

## 55. A literature review on e-portfolios in teaching writing in English as a foreign language classes

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### Abstract

Electronic Portfolios have been widely used for monitoring the progress and achievements of EFL learners as they present a systematic collection of students' tasks and performances. Particularly during and after the Covid-19 pandemic process, the majority of the educational institutions converted their foreign language teaching models and integrated digital platforms into their teaching programs. With the acceleration of the digitalisation process, e-portfolios have emerged as an alternative to traditional portfolios for monitoring and storing the students' works. The current paper aims to review the literature on e-portfolios for writing skills in the EFL context. The present review focuses on the effects of e-portfolios on students' motivation and success, technological requirements and challenges, limitations of e-portfolios, and perceptions of students and teachers/instructors. Depending on the studies reviewed, the paper concludes that e-portfolios affect students' attitudes toward writing tasks; it increases their motivation and develops writing skills. On the other hand, e-portfolios have some limitations, and they might require certain technological competencies from the instructors' perspective and call for training both for learners and instructors.

**Keywords:** Electronic Portfolio, Writing Skill, English as a Foreign Language

## Yabancı dil olarak İngilizce derslerinde yazma öğretiminde e-portfolyo kullanımını üzerine bir literatür taraması

### Öz

Elektronik Portfolyolar, öğrencilerin çalışma ve performanslarının sistematik bir koleksiyonunu sundukları için İngilizce öğrenenlerin ilerlemesini ve başarılarını izlemek için yaygın olarak kullanılmaktadır. Özellikle Covid-19 pandemi süreci ve sonrasında eğitim kurumlarının büyük çoğunluğu yabancı dil öğretim modellerini dönüştürerek dijital platformları öğretim programlarına entegre etmiştir. Dijitalleşme sürecinin hızlanmasıyla birlikte öğrencilerin eserlerinin izlenmesi ve saklanması için geleneksel portfolyolara alternatif olarak e-portfolyolar ortaya çıkmıştır. Bu makale, yabancı dil olarak İngilizce öğretimi (EFL) bağlamında yazma becerileri için e-portfolyolar hakkındaki literatürü gözden geçirmeyi amaçlamaktadır. Mevcut inceleme, e-portfolyoların

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öđrencilerin motivasyonu ve başarısı üzerindeki etkileri, teknolojik gereksinimler ve zorluklar, e-portföylerin sınırlılıkları ve öđrencilerin ve öđretmenlerin/eđitmenlerin algıları üzerindeki etkilerine odaklanmaktadır. İncelenen çalıřmalara bađlı olarak, e-portfolyoların öđrencilerin yazma görevlerine yönelik tutumlarını ve motivasyonlarını olumlu etkilediđi sonucuna ulařılmıřtır; öte yandan, e-portfolyoların bazı sınırlılıklarının bulunduđu ve eđitmenler ađısından belirli teknolojik yeterlilikler gerektirdiđi ve hem öđrenciler hem de eđitmenler için eđitimlerin gerekli olabileceđi sonuçlarına ulařılmıřtır.

**Anahtar kelimeler:** Elektronik Portfolyo, Yazma Becerisi, Yabancı Dil Olarak İngilizce

## Introduction

Portfolio assessment is becoming a viable alternative to traditional evaluation in writing classrooms (Fahim & Jalili, 2013). Writing is one of the productive foreign language skills. Writing grants EFL students the chance to advance their language learning (Bello, 1997). A learner's processes in developing writing skills are quite different from the other skills. Writing in a foreign language is more intimidating than speaking in that learners do not have to worry about misspelling a foreign word, and they have the chance to practice writing in English well before they begin speaking in the target language. Moreover, it plays a significant function in stimulating thought, focusing, and organising their ideas (Rao, 2005). By enhancing their writing abilities, EFL learners achieve success in the English learning process and in their lifelong learning and professions (Wilson and Glazier, 1994).

Barrett and Knezek (2003) assert that both e-portfolios and paper portfolios are based on the same conceptions of goal, teaching, and assessment. Considering these perspectives, the presentation of the studies in the related literature includes the definition and role of portfolios in general, then the concept of e-portfolios, studies on e-portfolios, and the effects of e-portfolios on the writing performances of learners. Following these aspects, the review presents studies on the challenges faced by the practitioners and the limitations of the e-portfolios. This will be followed by an in-depth discussion of electronic portfolios, including how they vary from traditional portfolios, their advantages, and their usage difficulties.

