



**Assessing the Transition: A Needs
Analysis of Digitizing Paper
Portfolios for Enhancing Teaching
Practicum Experiences**

PROJECT PROPOSAL

INASED

2023



TITLE OF THE PROJECT: Assessing the Transition: A Needs Analysis of Digitizing Paper Portfolios for Enhancing Teaching Practicum Experiences

TYPE OF PROJECT: Education, Research and Development

PROJECT PARTNERS: Çanakkale Onsekiz Mart University/Faculty of Education, Türkiye
Turkish Educational Research Association (EAB)

PROJECT DATES: October 1, 2023 to August 1, 2023

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BUDGET PLANNING

Conference Fee: \$50 for the Project Coordinator

\$50 for the Research Expert

\$50 for the Research Assistant

Total Budget: \$150

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Introduction

Recent global trends point to the importance of incorporating digital technology effectively in the field of education. The primary objective is not merely to digitalize education systems, but rather to recognize it as a valuable tool capable of enhancing the quality, equity, and efficiency in education (Organization for Economic Co-operation and Development [OECD], 2023). In addition to the OECD, the European Higher Education Area (EHEA) also emphasizes similar educational goals. The final report on "Policy development for new EHEA goals" identified the integration of digital technologies to improve educational experiences and facilitate more adaptable learning methods as one of its objectives (Bologna Process, 2018). Furthermore, exceptional circumstances like the Covid-19 pandemic can render conventional training methods impractical. In such cases, it becomes essential to adopt alternative approaches that offer flexibility (Zhang & Tur). Hence, the widespread adoption of digital technologies in education holds significant importance, enabling adaptation to global trends and unforeseen events.

E-portfolios (or digital portfolios) provide a means of integrating technology into educational systems for both learning and assessment purposes. This study aims to explore the perspectives of faculty members in the Faculty of Education regarding the potential outcomes of utilizing e-portfolios for teaching practicum classes and to gather their insights about components of effective e-portfolios.

Theoretical Framework

This section is organized as follows: Definition of e-portfolios, e-portfolios in higher education and e-portfolios in preservice teacher education and teaching practicum.

Definition of e-portfolios

Due to its diverse nature and varying uses, educators have not reached a consensus on a common definition of the e-portfolio, despite its increasing popularity among institutions (Jenson & Treuer, 2014).

According to Challis (2005), an e-portfolio is a purposefully curated and organized repository of digital content that showcases an individual's achievements and progress. It is typically managed using specialized software, often containing multimedia elements, and is commonly accessible through a web platform or distributed via CD-ROM or DVD.

Kuh et al. (2017, p.10) define an e-portfolio as 'a portable, expandable, updatable vehicle for accumulating and presenting evidence of authentic student accomplishment including the curation of specific proficiencies and dispositions at given points in time.'

In their more recent definition, Zhang & Tur (2022, p. 66) conceptualize an e-portfolio as a 'comprehensive electronic collection of multimodal artifacts as learning evidence that can be used in teaching, learning, assessment, and showcasing; it illustrates skills development, focusing on the learning process, progress, and achievement.'

While there exists a spectrum of definitions for e-portfolios offered by different researchers, it is noteworthy that the core commonality among these definitions is their function as digital repositories that showcase evidence of learning. These definitions encompass a range of perspectives, including those that emphasize the e-portfolio's role in documenting academic

achievements, highlighting personal and professional growth, and providing a platform for self-reflection and assessment.

