios reshape assessment culture, promote learner reflection, and support long-term retention of language skills. This lack of synthesis suggests a need to consolidate findings across diverse settings to understand better the educational, reflective, and motivational impacts of e-portfolio integration in EFL learning.

To establish a foundation for this review, Table 1 summarizes five influential studies that exemplify the varied research field on e-portfolios in EFL education. These studies were selected based on their empirical scope, thematic contribution, and representativeness of both assessment innovation and pedagogical application. They reflect a spectrum of research contexts, including vocabulary learning, tertiary writing development, and digital assessment practices, which this article builds upon. While the reviewed studies consistently support the pedagogical value of e-portfolios, gaps remain in three key areas: (1) the underexploration of grammar mastery and oral performance outcomes; (2) a scarcity of longitudinal or large-scale studies that trace learning impact beyond a single course; and (3) limited attention to how e-portfolios influence assessment culture and policy in institutional contexts. Additionally, the majority of studies

emphasize higher education, leaving school-level implementation and differentiated learner needs relatively underrepresented (Barrot, 2021; Cong-Lem, 2019).

Based on the analysis of previous studies, the present article aims to systematically review the pedagogical impacts and assessment innovations associated with e-portfolios in EFL instruction. This review employs a qualitative thematic synthesis approach, examining peer-reviewed research from the past two decades to categorize key outcomes across language skills, learner engagement, and assessment design. The novelty of this study lies in its integrative perspective, bridging disparate empirical findings into a coherent pedagogical framework that informs future research, curriculum design, and reflective practice in English language education.

Table 1. Previous research.

No	Title	Reference
1	The effect of e-portfolio assessment on EFL vocabulary learning and retention	Nourdad & Banagozar (2022)
2	The use of e-portfolio as innovative creation of EFL students in language assessment	Syatriana et al. (2025)
3	Portfolios as learning and alternative-assessment tools in EFL context: A review	Cong-Lem (2019)
4	Designing an e-portfolio framework for academic writing of second language learners	Ngui et al. (2019)
5	E-portfolio in higher education: A review of the literature	Barrot (2021)

2. Literature Review

2.1.E-Portfolios for Learner Autonomy and Metacognitive Development

One of the most consistently cited benefits of e-portfolios is their capacity to promote learner autonomy and self-regulated learning. Through ongoing documentation and reflection, students are empowered to monitor their progress, set goals, and make learning decisions (Barrett, 2005). The interactive nature of e-portfolios facilitates the development of metacognitive awareness, encouraging students to engage in self-evaluation and iterative revision (Chau & Cheng, 2010). Studies by Pardo (2021) and Ngui et al. (2019) emphasize that students using e-portfolios reported higher levels of self-confidence and control over their language learning, particularly when supported with scaffolded reflection prompts and timely feedback.

2.2.Writing Skills, Feedback, and Reflective Practice

E-portfolios have been widely adopted in EFL writing instruction as tools to support drafting, revision, and peer or teacher feedback (Cong-Lem, 2019; Lam, 2018). The visibility of students' writing progress across time makes the writing process more transparent and formative. For instance, Syatriana et al. (2025) found that students using Google Sites for portfolio writing were better able to organize their thoughts, reflect on grammar accuracy, and respond to commentary, leading to measurable improvements in coherence and complexity. Likewise, studies by Wang & Jeffrey (2017) and Barrot (2021) highlight how integrating multimedia components, such as videos, audio reflections, and visual organizers, enhanced students' reflective thinking and increased their motivation to revise and improve their work.

2.3.Vocabulary Acquisition and Assessment Outcomes

Another growing strand of research investigates the impact of e-portfolio assessment on vocabulary learning and retention. Sharifi et al. (2017) and Nourdad & Banagozar

(2022) conducted experimental studies showing that learners in e-portfolio-integrated classrooms significantly outperformed control groups in both immediate post-tests and delayed assessments. These findings suggest that portfolios, by requiring repeated exposure, context-rich usage, and self-review, enhance vocabulary depth and retention. Moreover, vocabulary learning through portfolios aligns with principles of formative assessment and constructivist language learning, providing learners with meaningful and personalized encounters with target words (Gonzalez, 2009).