## Portfolio

A portfolio, according to Jones (2013), is a case for storing files that are intended to showcase or represent something or someone. Portfolios are created to contain actual samples or representations of our students' work. In the simplest terms, a portfolio is a collection of evidence that demonstrates a person's learning journey over time and their talents. Portfolios can be discipline-specific or quite comprehensive, including a person's lifelong learning. Numerous types of evidence can be included in a portfolio, including finished and unfinished writing samples, images, films, research projects, observations and assessments of supervisors, mentors, and peers, and reflective thoughts about all of these. In point of fact, one of the most important aspects of a portfolio is the remarks that are made about the pieces of evidence, the reasons why they were chosen, and the insights that the person who built the portfolio obtained from them (Abrami & Barrett, 2005; Loughran & Corrigan, 1995; Smith & Tillema, 2003; Wade & Yarbrough, 1996). Those who are putting up portfolios are therefore taking an active role in their own education (Wade, Abrami, & Selater, 2005). In addition to this, Kimball (2005) suggests that "Without a solid basis in reflection, neither gathering nor selecting things to be included in a portfolio are effective learning tasks. The entire pedagogy of the portfolio is based on the practice of

reflection “. In addition, portfolios evaluate learning and progress throughout time (Challis, 2005), and learning occurs during the portfolio-building process instead of the portfolio’s final result (Smith & Tillema, 2003). Portfolios can be created for a range of attributes, including learning, professional development, evaluation, job applications and promotions, and for various audiences, including instructors, mentors, employers, and the creator. Portfolios are a form of alternative assessment to traditional summative tests used in higher education to track students’ intellectual development (Chang, 2001; Smith & Tillema, 2003; Smits et al., 2005; Wade et al., 2005). Some people (Abrami & Barrett, 2005; Chang, 2001; Kimball, 2005; Loughran & Corrigan, 1995; Ma & Rada, 2005) believe that these types of assessments are more “authentic” because they include several pieces of data, exhibit reasoning progress, and more accurately represent student skills.

### **e-portfolio**

The development of internet technology has accelerated the process of using e-portfolios. Norton and Wiburg (1998) described s portfolio as “a methodical and selected collection of student studies that has been created to reflect the student’s motivation, academic development, and level of success”. Unlike the traditional paper portfolios, e-portfolios are kept in an electronic environment. Numerous research studies anchored on a range of learning theories have shown a number of benefits associated with the use of e-portfolios in education. As e-portfolios gain attraction as a preferred means for students to exhibit their learning and abilities, it is vital for instructors to thoroughly comprehend the benefits of e-portfolios and encourage students to create high-quality, competitive e-portfolios. (Lu, 2021).

Certain factors enable the effectiveness of using an electronic portfolio, and a number of implementation obstacles exist. Moreover, establishing an electronic portfolio system necessitates a number of pedagogical and technological concerns (Lu, 2021). On the one hand, e-portfolios are comparable to conventional portfolios that are assembled using papers and folders, but, on the other hand, they vary from portfolios based on paper. For example, students can save a wide variety of media assets in their electronic portfolios. In addition, they make it possible for students and instructors to engage with one another through the use of chat rooms, online classrooms, and discussion groups. According to Lorenzo and Ittelson (2005), electronic portfolios have six primary uses, which are more of a technology breakthrough than a philosophical one. They are utilised “1) in the planning of educational programs; 2) in the documentation of knowledge, skills, abilities, and learning; 3) in the tracking of development within a program; 4) in the search for employment; 5) in the evaluation of a course; 6) in the monitoring and evaluation of performance” (p. 2). The number of educational institutions is currently growing, and they started to use school-wide e-portfolio systems (Batson, 2002). Students need to be proficient in all four language skills before they can study a foreign language. These abilities include listening, speaking, reading, and writing. Writing is considered to be the most difficult of these abilities to acquire, despite the fact that the productive talents overall appear to be rather tough to obtain. In order to make consistent forward progress when writing, it is necessary to have a few planning techniques, and here is where the portfolio review comes into play. Students can obtain knowledge on the usage of specific pre-writing tactics and track their progress through the writing process by keeping portfolios, which lets students track their progress through the writing stages. E-portfolios are designed to be used by students as a tool for students to reflect on their own learning progress and as an alternative assessment.

For example, Mahasneh (2020) interviewed 20 educational science professionals to establish an e-portfolio model for university students and then administered a 17-item questionnaire to 90 students at a college. The interviews led to a suggested e-portfolio model with ten components: student biography,

course plan, reports and research, assignments, projects and experiments, activities, summaries and conclusions, scientific information, audio and video clips, and student performance examples (Mahasneh,2020). The questionnaire found that students generally liked the suggested model. The researchers concluded that faculty members should include students' e-portfolios in instruction. Another study that investigated e-portfolios was McKenna et al. (2017); the study offered educators helpful empirical information for contemplating the usage of e-portfolios in an educational setting. For instance, the perspectives of students and faculty outlined in this research can assist in alerting educators about some of the difficulties that may influence the use of e-portfolios to promote development in higher education.

Song (2020) evaluated e-portfolio usefulness through learners' views. This study used an online survey to collect data from 226 students. An exploratory factor analysis revealed five factors: perceived utility (PU), organisation (ORG), collaboration (COL), and evaluation (EVA) (PVL). Confirmatory factor analysis also confirmed the 5-factor solution's model fit. All independent factors, except for assessment, were positive and significant predictors of learners' PVL. The ORG variable best-predicted PVL. PU was a poorer PVL predictor.

