THE USE OF EPORTFOLIOS WITHIN PRE-SERVICE LANGUAGE TEACHER EDUCATION: AN EXEMPLARY IMPLEMENTATION

(Research article)

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Abstract

With rapidly evolving technology, the adaptation to new contexts of teaching and learning has moved teacher educators to rethink new ways of teaching and learning in the training of future teachers (Flores & Swennen, 2020). For example, ePortfolios, as one means of digital learning, have gained prominence in pre-service teacher education (Pegrum & Oakley, 2017). However, many ePortfolio implementations in higher education have substantially focused on the semester-long use of ePortfolios as an assessment tool in a specific course (Boulton, 2014). As the first part of a larger project examining the learning processes and personal growth of pre-service ELT teachers through their ePortfolio experiences, this paper presents a long-term implementation of ePortfolio in a pre-service language teacher education program, which has been developed considering the recent developments in teacher education literature and needs of pre-service ELT teachers of 21st century. The ePortfolio implementation provided a connective and multimodal platform in which teacher candidates present long-term evidence of their academic, pedagogical, and methodological experiences in their journey to becoming language teachers, from university to employment.

Keywords: Teacher education, Language teacher education, ePortfolios, ePortfolio implementation

1. Introduction

Electronic portfolios (ePortfolios) can be defined as "a digitized collection of artifacts including demonstrations, resources, and accomplishments that represent an individual, group or institution" (López-Crespo et al., 2022, p. 5234). Eportfolios have been increasingly used within higher education to transform teaching, learning, and assessment (Walland & Shaw, 2022). The introduction of ePortfolios into language education and teacher education is also not a recent development (Lam, 2020). The increased use of ePortfolios has been experienced in many countries in the domain of teacher education to improve quality, attain established standards, and resolve accreditation issues (Cuesta et al., 2022; Zhou, Chye, Koh, & Liu, 2013). Reflective journals have been widely used in teacher education programs including the English Language Teaching (ELT) field to support pre-service teachers' learning and reflective practices and document and describe their emerging skills and competence as a teacher (Ayan & Seferoglu, 2011; Oakley, Pegrum, & Johnston, 2014). Research has indicated that pre-service teachers who successfully adopt ePortfolios are more likely to establish links between learning attained at university and skills developed in teaching practice (Young, 2008). They allowed pre-service teachers to improve their higher-order thinking skills and develop their reflection competencies (Beck & Bear, 2009) as well as being adopted as an

important assessment tool (Ayan & Seferoglu, 2011; Silva, Delaney, Cochran, Jackson, & Olivares, 2015; Xerri & Campell, 2016). Taking up the opportunities offered by technologies, ePortfolios eliminated the need for hard copies and facilitated communication and peer review between students and teachers (Wray, 2007). However, a literature search found rare evidence of the implementation of ePortfolios as program-wide tools and the continuation of ePortfolio from university into employment. ePortfolios have been implemented in practical education settings including language education to have students compile their multimodal artifacts and reflect on them during their learning process (Lam, 2020; Yancey, 2019). For example, one of the main suggestions which is expected for language teachers in terms of using ePortfolios in language education has been to familiarize themselves with recent e-assessment tools for effectively implementing the ePortfolio approach (Cummins & Davense, 2009; Lam, 2020). Thus, to make novice teachers ready for today's approaches, we need to reshape the content of teacher education programs in which teacher candidates already experience the use of digitally enriched ePortfolios, their use for their own assessment and self-reflection then they can implement ePortfolios in language education with their future language learners.

Without ignoring the essential key functions of ePortfolio implementation in teacher education programs - "exposure, reflective, social, and assessment" (Karsenti, Dumouchel, & Collin, 2014, pp. 3487-3488) and following the suggestions of Boulton (2014) in her own long-term implementation, the development of this project is based on the idea that learning to teach is a process in which teacher candidates can grow professionally through continuous reflection on their practice and progress. The design and use of ePortfolios therefore should be a learning journey that provides opportunities to improve the teaching practices of pre-service teachers in becoming digitally competent teachers of the current century (Boulton, 2014). Following a design-based research as a research methodology, this study aimed to develop an innovative ePortfolio design and to examine the learning and personal growth of the student ELT teachers through the use of e-portfolios in a small-scale study. This present paper presents only the three-year-long design and implementation process of the larger ePortfolio project that was developed for pre-service English language teachers at a teacher education program in which teacher candidates have had an opportunity to document their journey to becoming language teachers. Under the guidance of the teacher educators, pre-service teachers constructed their ePortfolios using web design tools (WordPress and Weebly) and used them for the four-year duration of their coursework in the program and thereafter to enhance their learning process with the transition from university to employment. This project also aimed to turn the finalized ePortfolio into a detailed online resume for candidates in their induction as beginning teachers to exhibit their professional development, knowledge, and skills to different audiences in the job market. The practical implementation described in this paper in the light of relevant literature is valuable for pre-service teacher education programs as it provides evidence of the attainment and integration of 21st-century teaching standards and competencies in 21st-century language teacher education and serves as an implemented model in the process of building new teacher identities through ePortfolios.

2. Literature Review: Rationale Behind the Implementation

As clearly described in the 21st-century learning skills, it is important for any individual, especially for an educator to gain innovative teaching and technological skills (Partnership for 21st Century Learning Skills, 2019; Mutton, 2020). The work of teachers is especially characterized by a wide range of tasks and activities to be practiced and acquired during pre-service education years and with professional development, all of which requires a process in which teacher candidates grow professionally through continuous reflection on their and others' practice and progress. Serving this purpose, ePortfolios have been implemented in

teacher education mostly as digital dossiers in which students compiled and reflected upon multimodal artifacts for the purpose of reviewing their learning journey (Yancey, 2019). In teacher education programs, widespread implementations of ePortfolios have been experienced to improve pre-service teachers' higher-order thinking skills and their reflection competencies (e.g., Oakley et al., 2014; Tobias, 1994); to practice an alternative assessment method (e.g., Granberg, 2010; Zellers & Mudrey, 2007), to document their learning from a specific course or courses (Wray, 2007), and practice dialogic communication and constructive feedback in collaborative online learning setting (e.g., Ehiyazaryan-White, 2012; Tang & Lam, 2014). Following a similar purpose of promoting student teacher's professional growth through reflection and dialogue, The European Center for Modern Languages of the Council of Europe developed the European Portfolio for Student Teachers of Languages (EPOSTL) to encourage students to reflect on their awareness and competences, to prepare them for their future profession in various teaching contexts, and to promote discussions between students, teachers, and mentors (Council of Europe, 2022). The content of the EPOSTL is structured in three main sections, which are a personal statement section, a self-assessment section, and a dossier. The personal statement section helps students reflect on general questions related to teaching while the self-assessment section facilitates reflection and self-assessment. A dossier makes students' outcomes more transparent as it provides evidence of students' professional development and examples of work related to teaching practices.