E-portfolios in higher education

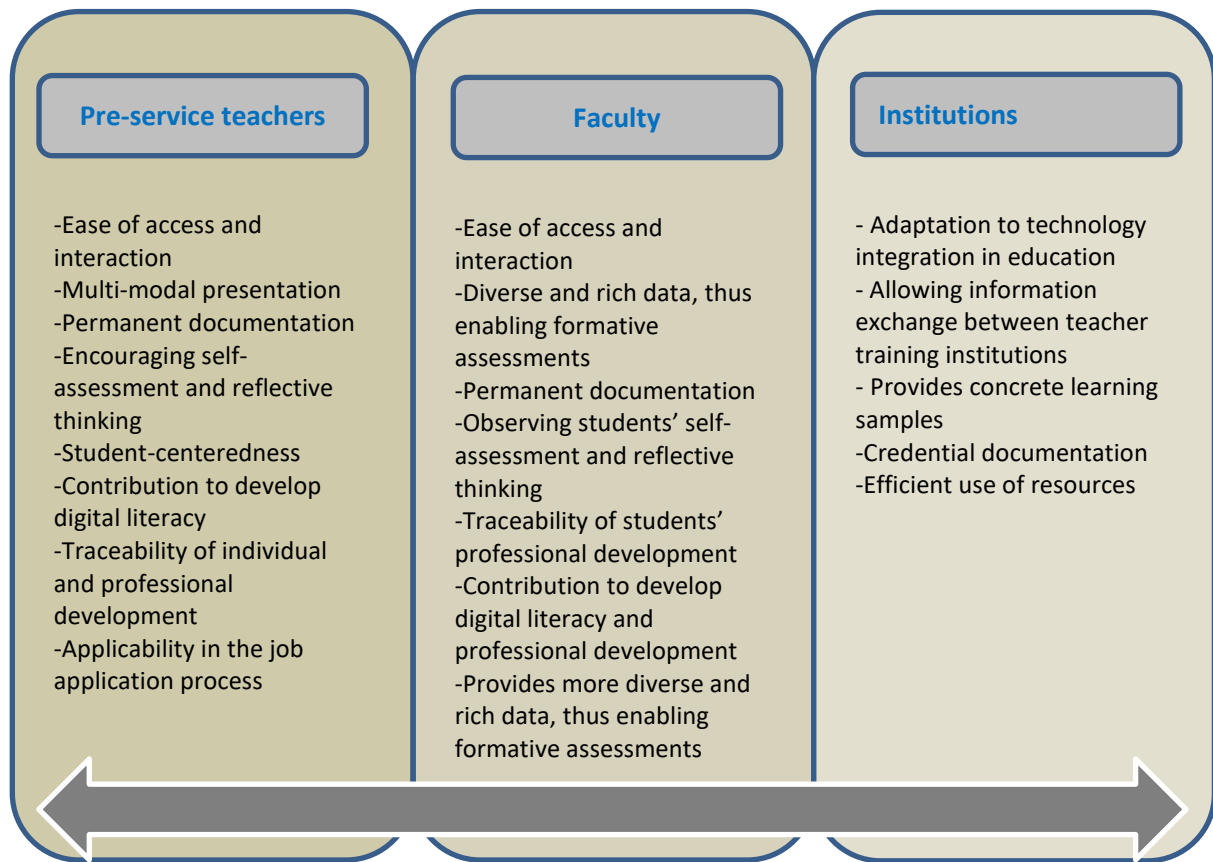
The utilization of e-portfolios in higher education institutions is on the rise, (Hinojosa-Pareja et al., 2021; Jenson & Treuer, 2014; Pegrum & Oakley, 2017; Wilson et al., 2018) and this trend is observed globally. The Association of American Colleges and Universities (AAC&U) had been advocating for the use of e-portfolios as a powerful pedagogical tool since 2016 (Lu, 2021) and currently, over half of higher education institutions in the United States have adopted e-portfolio applications (Eynon & Gambino, 2023).

Carl and Strydom (2017) attribute this surge to changing pedagogical approaches that emphasize demonstrable learning outcomes and a shift toward student-centered education in higher education. Additionally, there is an increasing expectation for higher education institutions to document the skills and competencies acquired by students. According to Challis (2005), e-portfolios offer more dynamic and interactive learning environments compared to paper versions. In addition, e-portfolios are useful tools for fostering reflective thinking; enabling students make meanings from their learning experiences (Eynon & Gambino, 2023; Hinojosa-Pareja et al., 2021). Reflections on learning can take various forms, including written, verbal, artistic, or multimedia formats, serving both assessment purposes and contributing to students' professional development (Eynon & Gambino, 2023).