Contreras-Higuera et al. (2015) researched university students' attitudes toward e-portfolios. The paper provided a study with two research objectives: (a) to establish university students' impressions of two integrated evaluation methods and (b) to investigate if students' perceptions of e-portfolios differed and what criteria encouraged their adoption. 247 students in Barcelona's Education Degree program completed a questionnaire. For the first goal, students saw the portfolio and rubrics separately, despite their use together. To achieve the second goal, the researchers identified four groups with distinct features. First, more teacher experience with digital portfolios; second, continual technical help; third, more weight in evaluation; and fourth, smaller class sizes.

Cote and Emmett (2015) investigated the reflection aspect from the perspectives of learners. The article explained the Virtual Learning Academy Charter School's e-portfolio system for grades 9–12. (VLACS). The use of e-portfolios at VLACS grew out of a curriculum for an Advisory course that helps students prepare for college, careers, and citizenship. VLACS is entirely web-based, providing them with a unique implementation viewpoint. The article demonstrated how e-portfolios enable VLACS students to both to reflect on their experience as learners and display academic and professional abilities.

### **e-portfolios and students' motivation**

Research indicates that the use of electronic portfolios assists students in the development of reflective learning skills as well as an improvement in their writing abilities. This is accomplished by inspiring students to enhance their writing abilities on an intrinsic level. For example, basing decisions on the knowledge obtained via the implementation of electronic portfolios inside the confines of an educational establishment.

Doig et al. (2006) conducted research to determine how best to meet the needs of students while adhering to the parameters of an effective e-learning support system. They emphasised how important it is to build abilities in reflective writing in order for the e-portfolio to be an effective instructional strategy. This is because reflective writing is at the core of the e-portfolio. They wanted to place a focus on the utilisation of e-portfolios as a tool to aid in the development of the autonomous and self-reflective learner, so they could better meet their goals. The e-portfolio system that was being evaluated at Dundee

University, which is located in Scotland, was the subject of the experience that was examined in the research. During the course of the pilot project, the participants largely consisted of two distinct student groups, and the data was analysed through the utilisation of questionnaires as well as focus groups. According to Doig et al. (2006), the use of technology in educational settings has demonstrated that it has a significant amount of untapped potential as a tool for assisting students in achieving their goals. However, it also brought to light the basic significance of students cultivating abilities in a reflection in order for them to fully assume responsibility for their learning throughout their lives. Jee (2008) had the intention of presenting a useful educational application for the use of blogs as electronic portfolios for writing. The research included four key steps for presenting blogs as writing e-portfolios and evaluating the efficacy of these e-portfolios. After having students participate in peer evaluation and collaboration through interaction on blogs, the author came to the conclusion that incorporating blogs into writing classes improved students' technology-related literacy, fostered intrinsic motivation, and motivated students to be more conscientious writers. In a different piece of research, Bacabac (2012) focused on the importance of the development of e-portfolios inside a technical writing class. In the course of his research, he intended to investigate the use of professional e-portfolios to assist students in the development of their literacies. The amount of time that students spent on all four tasks typically ranged from six to seven weeks, and this was determined by the number of students who needed individual feedback from their instructors. Bacabac (2012) discovered that as a consequence of the study, technical writing programs at the schools that participated in the study got stronger, and the graduates became more competitive. In a different piece of research, Denton (2012) examined the correlation between portfolio metadata and writing quality ratings. In his study, eleven undergraduate students participated who were enrolled in a teacher preparation program. In the first place, he evaluated each entry in the portfolio and determined the degree of connection between the quality of the writing and the metadata of the portfolio. Denton (2012) discovered that there are significant relationships between the number of phrases offered in a portfolio and the quality of the writing. He came to the conclusion that there was a discernible increase in the quality of the writing. Last but not least, because there was a lack of empirical research on the usage of e-portfolios in primary education, Nicolaidou (2013) performed a study in a primary school class of fourth-graders by having them install 20 e-portfolios. The author centred their attention on the connection between e-portfolios, peer feedback, and overall writing performance. In order to better incorporate e-portfolios into the Language Arts curriculum, he carried out a case study. He made use of a standard, open-source blogging platform. He concluded that the use of e-portfolios might help students improve their writing abilities and receive feedback from their peers.

According to research, e-portfolio initiatives that are carried out in schools boost students' motivation levels and improve their level of education. According to a study, e-portfolio initiatives that are carried out in schools boost students' motivation levels and improve their level of education. For instance, after noticing that many undergraduate students majoring in science and engineering considered their English lessons as only marginally useful and a nuisance, Tuksinvarajarn and Todd (2009) devised a plan to address the situation by introducing an electronic portfolio project. With the use of diary entries written by the instructor after each class, the authors of this study attempted to emphasise and analyse this e-portfolio project as well as take a closer look at the "e-pet." This was done in the context of this study. According to the research findings, using an e-pet was an efficient technique to stimulate and sustain student attention. In a separate piece of research, Tanaka et al. (2015) used a questionnaire to investigate how English as a foreign language (EFL) students feel about the application of Lexinote. They reasoned that students, teachers, CALL researchers and developers might all benefit from "Lexinote." Participants in the study were all learning English as a second language and were all enrolled in an

English 101 class. Tanaka et al. (2015) discovered that the participants were pleased with their progress in language acquisition. Acker and Halasek (2008) conducted another study in which they called their endeavour the “ePortfolio Project.” This was a program through which personnel from high schools and universities conducted joint research to address k–16 English language arts alignment and student success in environments designed for post-secondary education. They wanted to determine whether or not receiving constructive “eResponses” from high school and university writing teachers would enhance students’ writing and cause their production to match more closely to expectations. Forty-one children representing several school districts in the surrounding region took part in the project. Acker and Halasek (2008) utilised two different approaches to data analysis in the course of the research. These approaches included assigning numerical Likert scores to both the draft and final versions of the publications. They discovered that pupils who went from high school to college showed a considerable increase in their ability to write.