With the growth of online interactive tools such as Blogs, Websites, and Wikis, ePortfolios have especially undergone some changes becoming digital folders to more interactive archives and settings where teacher candidates would benefit in the process of their learning (Boulton, 2014; Lam, 2020). They turned into tools in pre-service teacher education programs with which we can observe student teachers' growth and equip them with skills such as "reflective practice, technical competence and strategies for lifelong learning" (Gulzar & Barrett, 2019, p. 489). However, ePortfolios in many teacher education contexts have been used as a tool to document the product of learning as part of one or two semester-long courses as an alternative assessment tool (Boulton, 2014) rather than a tool to evaluate the longitudinal process of learning.

Problem Statement

The process of learning which leads to professional growth was echoed by Boulton (2014) and Mathews-DeNatale (2019). They suggested the integration of ePortfolios as a learning tool into a program that covers the entire learning process and the extension of ePortfolios to enhance career skills for newly qualified teachers (Boulton, 2014). In her longitudinal action research project, Boulton (2014) conducted a long-term implementation of ePortfolios in pre-service teacher education and explored how ePortfolios can be extended into the newly qualified teachers' year in terms of presenting evidence of student teachers. The evidence coming from Boulton's research project indicated that ePortfolio is compatible with preservice teaching to the newly qualified teacher year and a tool that increases the sense of self-regulation in terms of goal setting, self-evaluation, and self-efficacy. Based on the results, Boulton (2014) suggests that ePortfolios as a way of developing professional self-identity should be embedded into higher education pedagogy and shared with pre-service teachers with which teacher candidates become the owner of their own journey. We should consider extended use of ePortfolios by having students develop and use them within a community rather than only using them as an assessment tool as part of a semester-long course. ePortfolio should be continued into the teaching career by giving careful consideration to the ownership and the purpose. The sample implementations similar to Boulton's study are pretty small and are none around the world including the Turkish higher education context.

English Language teaching research conducted with teachers and students in Turkey has resulted in several noticeable weaknesses concerning the language, culture, instruction, assessment, and professionalism domains in language teacher education programs (Mahalingappa & Polat, 2013; Nergis, 2011). These studies address that to increase the effectiveness of English language teaching in Turkey, it is necessary to better structure language teacher preparation that will open the way to support candidates' growth and development, which overall match with the developed countries' teacher education preparation priorities. For example, according to the American Association of Colleges for Teacher Education (AACTE), one of the three critical features of teacher preparation is teachers' professional growth through continuous reflection on their practice and progress. The development of the ePortfolio project presented in this paper follows these suggestions and gaps emphasized in the relevant literature, particularly from Boulton (2014). The project is built upon the key themes Boulton finds out based on her own implementation (i.e., reflection, professional identity, self-regulation, assessment, and feedback, collaboration, and ownership, etc.) and presents an extended use of ePortolio in a teacher education program.

Purpose of the implementation

With the successful and continued implementation of ePortfolios, our aim in this project was to help pre-service teachers grow professionally through the development of an ePortfolio, which will give them the opportunity to keep the digital story of their journey of becoming teachers, reflect upon their own and friends' development in an online collaborative community, and use ePortfolios as evidence of their professional development, skills, and knowledge in getting into the job market.

Significance of the implementation

Our project is significant as it intends to equip teacher candidates with 21st-century life-long learning skills such as skills of creativity, self-reflection, communication, and collaboration as well as necessary technical skills such as technology artifact creation. It is innovative in terms of implementation, as similar implementations are small around the world and none in Turkish higher education context. This has been a reflective ePortfolio development that will support the growth of an involved educator who is an active participant in the learning environment. It was intended that students developing ePortfolios would be able to construct meaning from their learning experiences and develop a cohesive instrument for presenting the constructed meaning to others.

3. Methodology

The design and implementation process presented in this paper is the first part of a larger project examining the learning and personal growth of the student ELT teachers through the use of e-portfolios that has an innovative architecture within which students can develop their skills, reflect on their practice, and showcase their strengths to a range of relevant audiences including faculty and employers. The larger project had both learning-based and practical purposes to achieve and thus, followed design-based research as the research methodology that will advance design, research, and practice concurrently. In design-based research, researchers manage research processes in collaboration with participants, design and implement interventions systematically to refine and improve initial stages, and ultimately seek to advance both pragmatic and theoretical aims affecting practice (Wang & Hannafin, 2005). The larger project used a systematic but flexible methodology that aim to improve educational practices through iterative analysis, design, development, and implementation, based on collaboration among researchers and practitioners (students and faculty). In this article, only the design and

implementation part of the project is presented within the theoretical framework coming from relevant literature.

This paper is designed to deliver on the purposes stated above in the literature. The part entitled "Implementing ePortfolios in the English language teacher education program" provides all steps of how ePortfolios for this project was designed and integrated into and implemented in the ELT program. Within this part, "initial ePortfolio design", "selecting appropriate tools for ePortfolio design", "continued development and practice of ePortfolios" and "building collaborative and professional learning" introduce the existing phases in this implementation, each of which has been developed considering relevant literature and previous implementations.

4. Implementation

4.1. Implementing ePortfolios in the English Language Teacher Education Program

The use of portfolios, specifically, ePortfolios constitutes a major recent direction in alternative assessments in both small-scale and large-scale contexts. While there are a number of sources on ePortfolio use in a classroom context for diagnostic and placement purposes (Brown & Abeywickrama, 2019; Weigle, 2002), there is not, as yet, an extensive implementation and research on ePortfolio design and use beyond the classroom context. As discussed in the literature, the use of ePortfolios has a crucial impact in higher education, especially on pre-service teachers' reflective learning and future career goals (Boulton, 2014; Ciesielkiewicz & Coca, 2013, Pegrum & Oakley, 2017). When properly planned, ePortfolios as learning tools help pre-service teachers think critically and become self-regulated learners (Ciesielkiewicz, 2019). Also, the current use of technology in language education proposes a holistic approach to the sustainable use of ePortfolios (Lim, Lee, & Lia, 2016) by opening the way for preparing pre-service teachers to adapt to the challenges of the changing world with their own ePortfolios, and establishing an innovative vision.