2.4. Digital Integration and Pedagogical Transformation

The shift from traditional paper-based portfolios to digital platforms such as Mahara, Google Sites, or institutional LMS has transformed how portfolios are used in language classrooms. E-portfolios are no longer mere repositories but function as living spaces for formative assessment, feedback cycles, and project-based learning (Blannin et al., 2020; Yastibas & Yastibas, 2015). The literature points to how digital portfolios support multimodal communication, learner creativity, and task authenticity (Afrianto, 2017; Charteris et al., 2022). However, several studies also note challenges such as technological access, student training, and assessment reliability (Mahasneh, 2020; Ngui et al., 2019). These highlight the need for well-designed guidelines and teacher facilitation to ensure effective implementation.

Figure 1 illustrates the interconnected pedagogical dimensions of e-portfolios in EFL learning, based on the thematic categories synthesized in this review. At the center lies the e-portfolio as a multimodal learning and assessment tool, surrounded by four key domains: autonomy and metacognitive development, writing skills and feedback integration, vocabulary acquisition and formative assessment, and digital reflection practices. These domains collectively contribute to enhanced language proficiency and the transformation of traditional assessment paradigms.

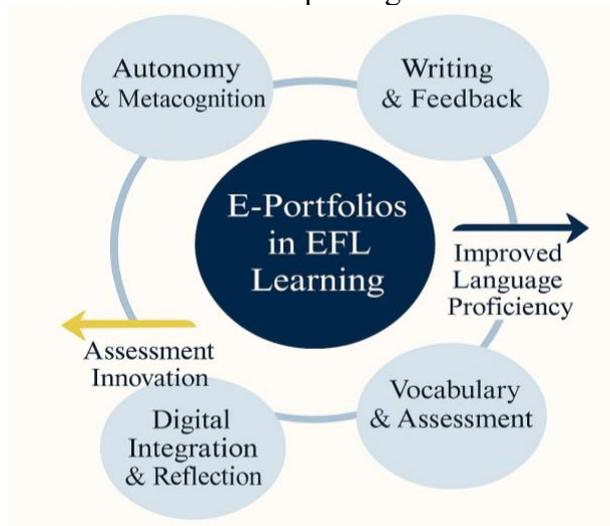


Figure 1. Pedagogical dimensions of e-portfolios in EFL education.

3. Research Method

3.1. Research Design

This study employed a qualitative systematic literature review to investigate the pedagogical impacts and assessment innovations of e-portfolios in English language learning. The review followed a simplified PRISMA-based approach, covering five stages: database selection, keyword search, screening, eligibility assessment, and thematic synthesis. The focus was to generate integrative insights from relevant and recent empirical studies.

3.2.Data Sources and Search Strategy

Relevant studies were retrieved from Google Scholar databases, selected for their comprehensive coverage of education and applied linguistics research. The Boolean search string used was: “e-portfolio” OR “electronic portfolio” AND (“EFL” OR “English language learning”) AND (assessment OR pedagogy OR writing OR vocabulary OR reflection). The search was limited to peer-reviewed journal articles published between January 2020 and April 2025, written in English, and specifically situated within EFL/ESL instructional contexts.

3.3.Inclusion and Exclusion Criteria

Studies were included in this review if they met the following conditions: (1) conducted in EFL or ESL educational settings, (2) reported empirical data using qualitative, quantitative, or mixed-methods approaches, (3) addressed pedagogical functions, assessment design, or specific language learning outcomes, and (4) published in peer-reviewed journals between 2020 and 2025. Studies were excluded if they (1) focused on non-language education domains such as STEM, (2) were theoretical or conceptual papers without empirical data, (3) were not written in English, or (4) duplicated content already present in other included sources.

3.4.Screening Process and PRISMA Flow

Figure 2 illustrates the flow of the screening and selection process in this review. The initial search across databases identified 212 records. After duplicate removal and abstract screening, 94 full-text articles were assessed for eligibility. Following the application of inclusion and exclusion criteria, a total of 10 empirical studies published between 2020 and 2025 were selected for thematic synthesis.

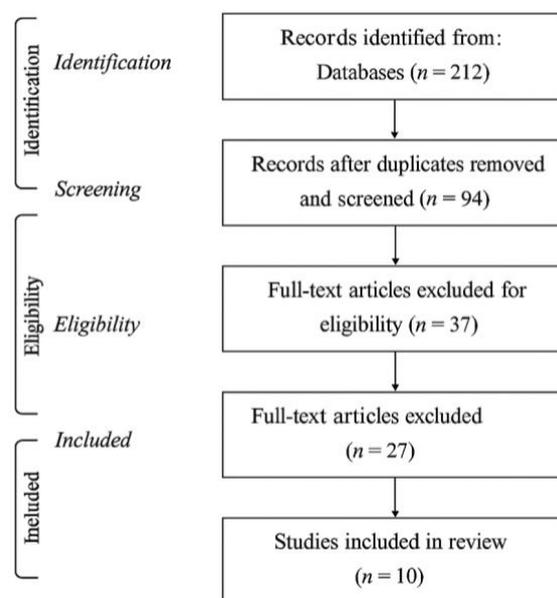


Figure 2. PRISMA flow diagram.