One current research that has been conducted on the impact that e-portfolios have had on the motivation of students, Akcil and Arap (2009) looked at the perspectives of students regarding the implementation of the electronic portfolios learning process. The study was carried out with the participation of education faculty students. The findings of the research demonstrated that the students have favourable attitudes towards the application of e-portfolios for educational purposes. In an Intensive English Language course, Alam and Aktar (2019) gathered qualitative data from students by having them participate in semi-structured interviews and utilising the formative portfolio assessment (FPA) approach as an intervention material. In addition, the authors utilised the FPA approach in order to evaluate the degree to which students had mastered the material covered in the course. The research concluded that giving students the option to assume a greater degree of control over the process of learning and evaluating their performance through the use of formative portfolio evaluation made it possible for students to engage in more autonomous learning. Huang et al. (2011) studied how e-portfolio satisfaction affected students’ learning motivation. The researchers collected data for three months, and 443 learners participated in the study. The results showed that learning motivation, Internet self-efficacy, and e-Portfolio satisfaction correlated positively. Learning motivation was a strong predictor of Internet self-efficacy, and Internet self-efficacy predicted e-Portfolio satisfaction.

Shroff et al. (2011) examined students’ behavioural intention to utilise an electronic portfolio system by analysing the Technology Acceptance Model (TAM). The E-Portfolio Usage Questionnaire was created using modified TAM scales. The e-portfolio system was rated as helpful (PU), easy to use (PEOU), and behavioural intention to use (BIU) by 72 participants. According to the research (ATU), perceived ease of use (PEOU) influenced students’ use attitudes, according to the study (ATU). Then, perceived ease of use (PEOU) influenced perceived usefulness the most (PU). The results supported TAM’s validity in an e-portfolio environment.

Another aspect studied in the related literature was the effect of e-portfolios in fostering reflection. In their recent study, Sultana et al. (2020) analysed how e-portfolios were used in a university undergraduate course to promote reflective thinking. The study examined the different levels of reflective thinking students acquired while working on their e-portfolios based on qualitative data from the teacher and students in the course. The researchers analysed elements that assist and impede students’ reflective thinking, how to enable facilitating aspects, and how to resolve hindering issues. The major findings underlined the teacher’s function as a learning facilitator and guide, the toolkit’s role in supporting instructors and students, and the need for technical capacity building and assistance in higher education e-portfolio deployment.

### **Effects of e-portfolios on students' overall success and writing skills**

Research indicates that using an electronic portfolio helps students make greater academic achievement. Baris and Tosun (2013) investigated the effects of e-portfolios on the achievements of students. According to the findings, the academic achievement post-test scores of students in the test group were greater than those of students in the control group. Based on these data, it was concluded that e-portfolio-supported education processes positively impacted students' achievement.

According to the findings of research conducted by Baturay and Daloğlu (2010), typical techniques of measuring student development in EFL writing lack indicators of skill progression. The researchers worked with two different groups of students during this study: the e-portfolio group and the traditional evaluation group. The e-portfolio group was comprised of students who took an online English language course. The traditional evaluation group did not keep an e-portfolio. In spite of the fact that the post-test results of the two groups did not differ from one another in a way that could be considered statistically significant, both groups showed substantial growth in their learning. According to the opinions of the students who participated in the e-portfolio study, keeping a portfolio was something that they looked forward to and found beneficial.

Another research article conducted to evaluate enhancing effects of e-portfolios on students was the research by Chang (2001). This study developed and assessed a web-based learning portfolio (WBLP) of genuine assessment in order to record, present, search, and analyse student learning process information. The findings of the system evaluation indicated that the majority of students view the system as beneficial for enhancing learning and achieving quality.

In research from Hj. Ebil et al. (2020), the researchers explored structured reflection using digital learning portfolios (e-portfolios) and their relationship to student learning. This study used mixed methods to analyse a group of students in Brunei over an eight-week period as they practised reflection using an e-portfolio. Students' Reflective Scores (SRS) were created using e-portfolio notes. Creating controlled chances to reflect and integrate learning helped students improve their ability to reflect, according to the evidence acquired. Students' reflection quality improved dramatically over time as more students used higher-order thinking in their e-portfolios. While students viewed introspection as disconnected, the intervention helped them improve their cognitive and metacognitive skills.