In our ePortfolio project, we followed these suggestions coming from recent literature and designed a long-term integration of ePortfolios into a language teacher education program considering the flexible and adaptable nature of ePortfolios that can be updated and incorporated into a platform (Ciesielkiewicz, 2019). The curriculum we integrated with ePortfolios already provided opportunities for pre-service teachers to improve their English language skills, gain knowledge and experience in language teaching methodology, use technology in foreign language teaching and learning, support critical reflection culture, and apply their learning in real teaching settings. The content of the courses offered in the four-year language teacher education program is linked to each other in terms of pre-service teachers' professional development. When we decided to integrate digital portfolios into the program, one of our purposes was thus to strengthen the link between course contents accordingly the learning of pre-service teachers.

In this implementation, our main aim but not the only one was to develop an e-portfolio practice for pre-service English language teachers in the program in which teacher candidates would have an opportunity to document their journey in becoming a teacher by selecting, sharing, and reflecting on artifacts they create such as samples of work including teaching philosophies, lesson plans, teaching materials, research, teaching experience reflections, reports, video clips of practice teaching and so forth. Different from one-semester-long in-course implementations mostly using ePortfolios as assessment tools, following the key themes that emerged in Boulton's study (2014), we integrated ePortfolio use into the program starting from sophomore till graduation. We designed a longitudinal implementation throughout pre-service teachers' higher education to achieve several different purposes: (1) to encourage pre-

service teachers for past, current, and future language teacher identity development (Gulzar & Barrett, 2019), (2) to provide opportunities such as "self-development and representation, demonstration of transferable skills, continuous professional growth and successful employment" (Walsh & Mann, 2019, p.488), (3) to improve pre-service teachers reflective practices on their own and their friends' learning, (4) to build multimodal evidence of authentic professional identity as the demonstration of language teaching competence, (5) to give ownerships to teacher candidates in their own learning journey, (6) to create an atmosphere in which pre-service teachers can self-regulate and self-evaluate their own development and learning, (7) to collaborate with other teacher candidates in the program during their journey as being part of an online collaborative community, (8) to turn their learnings into a digital resume that would be presented to employers as evidence of their learning. Namely, the development of ePortfolios was intended to be more than a digital collection of artifacts that belong to or represent a language teacher candidate. The model was aimed to provide the architecture within which students can develop their skills, reflect on their practice, and showcase their strengths to a range of relevant audiences including faculty and employers. The entire project was a process, specifically the process of generating new or deeper learning by reflecting on students' existing learning using an innovative educational assessment technology.

4.1.1. Initial ePortfolio design

In the initial ePortfolio design phase, students were engaged in the processes of deciding on the ePortfolios' purposes as well as examining and selecting artifacts to be included, given that this engagement would lead students to be part of metacognitive goal-setting and reflective self-assessment practices (Alan Hung, 2012) as the owner of the ePortfolios. ePortfolio idea and the implementation process have been introduced to the students in the Academic Writing course in which they experienced designing the first part of their blog-based portfolios, writing reflections, and peer evaluation process. These experiences were valuable for the students in terms of understanding the content of long-term ePortfolio design which will be built throughout their learning in the program. Following the academic writing course, students took a technology-enhanced language learning course in which they have enriched their already designed ePortfolios by extending its content with the pedagogical evidence. Technology-enhanced language learning course was compulsory and essential to equip students in the English language education program with the knowledge and skills to integrate technological innovations into language teaching. Upon completion of this course successfully, students were able to determine the main criteria for selecting and evaluating technological sources and evaluate and design the technology-enhanced language teaching materials for different purposes in various settings. Moreover, it was the environment where pre-service teachers clearly identified the rationale for creating their own ePortfolios.

4.1.2. Selecting appropriate tools for ePortfolio design

ePortfolios are an expression of students' personal and professional identities (Brown & Abeywickrama, 2019). In order to connect a link between ePortfolio owner and the target audience, students need to identify for what purposes they design their ePortfolios clearly and how they would achieve an interactive design for a well-developed ePortfolio using current technology. At this point, we introduced two free platforms - WordPress (https://wordpress.com/) and Weebly (https://www.weebly.com/) to students to ensure a digital workspace for their reflective practices and various artifacts. Students used WordPress to create their blog pages which were actively used in other courses they have taken such as the Academic Writing course. They designed their websites as their ePortfolio platforms using either WordPress or Weebly. Students continued to share artifacts (e.g., argumentative essays,

reflection papers, etc.) on their blog pages which were already linked to their ePortfolios. After a brief training session on the introduction of the tools, their practical use for ePortfolio purposes, and discussing the overall purpose of the ePortfolio implementation in the program, students as the owner of the digital platforms decided on the design of their ePortfolios including the naming of the page and menu as long as they created an interactive platform in which they could display the products of their learning process and interact with others in the online community, teacher educators and their friends.