E-portfolios in preservice teacher education and teaching practicum

Similar to other higher education institutions, the integration of e-portfolios into teacher training programs is gaining widespread popularity due to the potentials they offer for pre-service teachers, faculty, and institutions (Carl & Strydom, 2017; Klampfer & Köhler, 2013). (To view a comprehensive list derived from the literature review, please refer to Figure 1).

Figure1. Functions of e-portfolios for pre-service teacher, faculty and institutions



Pre-service teacher-related benefits

E-portfolios provide students with a valuable opportunity to integrate their diverse learning experiences into a unified body of work, fostering personal and professional growth (Carl & Strydom, 2017). More specifically, the review of literature reveals that e-portfolios carry potential benefits for pre-service teachers in enhancing their professional development. These benefits include fostering reflective thinking and digital skills, monitoring their progress, and providing a visual representation of their skills and learning for job applications and so on. Reflective thinking skills are considered crucial for teachers, and the use of e-portfolios, which are student-centered in nature, requires the application of reflective thinking skills (Carl & Strydom ,2017; Oakley et al., 2014). Ayaz and Gök (2022) experimental study confirmed

the impact of e-portfolios on reflective skills, concluding that the use of e-portfolio applications had a positive effect on reflective thinking skills in pre-service teachers.

Moreover, e-portfolios are helpful for developing various digital skills. In the job search process, for instance, e-portfolios also appear to be an effective way of showcasing the applicant's skills (Lorenzo & Ittelson, 2005).

Faculty-related benefits

Research highlights the importance of faculty engagement and support for implanting e-portfolios successfully (Eynon & Gambino, 2023; Oakley et al.'s 2014). While the incorporation of e-portfolios may pose challenges for faculty, demanding time and the development of necessary skills to utilize their functions effectively, it ultimately contributes to their professional growth (Eynon & Gambino, 2023).

Institution-related benefits

The increasing significance of higher education institutions' accountability highlights the value of e-portfolio practice as it offers ample prospects to demonstrate and document the quality of education they deliver (Eynon & Gambino, 2023). Additionally, integrating e-portfolios into teacher education programs serves the dual purposes of ensuring standardization and achieving accreditation (Wilhelm et al., 2006).

Accreditation standards in the field of teacher training are progressively emphasizing the systematic collection and analysis of data concerning the experiences of pre-service teachers throughout their education (Swan, 2009). In the United States, in response to the demands set forth by The National Council for Accreditation of Teacher Education (NCATE) and state accrediting boards for the systematic assessment of teacher candidates, educational

institutions promptly recognized the benefits offered by e-portfolio systems in monitoring students' achievement of standards (Barrett & Knezek, 2003, cited in Wilhelm et al., 2006).

A similar situation exists in the European context, wherein the focus is not solely on teacher training in higher education. For all higher institutions in participating countries, creating a unified, compatible, and standardized framework is stated as the most important goal of the Bologna Process (Bologna Process, 2018). As colleges and universities revise their curricula to align with Bologna standards and shift their focus toward student competencies and learner-centered approaches, such as prioritizing outcomes over inputs, e-portfolios are becoming increasingly integrated into a wide range of training and continuing education programs. These e-portfolios are closely linked with personalized learning, self-directed learning, and reflective practices in the learning journey (Klampfer & Köhler, 2013).

In this context, it is crucial to emphasize the roles and responsibilities of educational institutions to fully leverage the potential benefits offered by e-portfolios. By clearly defining the functions and duties of institutions, we can optimize the utilization of e-portfolios and maximize their positive impact on teaching, learning, and assessment within the educational setting. This entails establishing effective strategies for implementing e-portfolios, providing necessary resources and support, and fostering a culture of innovation and adaptability among both educators and students. Carl and Strydom (2017) underscore the pivotal roles that educational institutions must undertake to guarantee the effectiveness of technology-integrated teaching practices. These responsibilities encompass a multifaceted approach, which includes designing and cultivating innovative learning environments that seamlessly integrate technology, imparting essential training to equip both educators and students with the necessary digital skills, and establishing robust technical support systems to address any challenges or issues that may arise. Moreover, these efforts must be carried out with a long-

term vision, ensuring sustained success and adaptability in an ever-evolving educational landscape.