Nezakatgoo (2011) conducted her research with forty college students who were all enrolled in the same writing class. All of the students who participated were given a random assignment to one of two groups: the experimental group or the control group. The findings of the study showed that students whose work was evaluated by an electronic portfolio system had improved their writing abilities and obtained higher scores on the final assessment. The outcomes of the study underlined the fact that portfolio assessment might be utilised as a complementary option to conventional assessment in order to offer fresh insight into the process of writing.

Nicolaidou (2013) implemented e-portfolios to assist students in chronicling their progress and give peer comments. Data sources comprised 176 student essays, 1306 peer reviews, pre-and post-writing assessments, nine recorded student interviews, and one instructor interview. Quantitative data analysis demonstrated a statistically significant difference between students' pre-and post-test writing skills. A qualitative study of student comments indicated that students increasingly gave more extensive and remedial peer critique. In addition, students enjoyed peer input on their e-portfolios. The study

concluded that e-portfolios could improve students' writing proficiency and peer feedback skills. Implementing portfolios has instructional consequences.

Wanchid and Charoensuk (2015) investigated the impact of paper-based and weblog-based electronic portfolios on low English proficiency students' writing achievement; they explored the students' views on portfolio assessment and compared the control and experimental groups' perceptions. Sixty participants took part in the study. Students used a digital platform to create e-portfolios. At the outset of the course, both the control and experimental groups were instructed on portfolios and their aims, contents, and assessment criteria. Quantitative data came from a writing exam and a closed-ended questionnaire, while qualitative data came from open-ended questions, interviews, and reflection. The findings of the study demonstrated that the usage of weblog-based electronic portfolios for language learning and evaluation showed some promising outcomes.

Yang et al. (2015) analysed how e-portfolios assist formative learning. Interviews with first-year undergraduates at a university revealed their experiences using e-portfolios as evaluation assignments. E-portfolios were added to three first-year courses as part of a teaching and learning program. According to the findings, several conditions that are necessary to foster productive learning were lacking in the students' experiences. These conditions include: strengthening the formative role of e-portfolios through coherent assessment design; encouraging students to pursue authentic tasks to develop learning interests; engaging in reflective and self-regulative learning as an essential learning process; providing constructive feedback for sustained learning support (Yang et al., 2015). The paper offered implications for utilising information and communication technology (ICT) to support students' effective learning by explaining how the absence of these conditions hindered students' active participation in e-portfolio tasks and suggesting strategies for teachers at the institution.

### **Some concerns and limitations of e-portfolios**

Several studies suggest that, despite the presence of some obstacles, it is feasible, doable, and beneficial to deploy e-portfolios for both students. For instance, Schaffhauser (2010) collected data on the experiences of moving electronic e-portfolios to provide assistance for those who required information about e-portfolio use throughout the campus to achieve institution-wide acceptance. In addition to their favourable benefits on teaching and learning, research indicates that e-portfolios have negative consequences and limits. Hung (2012) employed an e-portfolio project as an alternative assessment tool in one study. He studied the positive and negative washback effects of e-portfolios, given that little effort had been made to find washback effects in alternative assessment tools. Reflective journals, interviews, document analysis, and observations were used to collect data. Hung (2012) showed that e-portfolio assessments facilitate learning through washback effects. On the other side, e-portfolio assessments resulted in adverse washback effects such as anxiety and technological aversion. Shin (2013) wanted to analyse the limits of current e-portfolios as a research and evaluation tool in a separate study, as there had been little or no instruction on how best to use certain online resources. Shin (2013) argued that in order to make e-portfolios more useable, the assessment of language competency must be revised.

According to Cheng (2008), in order to give students the ability to design their electronic portfolios in a timely and effective manner, it is necessary to build an online platform. The purpose of this article was to investigate and analyse the real problems that various stakeholders, such as system developers and administrators, students, and teachers, encountered during the implementation of an e-portfolio system

at a University. The article painted a detailed picture of the worries that many stakeholders have expressed over the implementation of an e-portfolio system.

Kabilan and Khan (2012) examined the benefits and challenges of adopting an e-portfolio for learning and self-assessment. Participants valued e-portfolios because they could track their progress over time. On the other hand, validity and dependability, intermittent Internet, unfavourable participant attitudes, time limits, workload, and ethics were identified as challenges. The study highlighted six competencies regarding teachers' e-portfolio practices: (1) recognising an effective teacher's role; (2) designing teaching approaches/activities; (3) enhancing language abilities; (4) grasping topic knowledge; (5) obtaining ICT skills; and (6) realising the need to alter attitudes.

Meyer et al. (2011) investigated the technical obstacle that the practitioner might face. The article reported on a study of 16 elementary classes throughout Canada that used an e-portfolio. Data were collected in order to investigate how educators utilised e-portfolios in their classes, how they incorporated them into practice, and the factors influencing their utilisation. This was accomplished through the use of a mixed-methods research strategy. Those that had a low rate of implementation faced major technical challenges and/or were unwilling to modify their well-established procedures. High implementers, on the other hand, claimed that they felt supported by their administration, that they were advancing in their teaching practice, and that they were adopting more pedagogical approaches that encourage self-regulated learning due to the scaffolding provided by the program.