4.1.3. Continued development and practice of ePortfolios

The sustainable use of ePortfolios has an impact on pre-service teachers' past, present, and future careers and their reflective thinking and learning (Lim et al., 2016). To enhance the vision of teachers for the sustainable use of ePortfolios, Cohen et al. (2003) suggest a holistic approach toward its implementation in higher education institutions. Therefore, in our setting, we proposed the sustainable use of ePortfolios with a holistic approach beyond graduation and hosted ePortfolios for professional development and career trajectory as devised by Parkes, Dredger, and Higs (2013). During the technology course, students continued to build their ePortfolio platforms by adding artifacts they produced in the technology class (e.g., Technology-enhanced lesson plans, digital stories, podcasts, etc.) as well as enriching their ePortfolios with the artifacts coming from other courses they have been enrolled in such as ELT Methodology, ELT Approaches in which they designed lesson plans and materials for their micro teachings and wrote their own teaching philosophy. Students were allowed to select best practices from other courses to display on their ePortfolios, although they were supposed to update their ePortfolio content regularly until their graduation. For example, as illustrated in Figure 1 below, ePortfolios had a home page with a menu that helped them group their selected artifacts: About Me, Teaching Philosophy, Lesson Plans, Practicum, and Blogs. One of our purposes in implementing ePortfolios in the program was to foster professional identity and ownership as the reflection of student teachers' development (Boulton, 2014). Thus, the design of the ePortfolio content was special to each student and has changed depending on their learning experiences, creativity, and originality.
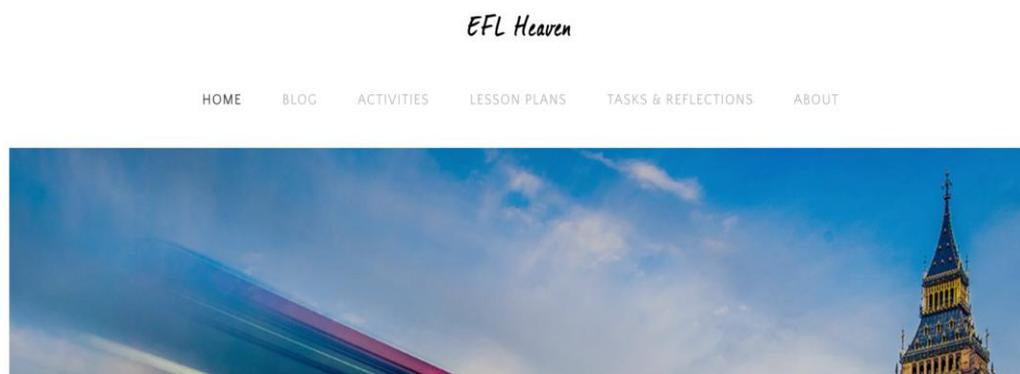

Figure 1. Sample display of a home page and menu

One other sample ePortfolio, entitled Language Journey (Figure 2), is a good indicator of our rationale in terms of encouraging student teachers for their continuous professional growth and improving their reflective practices on their own and their friends' learning by creating a link across the courses and learning experiences. As sampled in Figure 3, ePortfolios contained evidence related to students' teaching practices, lesson plans, written samples, technology enhanced material designs showing their academic improvement, extracurricular activities,

interviews, and pedagogical tasks designed for teaching English by using technology. For example, ePortfolios updated in Practicum courses I and II in the senior year had key features: (1) "exposure", using portfolios for job search besides academic purposes; (2) "reflective", monitoring and assessing knowledge, skills, and performance with a critical eye; (3) "social", promoting cooperation among students, teachers, mentors, supervisors, and employers; and (4) "assessment", examining students' exemplary work and associating them with the standards required to gain (Lim et al., 2016, p.164).

Figure 2. Sample ePortfolio designed by an undergraduate student

Figure 3. Sample products displayed in an activity pool page in a student ePortfolio

ePortfolios embedded into a three-year higher education process have been continuously updated as evidence of pre-service teachers' reflective learning (Schön, 2017). As exemplified in Figure 4 below, students wrote their first Teaching Philosophy as the final paper of the ELT Approach course. After they completed ELT Methodology and Observation in Schools courses in their third year, they updated their teaching philosophies in their ePortfolios with their new learning and knowledge.
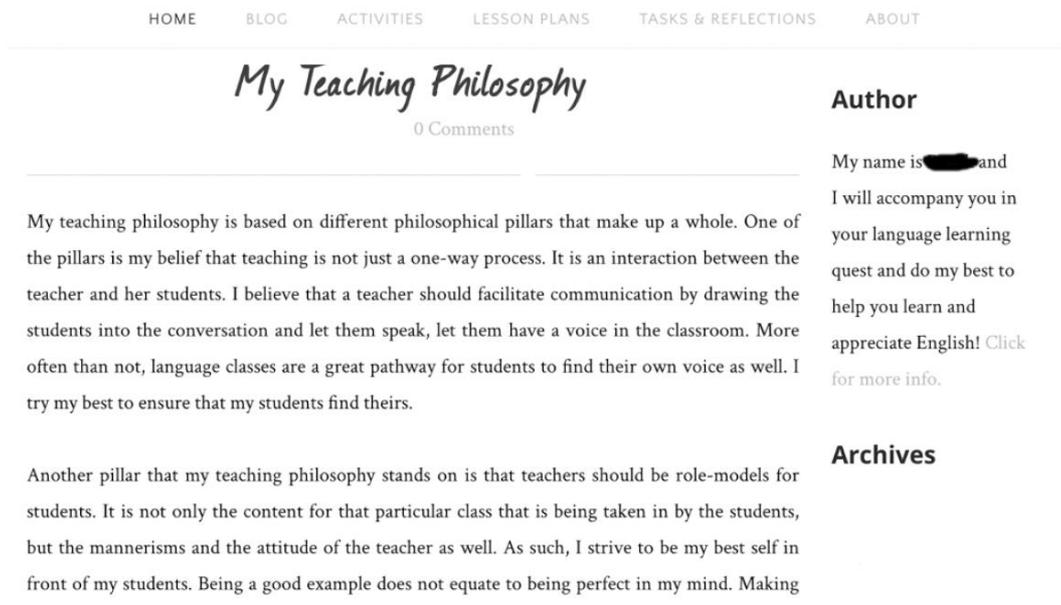

Figure 4. *A sample teaching philosophy page in a student ePortfolio*

ePortfolios had been part of pre-service teachers' learning and development process in their senior year where they experienced practicum courses. During practicum experience in selected public and private K12 schools, student teachers had the opportunity to apply what they have learned in their three-year university education and to develop and share their ePortfolios with stakeholders, such as teachers, peers, parents, employers, and community, etc. The practicum course was designed for English language teacher candidates to engage in teaching, observation, and reflection in a way that broadens their teaching experience and contributes to community services. They engaged in the focused observation of teachers of English and English language learners in Turkish public and private schools, managed their activities, and provided documentation of their teaching activities, as well as completed observations and organized materials. During their senior year, student teachers continued to enrich their ePortfolios with the new experiences they have gained from both practicum processes. To increase students' engagement in ePortfolio production, we assigned five tasks that were intended to help them demonstrate their achievement of the learning objectives for the practicum course. Guidelines and rubrics designed for each task were shared with them before the practicum process. The students' practicum ePortfolio assessment contributed to the total grade of the practicum course as well. Please see Table 1 below for a sample content of a student ePortfolio for the Practicum I course.

