

November 2017 – Volume 21, Number 3

ePortfolios in English Language Learning: Perceptions of Arabic-speaking Higher Education Students

***** On the Internet *****

Ellen Dougherty

University of South Florida, Manatee-Sarasota
<doughertye@usf.edu>

Daniela Coelho

Tampere University of Technology, Finland

Introduction

The millennial generation has brought a new dynamic to educational settings, calling for more current and innovative methods in teaching and learning. Web-based technologies are among the many preferred tools of this generation, across all levels of education. Specifically, in tertiary education, McWhorter, Delello, Roberts, Raisor, and Fowler (2013) suggest “the millennial generation of students, as well as adult learners, is asking for anytime, anywhere access to learning, necessitating the use of web-based tools in higher education instructional environments” (p. 254). While continuous access to learning resources seems to be of paramount importance for current students, learning communities and their stakeholders are increasingly placing more focus on the significance of providing evidence of learning (McWhorter et al., 2013).

Electronic portfolios have emerged as one of the potential ways to meet this need as well as the needs of the millennial generation. ePortfolios can be defined as digital tools where learners collect course materials, projects, and achievements, providing for evidence not only of coursework, but individual growth over a given time period. Even though ePortfolios have been used in higher education since the 1990s, it wasn’t until the 21st Century that this digital tool emerged as an essential and powerful means of compiling work, in large part due to its increased integration of multimedia features (McWhorter et al., 2013).

Since the beginning of the century, research studies in the field have mainly focused either on how ePortfolios foster student self-efficacy or on instructor or student perceptions of the value of electronic portfolios (Wakimoto & Lewis, 2014); however, most of these studies have been carried out in North America and Australia. A few studies have embraced a more international

perspective, including studies conducted in European, Asian and Middle Eastern countries (e.g., Kabilan & Khan, 2012; Richardson, Watkins, & Field, 2012), but, to our knowledge, research on the use of ePortfolios with Arabic-speaking students in the Middle East is still limited, specifically in the area of English language education.

Despite this limitation, the implementation of ePortfolios across fields of study has been increasingly encouraged in tertiary institutions in some Middle Eastern countries recently (Turner, 2014). Nevertheless, as teachers in a reputable, higher education institution in the Middle East, we observed limited use of ePortfolios, and portfolios in general, and, perhaps more significantly, a general lack of knowledge on the value of these digital tools in student learning.

With this in mind, we as teachers and researchers deemed it necessary and worthwhile to develop a study in our Middle Eastern, higher education institution to (a) understand the perceptions of the students regarding the value of ePortfolios in English language education and (b) gather suggestions from students on how to maximize the use of these digital tools in higher education.

The results of our study seem to indicate that our Arabic-speaking students saw ePortfolios as valuable digital tools in their English language classes; therefore, one of the goals of this paper is to familiarize teachers of Arabic-speaking students with the potentials of electronic portfolios.

ePortfolios in language learning in higher education

In higher education, ePortfolios have been referred to as the new ‘got to have it’ tool, the show-and-tell platform of the millennium, as reported in Siemens (2004), citing Cohen and Hibbits, 2004. Furthermore, over 40% of higher education institutions have reported the integration of ePortfolios in their curriculum (Rhodes, Chen, Watson, & Garrison, 2014; Dahlstrom, 2012). These digital tools are credited with having the potential to engage students, integrate learning across disciplines, and create a space for both student and faculty collaboration. Indeed, Love, McKean, and Gathercoal (2004) believe that ePortfolios “may have the most significant effect on education since the introduction of formal schooling” (p.24). However, to date, there is limited research documenting the real value of ePortfolios for enhancing student learning (O’Keefe & Donnelly, 2013).