Another research article highlighting the necessity of support for schools and teachers was conducted by Theodosiadou and Konstantinidis (2015). The study included 14 students, and one of the researchers was their usual instructor. The e-portfolio was recognised as a great assessment tool and a challenge for the school community. The authors offered advice based on their own e-portfolio implementation experience to help researchers and primary school teachers adopt and develop e-portfolio systems in their own contexts.

## **Conclusion and discussion**

The purpose of this research is to make a contribution to the existing body of knowledge and offer new perspectives on the use of electronic portfolios in the context of the instruction of writing in EFL settings. The process of reviewing, comprehending, and assessing the many aspects of the problems may give light to the manner in which implementations evolve, develop, and integrate with one another. According to Abhakorn (2014), the use of e-portfolios incorporates the potential to expand the teaching of writing skills and track the development of the learners. In addition, the usage of e-portfolios enables the sharing of work among students. On the other hand, in order to make successful use of e-portfolios, it is necessary to offer support to both individual practitioners and institutions.

From the research studies presented here, several significant inferences might well be formed. E-portfolios have been shown to improve students' reflective learning and writing abilities, which has been the primary focus of research into the implementation of e-portfolios in English language teaching (ELT) classrooms. In addition, it can be concluded it is possible to boost student interest in learning if there are initiatives in place that call for the use of electronic portfolios as a requirement for participation. Second, in terms of the challenges presented by technology, some studies focus on the development of students' digital abilities, while others are interested in the process of creating an e-portfolio, which needs students to use complex learning strategies. At this point, the current review has similar

conclusions with Aygün and Aydın (2006), who also concluded that the development of user-friendly e-portfolio platforms is essential for the efficient design and development of e-portfolios in the context of language acquisition. Along with student use, research on the use of e-portfolios by pre-service instructors reveals the facilitative influence of e-portfolios on-campus instructional methods and research.

E-portfolios have been shown by various researchers to have both positive and unfavourable implications for teaching and learning, despite the fact that e-portfolios offer a number of advantages. For example, the review of students' e-portfolios might produce anxiety in some types of learning environments. This could be due to the fact that some students may have a low tolerance for technology or experience. In addition, there has been little guidance provided on how to utilise e-portfolios as instruments for evaluation and research; hence the usage of these portfolios looks to be limited for certain users.

It is possible to make recommendations based on the contributions that e-portfolios have made to EFL writing. E-portfolios should be included in educational settings as early as possible since technology has become an inseparable component of modern life, and educational institutions from varying levels have initiated the process of transforming their teaching and learning settings into models which are enriched and supported by digital platforms. Second, in order to create an e-portfolio, students need to be able to demonstrate that they have mastered complex learning strategies as well as basic computer skills. It could be recommended that the practitioners receive training and be provided with models in order to facilitate the use of e-portfolios. Thirdly, because writing is the most difficult skill to master and is demotivating for the majority of students, encouraging slow learners and introverts to maintain e-portfolios can boost EFL writing success. Fourth, utilising e-portfolios might be appealing for the majority of the students as they involve technology. Modern students might feel motivated to write more if they become aware of the opportunities and contributions of using e-portfolios for educational purposes such as monitoring their progress and keeping the record of their studies at hand in a digital form.

### References

- Abhakorn, M. J. (2014). Investigating the Use of Student Portfolios to Develop Students' Metacognition in English as a Foreign Language Learning. *Journal of Language Teaching and Research*, 5(1). <https://doi.org/10.4304/jltr.5.1.46-55>
- Abrami, P., & Barrett, H. (2005). Directions for Research and Development on Electronic Portfolios. *Canadian Journal of Learning and Technology / La Revue Canadienne de l'apprentissage et de la Technologie*, 31(3). <https://doi.org/10.21432/t2rk5k>
- Acker, S. R., & Halasek, K. (2008). Preparing High School Students for College-Level Writing: Using ePortfolio to Support a Successful Transition. *The Journal of General Education*, 57(1), 1–14. <https://doi.org/10.2307/27798087>
- Akçıl, U., & Arap, B. (2009). The opinions of education faculty students on learning processes involving e-portfolios. *Procedia - Social and Behavioral Sciences*, 1(1), 395–400. <https://doi.org/10.1016/j.sbspro.2009.01.071>
- Alam, M. J., & Aktar, T. (2019). Assessment Challenges & Impact of Formative Portfolio Assessment (FPA) on EFL Learners' Writing Performance: A Case Study on the Preparatory English Language Course. *English Language Teaching*, 12(7), 161. <https://doi.org/10.5539/elt.v12n7p161>
- Aygün, S., & Aydın, S. (2016). The use of e-portfolios in EFL writing: a review of literature. *ELT Research Journal*, 5(3), 205-217.