Table 1. *Content of students' practicum I ePortfolios*

Content of ePortfolio: Practicum I
Designing detailed lesson plans for four official teaching
Teaching four official lessons and writing reflections for each teaching
Task 1: Reflection on the school and teaching setting
Task 2: Reflection on teaching methods, activities, and materials
Task 3: Interview with a cooperating teacher
Task 4: Teaching Philosophy
Task 5: Professional Resume

As Mansvelder-Longayroux, Beijaard and Verloop (2007) claimed, "reflection in the portfolio is not only a response to a particular problem or a particular issue of teaching practice; it is also concerned with linking different experiences over time" (p.50). As exemplified in Figures 5 and 6 below, student teachers in this project opened a new practicum tab in their ePortfolio sites and shared the artifacts that had been reflecting the entire practicum process they have experienced including the lesson plans and teaching materials they have created, their written reflections on their own observation and teaching experiences. They systematically reflected on their teaching practices, and personal and pedagogical development at different times by completing before (reflection for action)-during (reflection in action)-after (reflection on action) learning cycles (Kolb, 1984; Schön, 2017). The ePortfolio sample in Figure 5 belongs to one of the students who has stored his works as a collection of reflections and pedagogical tasks such as essays, posters, podcasts, and videos. He showcased his competencies and documents by linking different experiences in his learning and teaching process.
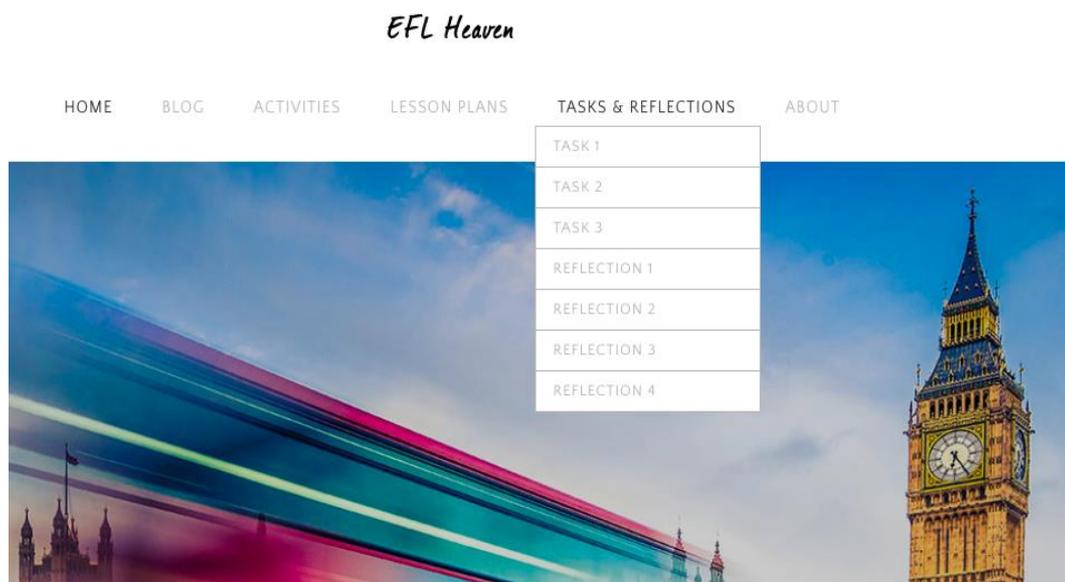

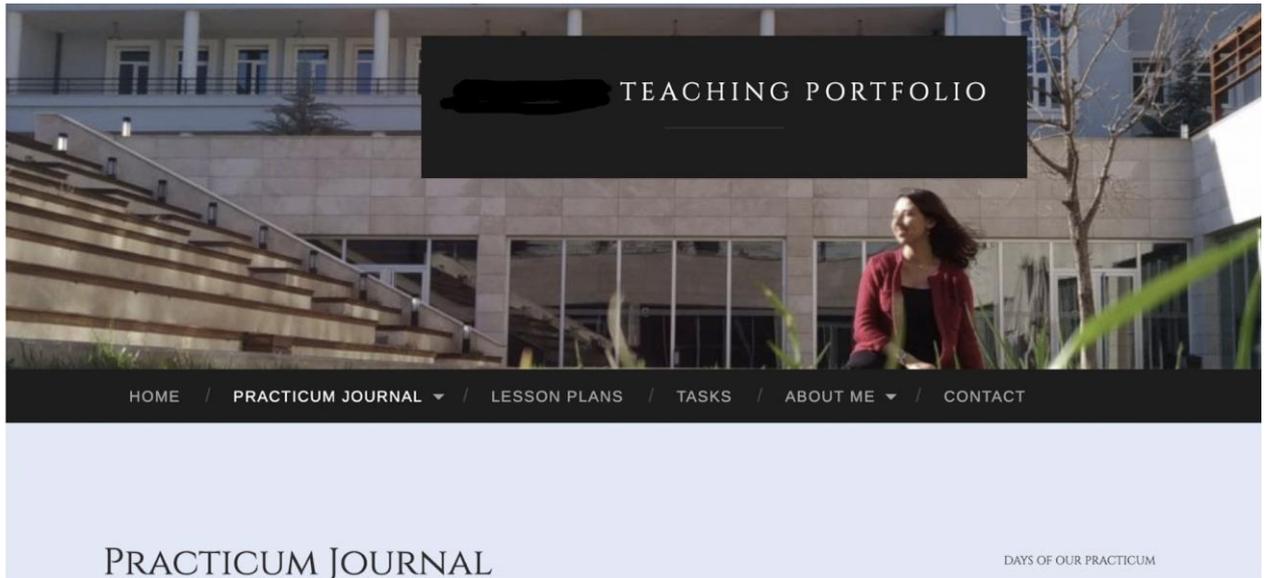*Figure 5.* Tasks and reflections in one of student ePortfolios

Figure 6. Practicum tab in a student ePortfolio

As part of the first and second practicum courses, one of the tasks pre-service teachers were supposed to complete was the revision of their resumes and teaching philosophies in their ePortfolios based on their new gainings from the senior year courses and the practicum just before they finalized their ePortfolios to share with the employers during their job applications.

Figure 7. A Pre-service teacher's teaching philosophy published in her ePortfolio

As supported in the literature, ePortfolios provide employers with "an overall rationale within which the specificities of applications for job hunting are embedded" (Moretti & Giovannini, 2011, p.87). The overall picture created by teacher candidates may facilitate the

transition from a university career to professional life. Thus, in our implementation, students were encouraged to use their ePortfolios as a one-link resume for job applications. Going beyond pre-service teacher education, some graduates turned their ePortfolios into lifelong learning documentation as part of their professional teaching life. Please see Figure 8 for one example of this implementation. As a novice teacher in his early career, our graduate preferred to keep his ePortfolio active and used it as a platform where he continued to share his teaching experiences and new learnings with other colleagues around the world. With this specific purpose, Eportfolios as the showcase of students' work were intended to allow them the freedom to set themselves apart from others in the job market. As lifelong learning documentation, e-portfolios became a repository of collected and connected learning that student teachers have engaged in.