In broad terms, ePortfolios are digital tools where students purposefully collect work on specific topics or subjects, customize them to meet their own needs, and share them with a variety of audiences (Siemens, 2004). Digital portfolios, or webfolios, are ideal for assembling artifacts, such as audio files, digital presentations, and videos, which are not easily assessed through standardized tests or collected in a paper-form file. Often, however, ePortfolios work simply as “digital repositories”, generally displaying student competencies in a particular field. They can, however, provide evidence of progress and achievement in one or more areas and be utilized as valuable tools for and of assessment (Barrett, 2007; Stiggins, 2005). Contemporary ePortfolios are often used as collaborative tools by both students and teachers, providing a means of sharing one’s work publicly (Barrett, 2007).

To date, many international platforms and online sites exist where research and current, best practices on ePortfolios are shared: The International Journal of ePortfolio (IJeP), The British Council, the Annual E-Portfolio Forum and the National Capital Language Resource Center are several sites devoted to guiding educators who would like to implement ePortfolios with language learners. Dr Helen Barrett's ePortfolios.org, the European Language Portfolio (ELP) and E-Portfolios: The Association of American Colleges and Universities (AAC&U) provide educators with the 'how-to' of implementing ePortfolios with students and include myriad examples and models. Several other sites, Portfolio Assessment in the Foreign Language Classroom, Linguafolio, ePearl and the Global Language Portfolio are similar to manuals, and offer information and modules specifically on how to set up e-Portfolios with students. These online resources provide easy access to essential information for educators who would like to integrate digital portfolios in their courses (see Appendix 1 for full URLs).

According to Cummins and Davesne (2009) research on portfolios has been significantly influenced by the ideas put forth initially by John Dewey in his seminal work *How We Think: A Restatement of the Relation of Reflective Thinking to the Educational Process*. However, recent studies have focused more on the metacognitive benefits of portfolios. Abrami, Wade, Pillay, Aslan, Bures, and Bentley (2008) cite one study on portfolios developed by Zellers and Mudrey in 2007 which suggests that portfolios in higher education, and in community colleges in particular, represent an effective tool to expand and enhance students' metacognition, as they provide students with opportunities to think more critically and become pro-active and autonomous learners. In addition, Abrami et al. (2008) state that a study by Hillyer and Ley in 1996 notes that one of the main advantages of portfolios is that students learn to take responsibility for monitoring their own learning. When students employ portfolios to understand how they learn and use them to set academic goals, they begin to appreciate their individual strengths and to reflect on their limitations.

As tools for contemplation and reflection, for setting goals, and for documenting learning over time, the affordances of portfolios are equally valid for both language learners and native speakers of English (Cummins & Davesne, 2009). Moreover, we suggest that ePortfolios, in particular, create a space for language learners to collaborate, to share their work, and, thus, to extend their learning. Empowering learners to achieve a greater understanding of the use of these digital resources as digital spaces for authentic learning, which provide a broader and deeper view of what language learners can actually accomplish, is in part what motivated our research.

Implementing ePortfolios in Higher Education: our challenges

The tertiary institution where our research was carried out had recently invested in a 3-year system-wide program to implement innovative technologies and had set as a primary goal the integration of mobile learning across the curriculum. However, the inclusion of ePortfolios as learning tools at our site was limited. Prior to this study, portfolios had been merely used as files or binders for collecting papers for courses. Additionally, there was a reluctance by both the administration and colleagues to employ ePortfolios in courses. After examining the social setting and considering the interactions and relationships of the various stakeholders, we took

the decision to carry out action research to determine how Arabic-speaking students at the tertiary level would respond to using ePortfolios in their English language classes.

This decision was influenced by the researchers' previous experiences in effectively implementing portfolios with various cultures in a variety of educational settings, including tertiary, secondary, and primary levels. Our experiences with using portfolios and ePortfolios with ELLs in Europe, North America, and elsewhere in the Middle East, suggested that the use of ePortfolios in learning, if implemented and scaffolded effectively, reflecting culturally acceptable norms, could be successfully and effectively implemented with our Arabic-speaking students.