- Bacabac, F. E. (2012). Creating Professional ePortfolios in Technical Writing. *Journal of Business and Technical Communication*, 27(1), 91–110. <https://doi.org/10.1177/1050651912458921>
- Baris, M. F., & Tosun, N. (2013). Influence of E-Portfolio Supported Education Process to Academic Success of the Students. *Procedia - Social and Behavioral Sciences*, 103, 492–499. <https://doi.org/10.1016/j.sbspro.2013.10.365>
- Barrett, H., & Knezek, D. (2003). E-Portfolios: Issues in Assessment, Accountability and Preservice Teacher Preparation.
- Batson, T. (2002). The Electronic Portfolio Boom: What's It All About?. *Syllabus*, 16(5), n5.
- Baturay, M. H., & Daloglu, A. (2010). E-portfolio assessment in an online English language course. *Computer Assisted Language Learning*, 23(5), 413–428. <https://doi.org/10.1080/09588221.2010.520671>
- Bello, T. (1997). Writing Topics for Adult ESL Students, Paper presented at the 31st Annual Teachers of English to Speakers of Other Language Convention, Orlando, FL, USA.
- Challis, D. (2005). Towards the mature ePortfolio: Some implications for higher education. *Canadian Journal of Learning and Technology / La Revue Canadienne de l'apprentissage et de La Technologie*, 31(3). <https://doi.org/10.21432/t2ms41>
- Chang, C. (2001). A study on the evaluation and effectiveness analysis of web-based learning portfolio (WBLP). *British Journal of Educational Technology*, 32(4), 435–458. <https://doi.org/10.1111/1467-8535.00212>
- Chang, C. C. (2001). Construction and Evaluation of a Web-Based Learning Portfolio System: An Electronic Assessment Tool. *Innovations in Education and Teaching International*, 38(2), 144–155. <https://doi.org/10.1080/13558000010030194>
- Cheng, G. (2008). Implementation Challenges of the English Language Eportfolio System from Various Stakeholder Perspectives. *Journal of Educational Technology Systems*, 37(1), 97–118. <https://doi.org/10.2190/et.37.1.h>
- Contreras-Higuera, W. E., Martínez-Olmo, F., José Rubio-Hurtado, M., & Vilà-Baños, R. (2015). University Students' Perceptions of E-Portfolios and Rubrics as Combined Assessment Tools in Education Courses. *Journal of Educational Computing Research*, 54(1), 85–107. <https://doi.org/10.1177/0735633115612784>
- Cote, K., & Emmett, T. (2015). Effective implementation of ePortfolios: The Development of ePortfolios to Support Online Learning. *Theory Into Practice*, 54(4), 352–363. <https://doi.org/10.1080/00405841.2015.1077642>
- Denton, D. W. (2012). Improving the quality of evidence-based writing entries in electronic portfolios. *International Journal of ePortfolio*, 2(2), 187–197.
- Doig, B., Illsley, B., McLuckie, J., & Parsons, R. (2006). Using ePortfolios to enhance reflective learning and development. In A. Jafari & C. Kaufman (Eds.), *Handbook of Research on ePortfolios* (158–167). Hershey, USA: Idea Group.
- Fahim, M., & Jalili, S. (2013). The Impact of Writing Portfolio Assessment on Developing Editing Ability of Iranian EFL Learners. *Journal of Language Teaching and Research*, 4(3). <https://doi.org/10.4304/jltr.4.3.496-503>
- Groot, R., Smits, M., & Kuipers, H. (2005, January). A Method to Redesign the IS Portfolios in Large Organisations. In *Proceedings of the 38th Annual Hawaii International Conference on System Sciences* (pp. 223a–223a). IEEE.
- Hj. Ebil, S., Salleh, S. M., & Shahrill, M. (2020). The use of E-portfolio for self-reflection to promote learning: a case of TVET students. *Education and Information Technologies*, 25(6), 5797–5814. <https://doi.org/10.1007/s10639-020-10248-7>