Figure 8. Sample ePortfolio turned into lifelong learning documentation as part of professional teaching life

4.1.4. Building collaborative professional learning

There is a move towards collaborative learning with the potential use of ePortfolios (Boulton, 2014; Horan, 2020). Even though collaboration is one of the important aspects of ePortfolio development and evidence-based learning, Barrett (2007) views social interaction with the identified and unidentified audiences through ePortfolios critically. Students initially share their artifacts with their audience who are their peers, mentors, and teachers, and then they update and put into their products with the audience regarding stakeholders, and employers in mind. Therefore, during the ePortfolio creation, "audience consideration is accomplished through multiple checkpoints" (Horan, 2020, p. 47). Tan et al. (2018) in their study indicated that there is a high potential and competency in using ePortfolio for collaborative professional learning. Receiving and giving feedback on their ePortfolios from various audiences allow for more reflection on their artifacts. This critical social interaction allows students to think more and develop a deeper reflection on their artifacts. In our implementation, with the help of interactive ePortfolios designed as an online collaborative platform, our students experienced collaboration among student teachers and faculty. Student teachers designed their ePortfolios privately and opened them to their classmates and faculty members in the program. This allowed faculty members and other students access to their

ePortfolios and each member of the learning process had a chance to assess each others' works and developments and received feedback from their professors and friends with the help of this online collaborative community. In the long run, this experience naturally turned into a different way of assessment as the classic assessment purpose diminished and the need to improve within a community increased (Boulton, 2014).

The process of collaboration among our students initially started with blog-based writing in their academic writing course, which offered a number of benefits to them such as enhancing student-content interaction, student-teacher interaction, and student-student interaction in their blog community. Blogs created an efficient platform for both summative and formative assessment supporting their self-assessment, peer-assessment, and teacher assessment, all of which are empowered by enhanced interaction and collaboration. For example, in their freshmen year, with the completion of Academic Writing Skills I and II courses, the students demonstrated awareness of the demands of academic writing in a variety of genres and created student blogs for academic writing. Both courses are sources of motivation for developing basic technology and academic writing skills and trigger the creation of ePortfolios beside their pre-designed writing blogs. The students typically created these blogs as part of a course as a way to demonstrate learning and provide self and peer feedback in the learning process. This experience contributed to creating a feedback culture and social interaction and set the stage for collaboration in ePortfolio implementation. Please see Figure 9 below as evidence of an interactive community created with ePortfolios.
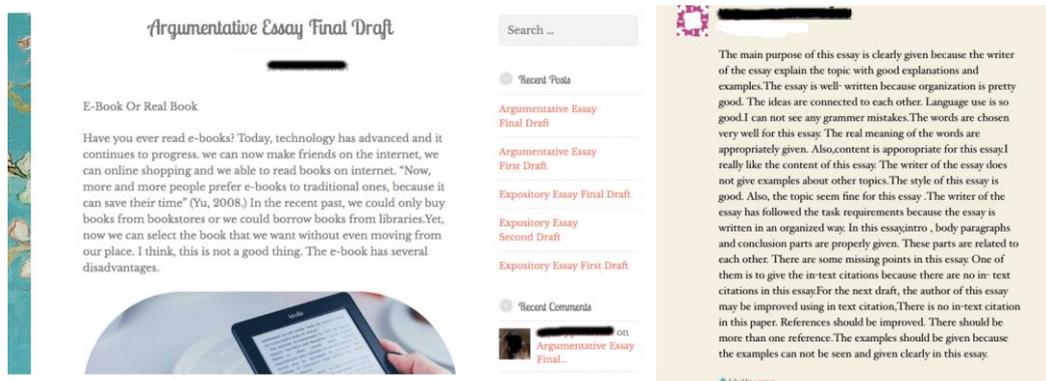

Figure 9. Student writing published in her ePortfolio with a comment received from her friend

5. Discussion and Recommendations

In this new era of ePortfolio implementation in pre-service teacher education, our implementation aimed to provide a situated space for pre-service language teachers for evidencing their professional development in the program through which it has been possible for them to be the owner of their own space but also to build "a sense of belonging to a community of practice" (Boulton, 2014, p. 386). Our three-year-long implementation in our program was designed to foster the development of reflective practice for student teachers by encouraging shared reflections with peer and teacher educator support and a real audience witnessing learning development in an online collaborative environment. As exemplified above in detail, we aimed to help student teachers build their professional teacher identity by presenting multimodal evidence of their learning and competence and to foster their self-regulation on their own learning by taking the responsibility of their own ePortfolios. To serve the development of these main purposes, we guided pre-service teachers to build interactive online portfolios which are open to update and change based on their experiences throughout

the program and linked with the courses they have completed. To our knowledge, there is no specific example of a language teacher education program that uses an ePortfolio as a program-wide tool and no evidence of ePortfolio development based on the continuation of the ePortfolio from university into employment.

ePortfolio use in teacher education was regarded as facilitative for meta-cognitive reflection and students' learning as it made the process more efficient. This study discussed the rationale behind our ePortfolio implementation in teacher education and provided insights into how teacher education programs should apply ePortfolios to foster reflection, professional identity, self-regulation, collaboration, assessment and feedback, collaboration, and ownership as addressed earlier by Boulton (2014). We found the use of ePortfolio to add great value to our teacher education program. Our students experienced the opportunity to show what they learned and how they spent their time in a four-year teacher education program. The ePortfolio implementation was quite developmental and reaffirming for all students involved in the ePortfolio project even if some challenges remain such as grappling with the authenticity of the evidence offered, and the difficulties in the user interface.

Besides implementing ePortfolio throughout students' higher education careers to encourage reflective learning and teacher identity (Horan, 2020), our implementation taught us that teacher educators should develop program outcomes to arouse the sustainable use of ePortfolios for teacher candidates' future career trajectory. To achieve this, teacher educators should guide the reflection process and support continued reflection culture, and support students to sustain their ePortfolio beyond graduation (Lim et al., 2016).