3.5.Data Extraction and Thematic Synthesis

Data from each selected article was extracted and synthesized using a thematic coding framework. The main focus of analysis was centered on four thematic categories: (1) learner autonomy and metacognition, (2) writing development and feedback, (3) vocabulary learning and assessment, and (4) digital integration and reflective pedagogy. For each study, relevant details such as author, year, country, educational level, research method, e-portfolio platform, and key findings were recorded. Thematic synthesis was

conducted through iterative comparison and refinement of emerging patterns, following the qualitative approach proposed by Braun & Clarke (2006).

4. Results and Discussion

4.1. Studies on E-Portfolio in EFL Education

To map the current research landscape on e-portfolio use in EFL education, Table 2 summarizes ten selected studies that reflect diverse contexts, learner levels, and methodological approaches. Most studies were conducted at the university level in Asian and African contexts, using both conventional and social-media-based platforms. Focus areas ranged from writing and vocabulary development to learner autonomy and reflective pedagogy. This synthesis confirms the pedagogical relevance of e-portfolios in supporting language acquisition, feedback cycles, and student engagement while highlighting gaps in speaking, grammar, and long-term retention. These themes are elaborated in the subsequent sections.

Table 2. Overview of reviewed studies on e-portfolio in EFL education.

No	Author(s) & Year	Country	Level of Education	Focus Area	Method	E-Portfolio Tool	Key Findings
1	Nourdad & Banagozar (2022)	Iran	Secondary	Vocabulary & Retention	Experimental	WhatsApp & Shad	E-portfolio improved vocabulary learning and delayed retention.
2	Cong-Lem (2019)	Vietnam	University	Writing & Feedback	Mixed	Mahara	Students improved revision behavior and valued teacher feedback.
3	Syatriana et al. (2025)	Indonesia	University	Writing, Creativity	Qualitative	Google Sites	Boosted writing fluency, self-confidence, and creativity.
4	Ngui et al. (2019)	Malaysia	University	Autonomy, Academic Writing	Theoretical	Not specified	Proposed framework for portfolio use to promote autonomy
5	Barrot (2021)	Philippines	Higher Ed	Digital Literacy, Reflection	Review	Mixed	Synthesized literature on digital portfolio use across Southeast Asia.
6	Ali et al. (2023)	Indonesia	University	Reflection & Creativity	Qualitative	Google Form, WhatsApp	Developed e-portfolio for chemistry teaching; emphasized

7	Lu (2021)	United States	College	Autonomous Learning	Review	Web-based e-portfolio	reflection and creativity. Promoted autonomous learning through reflective portfolios
8	Ngui et al. (2022)	Malaysia	University	Academic Writing	Framework Design	Digital e-portfolio system	Designed e-portfolio assessment framework to support academic writing.
9	Farrell (2020)	Ireland	University	Instructional Challenges	Review	Student Progress Portfolio	Identified challenges in student engagement and instructional support for portfolio use
10	Barbera (2009)	Barcelona	University	Writing Performance & Engagement	Quasi-Experimental	Netfolio	Improved writing skills and learner engagement via social media integration

4.2. Promoting Learner Autonomy and Metacognitive Skills

Across the reviewed studies, e-portfolios consistently support the development of learner autonomy and self-regulation. In particular, reflective components embedded in platforms such as Google Sites or web-based journals encouraged students to monitor their own progress and plan for improvement (Lu, 2021; Ngui et al., 2019). These findings align with Pardo (2021), who emphasizes that metacognitive engagement is enhanced when learners are tasked with curating and analyzing their own work. Furthermore, e-portfolios shift the locus of control from teacher to student, creating space for goal-setting and personal accountability.

4.3. Enhancing Writing Performance through Feedback and Revision

Writing development emerged as the most recurrent focus, with multiple studies reporting improved organization, coherence, and revision practices. E-portfolio integration enabled students to visualize writing growth and respond more effectively to feedback cycles (Cong-Lem, 2019; Syatriana et al., 2025). These outcomes are echoed in Barrot (2021), who notes that feedback-rich portfolios promote deeper engagement with revision. Moreover, writing portfolios democratizes assessment by valuing process over product, aligning with Moya & O' Malley's (1994) early advocacy of performance-based evaluation.