- Huang, J. J., Yang, S. J., & Chang, M. C. (2011). The Effect of ePortfolio Satisfaction on Students' Learning Motivation and Internet Self-efficacy. *Journal of Educational Technology Development and Exchange*, 4(1). <https://doi.org/10.18785/jetde.0401.09>
- Hung, S. T. A. (2012). A washback study on e-portfolio assessment in an English as a Foreign Language teacher preparation program. *Computer Assisted Language Learning*, 25(1), 21–36. <https://doi.org/10.1080/09588221.2010.551756>
- Jee, M. J. (2008). Using blogs as ePortfolios in ESL/EFL writing classes. *SLWIS News*, 3(2), 1-9.
- Jones, E. (2013). Practice-based evidence of evidence-based practice: professional practice portfolios for the assessment of work-based learning. *Quality in Higher Education*, 19(1), 56–71. <https://doi.org/10.1080/13538322.2013.772467>
- Kabilan, M. K., & Khan, M. A. (2012). Assessing pre-service English language teachers' learning using e-portfolios: Benefits, challenges and competencies gained. *Computers & Education*, 58(4), 1007–1020. <https://doi.org/10.1016/j.compedu.2011.11.011>
- Kimball, M. (2005). Database e-portfolio systems: A critical appraisal. *Computers and Composition*, 22(4), 434–458. <https://doi.org/10.1016/j.compcom.2005.08.003>
- Loughran, J., & Corrigan, D. (1995). Teaching portfolios: A strategy for developing learning and teaching in pre-service education. *Teaching and Teacher Education*, 11(6), 565–577. [https://doi.org/10.1016/0742-051x\(95\)00012-9](https://doi.org/10.1016/0742-051x(95)00012-9)
- 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>
- M. K. Mahasneh, O. (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.509.2020.71.28.33>
- McKenna, G., Baxter, G., & Hainey, T. (2017). E-portfolios and personal development: a higher educational perspective. *Journal of Applied Research in Higher Education*, 9(1), 147–171. <https://doi.org/10.1108/jarhe-05-2016-0035>
- Meyer, E., Abrami, P., Wade, A., & Scherzer, R. (2011). Electronic portfolios in the classroom: factors impacting teachers' integration of new technologies and new pedagogies. *Technology, Pedagogy and Education*, 20(2), 191–207. <https://doi.org/10.1080/1475939x.2011.588415>
- Nezakatgoo, B. (2011). The Effects of Portfolio Assessment on Writing of EFL Students. *English Language Teaching*, 4(2), 231. <https://doi.org/10.5539/elt.v4n2p231>
- Nicolaidou, I. (2013a). E-portfolios supporting primary students' writing performance and peer feedback. *Computers & Education*, 68, 404–415. <https://doi.org/10.1016/j.compedu.2013.06.004>
- Nicolaidou, I. (2013b). E-portfolios supporting primary students' writing performance and peer feedback. *Computers & Education*, 68, 404–415. <https://doi.org/10.1016/j.compedu.2013.06.004>
- Norton, P. & Wiburg, K. (1998). *Teaching with technology*. Orlando, FL: Harcourt Brace College Publishers.
- Rao, Z. (2007). Training in brainstorming and developing writing skills. *ELT Journal*, 61(2), 100–106. <https://doi.org/10.1093/elt/ccm002>
- Schaffhauser, D. (2010). Hurdling toward Campuswide e-portfolios. *Campus Technology*, 24(1), 32–38.
- Shin, S. Y. (2013). Developing a framework for using E-portfolios as a research and assessment tool. *ReCALL*, 25(3), 359–372. <https://doi.org/10.1017/s0958344013000189>

- Shroff, R. H., Deneen, C. C., & Ng, E. M. W. (2011). Analysis of the technology acceptance model in examining students' behavioural intention to use an e-portfolio system. *Australasian Journal of Educational Technology*, 27(4). <https://doi.org/10.14742/ajet.940>
- Smith, K., & Tillema, H. (2003). Clarifying different types of portfolio use. *Assessment & Evaluation in Higher Education*, 28(6), 625–648. <https://doi.org/10.1080/0260293032000130252>
- Song, B. K. (2020). E-portfolio implementation: Examining learners' perception of usefulness, self-directed learning process and value of learning. *Australasian Journal of Educational Technology*, 68–81. <https://doi.org/10.14742/ajet.6126>
- Sultana, F., Lim, C. P., & Liang, M. (2020). E-portfolios and the development of students' reflective thinking at a Hong Kong University. *Journal of Computers in Education*, 7(3), 277–294. <https://doi.org/10.1007/s40692-020-00157-6>
- Tanaka, H., Yonesaka, S. M., Ueno, Y., & Ohnishi, A. (2015). An e-portfolio to enhance sustainable vocabulary learning in English. *The EuroCALL Review*, 23(1), 41. <https://doi.org/10.4995/eurocall.2015.4663>
- Theodosiadou, D., & Konstantinidis, A. (2015). Introducing E-portfolio Use to Primary School Pupils: Response, Benefits and Challenges. *Journal of Information Technology Education: Innovations in Practice*, 14, 017–038. <https://doi.org/10.28945/2158>
- Tuksinvarajarn, A., & Todd, R. W. (2009). The E-Pet: Enhancing motivation in e-portfolios. In *English Teaching Forum* (Vol. 47, No. 1, p. 22). US Department of State. Bureau of Educational and Cultural Affairs, Office of English Language Programs.
- Wade, A., Abrami, P., & Sclater, J. (2005). An Electronic Portfolio to Support Learning. *Canadian Journal of Learning and Technology / La Revue Canadienne de l'apprentissage et de La Technologie*, 31(3). <https://doi.org/10.21432/t2h30p>
- Wade, R. C., & Yarbrough, D. B. (1996). Portfolios: A tool for reflective thinking in teacher education? *Teaching and Teacher Education*, 12(1), 63–79. [https://doi.org/10.1016/0742-051x\(95\)00022-](https://doi.org/10.1016/0742-051x(95)00022-)
- Wanchid, R., & Charoensuk, V. (2015). The Effects of Paper-based Portfolios and Weblog-based Electronic Portfolios on Limited English Proficiency Students in Writing for Service Industry Course. *English Language Teaching*, 8(9). <https://doi.org/10.5539/elt.v8n9p131>
- Wilson, P., & Glazier, T. F. (2017). *The Least You Should Know About English: Writing Skills* (13th ed.). Cengage Learning.
- Yang, M., Tai, M., & Lim, C. P. (2015). The role of e-portfolios in supporting productive learning. *British Journal of Educational Technology*, 47(6), 1276–1286. <https://doi.org/10.1111/bjet.12316>