Additionally, the ePortfolio design permits the assessment of various aspects of student learning, facilitates self-assessment and critical thinking skills, and provides tangible evidence of students' individual, pair, and group work (Brown & Abeywickrama, 2019). Through the use of ePortfolios and ePortfolio assessment, our students received and gave powerful feedback to achieve learning outcomes as stated by Pelliccione and Dixon (2008). Within the feedback sessions, our students revised their own and other peers' artifacts, which supported social interaction and collaboration (Boulton, 2014). They also reflected on their higher-order thinking skills, such as the ability to communicate clearly, make judgments, and demonstrate certain competencies (Miller & Legg, 1993).

Overall, as discussed in the relevant literature, professional development requires a lifelong commitment to learning, teaching, and searching. ePortfolios have become the prominent embodiment of the assessment for learning movement, wherein students are encouraged to self-regulate their learning with feedback. In this implementation, our students used their ePortfolios for the duration of their coursework in the program and thereafter in order to enhance their learning process with the transition from university to graduate employment. Thus, their ePortfolios have turned into salient sources for teacher candidates where they showcased their best practices as a professional development, and for faculty and students to examine the learning and personal growth of the student teachers through their experiences in the program.

ePortfolio implementation provided powerful feedback to our students in terms of developing and earning as well as fostering motivation, responsibility, and ownership. This practical implementation showed us that the successful and continued implementation of ePortfolios can help student teachers grow professionally through the ePortfolio development, which will give them the opportunity to keep their journey of becoming teachers. As ePortfolio adoption in higher education is growing and students are asked to create their own sites even more often, we believe that the pedagogical framework presented in this study will assist

teachers to increase their students' willingness to produce high-quality products and facilitate their development of 21st-century meta-skills. This implementation is also a helpful source for teacher educators, practitioners, teacher candidates, and institutions who are interested in ePortfolio use in higher education.

6. Conclusion

This project was a long-term endeavor. The design and implementation process of the large project was crucial as the initial and key step of the project's success and sustainability in terms of identifying the entailed processes and resources for the project, evaluating and selecting appropriate technological tools and systems, planning ePortfolio maintenance and accessibility and evaluating the project's worth or potential before it becomes available to other relevant teacher education contexts. The purpose of our implementation was multifold, based on the current needs of language teacher education. It was an integrative e-portfolio project helping students connect their learning across courses and semesters, and link their academic learning with their lived experience of work. This has been a learning ePortfolio, where the goal was to help students examine and reflect on their learning; and also a career/transfer ePortfolios where the goal is to provide students with a tool for showcasing their achievements for professional purposes. Future implementations should support the growth of an involved educator, who serves as an active participant in the learning environment. Students developing e-portfolios should be provided with the opportunity to construct meaning from their learning experiences and develop a cohesive instrument for presenting the constructed meaning to others.

Ethical Text

"In this article, the journal writing rules, publication principles, research and publication ethics, and journal ethical rules were followed. The responsibility belongs to authors for any violations that may arise regarding the article. " Ethics committee approval within the scope of the research is given. It has been taken from the TED University ethics committee with the decision numbered 27535802-050.03.04/ on 06/07/2020-1362. There is no conflict of interest between the authors.

References

Ayan, D., & Seferoğlu, G. (2011). Using electronic portfolios to promote reflective thinking in language teacher education. *Educational Studies, 37*(5), 513-521.

Alan Hung, S-T. (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.

Barrett, H. (2007). *A will to learn. Being a student in an age of uncertainty.* Maidenhead: Open University Press.

Beck, R., & Bear, S. (2009). Teacher's self-assessment of reflection skills as an outcome of e-folios. In Adamy & Milman (2009) Evaluating Electronic Portfolios in Teacher Education. Charlotte: Information Age Publishers.

Boulton, H. (2014). ePortfolios beyond pre-service teacher education: a new dawn? *European Journal of Teacher Education, 37(*3), 374-389.

Brown, H. D., & Abeywickrama, P. (2019). *Language assessment: Principles and classroom practices* (3rd ed.). Hoboken, NJ: Pearson.

Cambridge, D. (Ed.). (2010). *E-portfolios for life-long learning and assessment.* San Francisco, CA: Jossey-Bass.

Ciesielkiewicz, M. (2019). The use of e-portfolios in higher education: From the students' perspective. *Issues in Educational Research, 29*(3), 649-667.

Ciesielkiewicz, M., & Coca, D. M. (2013). The electronic language portfolio as a tool for lifelong learning. In Proceedings International Conference: ICT for language learning (p. 464). Libreriauniversitaria. it Edizioni. https://conference.pixelonline.net/conferences/ICT4LL2013/common/download/Paper_pdf/225-SIM03- FP-Ciesielkiewicz-ICT2013.pdf

Cohen, D. K., Raudenbush, S. W., & Ball, D. L. (2003). Resources, instruction, and research. *Educational Evaluation and Policy Analysis, 25*(2), 119-142.

Council of Europe (2022). European portfolio for student teachers of languages. Retrieved October 15, 2022, from https://www.ecml.at/Portals/1/3MTP/EPOSTL/2010_06_23_epostl_infobroschuere_englisch.pdf?ver=2020-02-28-111255-200

Cuesta, A., Batlle, J., González, V., & Pujolà, J. T. (2022). Approaches to the development of pre-service language teachers' e-portfolios. *Promoting professionalism, innovation and transnational collaboration: a new approach to foreign language teacher education*, 191-212.

Cummins, P. W., & Davesne, C. (2009). Using electronic portfolios for second language assessment. *The Modern Language Journal, 93*(1), 848-867. https://doi.org/10.1111/j.1540-4781.2009.00977.x

Ehiyazaryan-White, E. (2012). The dialogic potential of eportfolios: Formative feedback and communities of learning within a personal learning environment. *International Journal of ePortfolio, 2*(2), 173-185.

Flores, M. A., & Swennen, A. (2020). The COVID-19 pandemic and its effects on teacher education. *European Journal of Teacher Education, 43*(4), 453-456.

Granberg, C. (2010). E-portfolios in teacher education 2002–2009: The social construction of discourse, design, and dissemination. *European Journal of Teacher Education, 33*(3), 309-322.

Gulzar, N., & Barrett, H. C. (2019). Implementing ePortfolios in teacher education: research, issues, and strategies. In S. Walsh, & S.Mann, (Eds.), *The Routledge Handbook of English Language Teacher Education* (pp. 488-506). Routledge.

Horan, D. (2020). Review: ePortfolios as curriculum: Models and practices for developing students' ePortfolio Literacy (Stylus, 2019). *International Journal of ePortfolio, 10*(1), 45-49.