4.4. Facilitating Vocabulary Retention through Formative Assessment

The use of portfolios in vocabulary instruction has shown strong results, particularly in enhancing long-term retention. In Nourdad & Banagozar's (2022) quasi-experimental study, students who used e-portfolios outperformed peers in delayed post-tests. This reinforces prior findings by Sharifi et al. (2017), suggesting that regular vocabulary recycling and contextualization hallmarks of portfolio work enhance both accuracy and depth. These practices are consistent with constructivist approaches to language learning, where meaning is constructed through active, personalized use.

4.5. Integrating Digital Literacies and Reflective Pedagogy

Beyond content mastery, portfolios served as effective tools for building digital literacies and promoting reflective pedagogy. Digital platforms such as Facebook and WhatsApp, though informal, provided accessible spaces for student creativity and multimodal expression (Ali et al., 2023; Barrot, 2021). In line with Gonzalez (2009), these tools enable authentic audience engagement, reinforcing motivation. However, some studies caution that without adequate teacher guidance, digital portfolios may become mere repositories rather than reflective learning tools (Mahasneh, 2020).

5. Conclusion

This systematic review examined the pedagogical impacts and assessment innovations associated with the use of e-portfolios in English language learning. Synthesizing findings from ten recent studies, the review confirms that e-portfolios serve as more than just digital storage spaces; they function as dynamic tools that support formative assessment, reflective practice, and learner-centered pedagogy. The four key themes identified—autonomy and metacognition, writing and feedback, vocabulary learning and retention, and digital reflection practices, demonstrate that e-portfolios enhance engagement, performance, and critical thinking. Moreover, the integration of e-portfolios transforms assessment from a summative endpoint to a continuous, developmental process. Despite these benefits, gaps remain in the literature regarding the use of e-portfolios for grammar instruction, oral communication, and long-term learning outcomes. Additionally, there is a need for research on large-scale implementation, especially in secondary education and under-resourced contexts. Future research should explore these gaps and investigate how e-portfolios can be scaled for broader institutional adoption. Educators are also encouraged to adopt structured e-portfolio frameworks that integrate clear reflection prompts, consistent feedback cycles, and flexible digital platforms tailored to learner needs.

Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this article.

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Author Contributions

Elmiati: Conceptualization, initial draft writing, methodology, data collection, editing, and revision.

References

- Afrianto, A. (2017). Challenges of using portfolio assessment as an alternative assessment method for teaching English in Indonesian schools. *International Journal of Educational Best Practices*, 1(2), 106. <https://doi.org/10.31258/ijebp.v1n2.p106-114>
- Ali, R. M., Hastuti, D., Azhari, A., & Biddinika, M. K. (2023). *Training Abroad on Developing E-portfolio for Thai Teachers: Lessons Learned*. 319–328.
- Barbera, E. (2009). Mutual feedback in e-portfolio assessment: An approach to the netfolio system. *British Journal of Educational Technology*, 40(2), 342–357. <https://doi.org/10.1111/j.1467-8535.2007.00803.x>
- Barrett, H. C. (2005). White paper: Researching electronic portfolios and learner engagement. *The REFLECT Initiative*, 1–25.
- Barrot, J. S. (2021). Effects of Facebook-based e-portfolio on ESL learners' writing performance. *Language, Culture and Curriculum*, 34(1), 95–111. <https://doi.org/10.1080/07908318.2020.1745822>
- Blannin, J., Mahat, M., Cleveland, B., Morris, J. E., & Imms, W. (2020). Teachers as Embedded practitioner-researchers in innovative learning environments. *Center for Educational Policy Studies Journal*, 10(3), 99–116. <https://doi.org/10.26529/cepsj.887>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Charteris, J., Smardon, D., & Kemmis, S. (2022). Leadership in the built spaces of innovative learning environments: Leading change in people and practices in the perfectly self-managing society. *Studies in Continuing Education*, 44(2), 212–231. <https://doi.org/10.1080/0158037X.2021.1928051>
- Chau, J., & Cheng, G. (2010). Towards understanding the potential of e-portfolios for independent learning: A qualitative study. *Australasian Journal of Educational Technology*, 26(7), 932–950. <https://doi.org/10.14742/ajet.1026>
- Cong-Lem, N. (2019). Portfolios as learning and alternative-assessment tools in EFL context: A Review. *Computer-Assisted Language Learning Electronic Journal*, 20(2), 165–180.
- Farrell, O. (2020). From portafoglio to eportfolio: The evolution of portfolio in higher education. *Journal of Interactive Media in Education*, 2020(1), 19. <https://doi.org/10.5334/jime.574>
- Goldsmith, D. J. (2007). Enhancing learning and assessment through e-portfolios: A collaborative effort in Connecticut. *New Directions for Student Services*, 2007(119), 31–42. <https://doi.org/10.1002/ss.247>
- Gonzalez, J. A. (2009). Promoting student autonomy through the use of the European language portfolio. *ELT Journal*, 63(4), 373–382. <https://doi.org/10.1093/elt/ccn059>
- Hyland, K., & Hyland, F. (2019). Contexts and issues in feedback on L2 writing. In K. Hyland & F. Hyland (Eds.), *Feedback in Second Language Writing* (2nd ed., pp. 1–22). Cambridge University Press. <https://doi.org/10.1017/9781108635547.003>
- Lam, R. (2018). Promoting self-reflection in writing: A showcase portfolio approach. In A. Burns & J. Siegel (Eds.), *International Perspectives on Teaching the Four Skills in ELT* (pp. 219–231). Springer International Publishing. https://doi.org/10.1007/978-3-319-63444-9_16
- Lorenzo, G., & Ittelson, J. (2005). An overview of e-portfolios. *Educause Learning Initiative*, 1(1), 1–27.
- Lu, H. (2021). Electronic portfolios in higher education: A Review of the literature. *European Journal of Education and Pedagogy*, 2(3), 96–101. <https://doi.org/10.24018/ejedu.2021.2.3.119>
- Mahasneh, O. M. K. (2020). A proposed model for the university students' e-portfolio. *Journal of Education and E-Learning Research*, 7(1), 28–33. <https://doi.org/10.20448/journal.509.2020.7.1.28.33>
- Moya, S., & O' Malley, J. M. (1994). A portfolio assessment model for ESL. *The Journal of Educational Issues of Language Minority Students*, 13, 13–36.