Significance and purpose of the study

Recent trends in education underscore the critical importance of effectively incorporating digital technology. While various studies draw attention to key issues such as design principles, ethics, user training, and motivation, they consistently emphasize the pivotal role of these technologies in enhancing the learning process. Thus, recognizing the benefits of technology integration in the teaching practicum course, a fundamental component of teacher education, represents a significant step toward enriching the experiences of both pre-service teachers and faculty members while elevating overall quality.

Moreover, Türkiye, as a member of various international organizations, shares common educational objectives. Having been a full member of the Bologna Process and EHEA since 2001, Türkiye is encouraged to proactively explore avenues for integrating technology into its higher education system, thereby aligning itself with both national and international educational standards.

Given the context described above and recognizing that the successful development and implementation of e-portfolios hinge on careful consideration of the perspectives of key education stakeholders, including faculty members (Wilhelm et al., 2006), this project aims to conduct a needs analysis by uncovering faculty members' perspectives on the potential outcomes of utilizing e-portfolios in teaching practicum classes and gathering their insights regarding effective e-portfolio components.

Furthermore, the results will provide guidance and insights for developing and implementing the intended e-portfolio application.

Method

Research Design

In order to elicit faculty members' perspectives on potential outcomes of utilizing e-portfolios and effective components of e-portfolios, the Delphi approach will be used. The Delphi method is a research approach becomes a suitable selection when the research inquiry necessitates the collection of subjective insights from professionals and experts actively engaged in the field (Stitt-Gohdes & Crews, 2004). A typical Delphi process comprises multiple rounds of data collection to reach a consensus among experts and analytical methods. After each round, researchers analyze data and provide participants with a feedback report summarizing the aggregated information derived from experts' judgments. The Delphi method is founded on the premise that the collective judgment of experts carries a higher level of quality than individual judgments (Mirata et al., 2020). To avoid respondents affecting each other's responses, anonymity is accepted as an integral part of this method (Lilja et al., 2011). The Delphi method gained widespread recognition and adoption as a robust research approach in higher education research, as noted by Clayton (1997). Its versatile applications include predicting the adoption of new technologies, formulating strategies for implementing technology, designing curricula, and addressing various challenges within educational contexts. (Mirata et al., 2020).

Participants

A purposive sampling approach will be employed to identify participants usually referred as *expert panel* within the Delphi research protocols. Although there is no prescribed number of participants in the Delphi method, it is recommended that the panel should have at least 10-15 members in the literature (Lilja et al., 2011). For the present study, the expert panel planned to be consisting of between 15 and 20 participants. The selection criteria will be that they

must be university lecturers or professors holding full-time academic positions with at least five years of experience in teaching practicum classes and who will be willing to participate in up to three rounds of the research.

Data Collection and Analysis

After identifying the expert panel, the first round will commence. Semi-structured questions will be formulated based on a review of the literature, teaching practicum models applied in other education faculties, and examples of current paper portfolios created by previous student teachers. To ensure the concurrent validity of the survey, this research will conduct an expert review by sharing a draft of the survey with two faculty members. Before commencing data collection, the research team will define the numerical criteria for consensus. The data collected from the responses in the first round will undergo qualitative content analysis and will be reported to the respondents. Subsequently, the analyzed and summarized data will be used to develop a second-round survey.

The responses from the experts will be utilized to create a Likert-type questionnaire, which will then be distributed to the participants. The panelists will rate the items on the questionnaire. Measures of central tendency will be employed by the researchers to determine whether consensus has been reached in the second round. If consensus is achieved, this phase of the project will be concluded. If not, the previous steps will be repeated in a third round.

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