Karsenti, T., Dumouchel, G., & Collin, S. (2014). The eportfolio as support for the professional development of preservice teachers: A theoretical and practical view. *International Journal of Computers and Applications, 12*(5), 3486-3495.

Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development.* Englewood Cliffs, NJ: Prentice Hall.

Lam, R. (2020). E-Portfolios: What we know, what we don't, and what we need to know. *RELC Journal,* 1-8.

Lim, C. P., Lee, C. J., & Jia, N. (2016). E-portfolios in pre-service teacher education: Sustainability and lifelong learning. In C., Day, & C. J., Lee (Eds.), *Quality and Change in Teacher Education* (pp.163-174). Springer.

López-Crespo, G., Blanco-Gandía, M.C., Valdivia-Salas, S., Camino, F., & Sanchez-Perez, N. (2022). The educational e-portfolio: Preliminary evidence of its relationship with student's self-efficacy and engagement. *Education and Information Technologies, 27*, 5233–5248.

Mahalingappa, L. J., & Polat, N. (2013). English language teacher education in Turkey: Policy vs academic standards. *European Journal of Higher Education, 3*(4), 371-383. doi: 10.1080/21568235.2013.832348

Mansvelder-Longayroux, D. D., Beijaard, D., & Verloop, N. (2007). The portfolio as a tool for stimulating reflection by student teachers. *Teaching and Teacher Education, 23*(1), 47-62. doi: 10.1016/j.tate.2006.04.033

Matthews-DeNatale, G. (2019). Untangling the past and present while weaving a future. In K. B. Yancey (Ed.), *ePortfolio as curriculum: Models and practices for developing students' ePortfolio literacy* (pp. 107-122). Sterling, VA: Stylus.

Miller, M. D., & Legg, S. M. (1993). Alternative assessment in a high-stakes environment. *Educational Measurement: Issues and Practice, 12*(2), 9-15. https://doi.org/10.1111/j.1745-3992.1993.tb00528.x

Moretti, M., & Giovannini, M. (2011). ePortfolio as a job-seeking tool for universities. *Journal for Perspectives of Economic, Political, and Social Integration, 17*(1-2), 87-104.

Mutton, T. (2020). Teacher education and Covid-19: responses and opportunities for new pedagogical initiatives. *Journal of Education for Teaching*, *46*(4), 439-441.

Nicolaidou, I. (2013). E-portfolios supporting primary students' writing performance and peer feedback. *Computers & Education, 68,* 404-415.

Nergis, A. (2011). Foreign language teacher education in Turkey: A historical overview. *Procedia Social and Behavioral Sciences, 15,* 181-185. https://doi.org/10.1016/j.sbspro.2011.03.070

Oakley, G., Pegrum, M., & Johnston, S. (2014). Introducing E-Portfolios to Pre-service Teachers as Tools for Reflection and Growth: Lessons Learnt. *Asia-Pacific Journal of Teacher Education, 42*(1), 36-50.

Parkes, K. A., Dredger, K. S., & Hicks, D. (2013). ePortfolio as a measure of reflective practice. *International Journal of ePortfolio, 3*(2), 99-115.

Pelliccione, L., & Dixon, K. (2008). ePortfolios: Beyond assessment to empowerment in the learning landscape. In Hello! Where are you in the landscape of educational technology? Proceedings ascilite Mel-bourne. Retrieved from http://www.ascilite.org.au/conferences/melbourne08/procs/ pelliccione.pdf

Pegrum, M., & Oakley, G. (2017). The changing landscape of e-Portfolios: Reflections on 5 Years of Implementing e-Portfolios in Pre-Service Teacher Education. In T., Chaudhuri, & B., Cabau (Eds.), *E-portfolios in Higher Education* (pp.21-34). Springer.

Schön, D. A. (2017). *Reflective Practitioner: How Professionals Think in Action*. New York: Routledge.

Silva, M. L., Delaney, S. A., Cochran, J., Jackson, R., & Olivares, C. (2015). Institutional assessment and the integrative core curriculum: Involving students in the development of an ePortfolio system. *International Journal of ePortfolio, 5*(2), 155-167.

Tan, E. H., Shahrill, M., Tan, A., Salleh, S. M., Jaidin, J. H., Jawawi, R., & Husain, S. (2018). The potential use of ePortfolio in supporting collaborative professional learning. *Journal of Computational and Theoretical Nanoscience, 24*(7), 5401-5404. doi: 10.1166/asl.2018.11744

Tang, E., & Lam, C. (2014). Building an online learning community (OLC) in blog-based teaching portfolios. *Internet and Higher Education, 20*, 79-85.

Tobias, S. (1994). Interest, prior knowledge, and learning. *Review of Educational Research, 64*(1), 37-54.

Walland, E., & Shaw, S. (2022). E-portfolios in teaching, learning and assessment: tensions in theory and praxis. *Technology, Pedagogy and Education*, *31*(3), 363-379.

Walsh, S., & Mann, S. (2019). *The Routledge handbook of English language teacher education.* Routledge.

Wang, F., & Hannafin, M. J. (2005). Design-based research and technology-enhanced learning environments. *Educational technology research and development*, *53*(4), 5-23.

Weigle, S. C. (2002). *Assessing writing.* Cambridge: Cambridge University Press.

Wray, S. (2007). Electronic portfolios in a teacher education program. *E-Learning, 4,* 40-51.

Xerri, D., & Campbell, C. (2016). E-portfolios in teacher development: The better option? *ELT Journal, 70*(4), 392-400.

Yancey, K. B. (2019). *ePortfolio as curriculum: Models and practices for developing students' ePortfolio literacy.* Sterling, VA: Stylus.

Young, D. (2008). *EPortfolios in education: A cause for Reflection.* In SOLSTICE 2008 Conference, Edge Hill University. June 5.

Zellers, M. D., & Mudrey, R. R. (2007). Electronic portfolios and metacognition: a phenomenological examination of the implementation of E-portfolios from the instructors' perspective. *International Journal of Instructional Media, 34*, 419-431.

Zhou, M., Chye, S., Koh, C., & Liu, W. C. (2013). Understanding teacher identity through the use of eportfolios with pre-service teachers. In J. Platos (Ed.), *Proceedings of the Second International Conference on e-Technologies and Networks for Development* (pp. 20-27). United States: Society of Digital Information and Wireless Communications.