- Ngui, W., Pang, V., & Hiew, W. (2022). E-portfolio as an academic writing assessment tool in higher education: Strengths and challenges. *Indonesian Journal of Applied Linguistics*, 12(2), 556–568. <https://doi.org/10.17509/ijal.v12i2.40122>
- Ngui, W., Pang, V., Hiew, W., & Tan, C. K. (2019). Designing an e-portfolio framework for academic writing of second language learners. *International Journal of Language Education and Applied Linguistics*, 09(2), 1–13. <https://doi.org/10.15282/ijleal.v9.2065>
- Nourdad, N., & Banagozar, M. A. (2022). The effect of e-portfolio assessment on EFL vocabulary learning and retention. *Indonesian Journal of Applied Linguistics*, 12(2), 466–475. <https://doi.org/10.17509/ijal.v12i2.44232>
- Pardo, M. A. R. (2021). Fostering language and vocabulary in international business students thorough an e portfolio. *South Florida Journal of Development*, 2(2), 3068–3085. <https://doi.org/10.46932/sfjdv2n2-147>
- Reese, M., & Levy, R. (2009). Assessing the future: E-portfolio trends, uses, and options in higher education. *ECAR Research Bulletin*, 2009(4), 1–12.
- Rhodes, T. L. (2010). Making learning visible and meaningful through electronic portfolios. *Change: The Magazine of Higher Learning*, 43(1), 6–13. <https://doi.org/10.1080/00091383.2011.538636>
- Sharifi, M., Soleimani, H., & Jafarigohar, M. (2017). E-portfolio evaluation and vocabulary learning: Moving from pedagogy to andragogy. *British Journal of Educational Technology*, 48(6), 1441–1450. <https://doi.org/10.1111/bjet.12479>
- Syatriana, E., Saiful, S., Ariana, A., & Dzilarsy, A. (2025). The use of e-portfolio as innovative creation of EFL students in language assessment. *International Journal of Language Education*, 9(1), 101–113. <https://doi.org/10.26858/ijole.v1i1.71706>
- Wang, P., & Jeffrey, R. (2017). Listening to learners: An investigation into college students' attitudes towards the adoption of e-portfolios in English assessment and learning. *British Journal of Educational Technology*, 48(6), 1451–1463. <https://doi.org/10.1111/bjet.12513>
- Yastibas, A. E., & Yastibas, G. C. (2015). The use of e-portfolio-based assessment to develop students' self-regulated learning in english language teaching. *Procedia - Social and Behavioral Sciences*, 176, 3–13. <https://doi.org/10.1016/j.sbspro.2015.01.437>