Our experiences were also influential in the decision to use Google Sites to have our students create their ePortfolios rather than an institutionally sanctioned, commercial product. In addition to being user-friendly, we had found that Google Sites provided students with control and flexibility in setting up individual ePortfolios and made it easy to add content of their choice. Significantly, and most importantly for our students, the Google Sites platform makes it easy to control privacy, who is able to view the site on the Internet, and to transfer an educational domain to a personal domain.

Initially, goals were set for the intended use of ePortfolios in both researchers' courses. Consistent set-up between classes was planned and clear, and appropriate explanations were provided for our second language students, reinforcing why ePortfolios were being used. Guided by best practices on the integration of individual learning styles, allowances were built in for individual learning differences and personal interpretation. For instance, more time was allowed for ePortfolio creation for students who struggled with technology and some freedom was given for students to choose how they would like the appearance of their ePortfolios to be and to add resources that were not initially contemplated in our plan. Subsequently, a plan was organized for continued, consistent implementation and use of ePortfolios in both classes throughout the semester. The belief that ePortfolios would be effective digital tools 'for and of' learning (Barrett, 2007) with our Arabic-speaking students was fundamental to designing and carrying out our research, where we hoped to document the learning, opinions, and voices of these English language students.

These questions guided our research:

- How do Arabic-speaking students perceive the use of ePortfolios in learning and in English classes?
- Will their perceptions change over time and in the course of using ePortfolios in their English classes?

Methodology

As researchers, we were primarily interested in 'hearing' our students' voices. As a result, and in order to meet the objectives of our research, we chose to carry out a quasi-experimental research study, combined with action research. This type of investigation is usually used to probe the effects of a certain intervention plan by using a pre-post test design study, which

means the researcher collects data on participants' perceptions and opinions, before and after the intervention (Creswell, 2009). The analysis of the data gathered from both tests allows researchers to make inferences on the potential effects of the intervention plan by comparing the main differences and similarities detected in both tests. In our study, we did not intend to test students' performance, but rather collect their opinions and beliefs on a Web 2.0 tool used in their English classes that they were encountering for the first time. As laptops or tablets were provided to all students in the college, and most of the students had never used ePortfolios, the researchers saw this as an opportune time to conceive an intervention plan (Elliot, 1991; Lewin, 1946) where the consistent creation and integration of individual ePortfolios in specific English classes taught by the researchers would be the main interventive task.

Our intervention plan

Lewin (1946) defines an intervention plan as a detailed description of the factors one would like to change in a specific setting and a rationale of how to implement the changes. Our intervention plan consisted of a set of activities put together in stages to implement the use of ePortfolios in tertiary English language classes with students whose first language was Arabic. The stages were based on Barrett's (2007) and Siemens's (2004) phases of an ideal implementation of an educational ePortfolio.

The first stage involved assessing students' prior knowledge through class discussions on portfolios (paper based or digital) and their possible uses in English classes. Students then completed an online questionnaire in order to share their existing views on portfolios, ePortfolios, and how these digital tools could be used in our English language classes.

The second stage in the process of integrating ePortfolios with our students' work was the introduction of an exemplary ePortfolio, which could be used as a model for students to consult over time as they developed and consequently mastered the technological aspects of creating their own ePortfolio. The study by O'Keeffe and Donnelly (2013) concluded that scaffolded support, particularly with the technological aspects of ePortfolios, was required for their successful implementation. Siemens (2004) suggests this is an important part of the process as it provides students with not only the technical guidance they need, but also the reasons as to why ePortfolios are being created, encouraging them to take responsibility for and reflect on their learning.

During the third stage of implementation, specific course work, activities, and projects were assigned to guide learners in comprehending the possible purposes of their ePortfolios for and of learning in our classes (Barrett, 2007; Siemens, 2004). Throughout this phase, students were encouraged to share artifacts from their ePortfolios as well as to interact with their peers through the use of ePortfolios.

Finally, after a period of three months of ePortfolio use, students were invited to complete a second questionnaire, which asked them to reflect on the importance and usefulness of this tool in the English language lessons.

Our intervention plan also included a description of and guidance in ways of potentially organizing the ePortfolios. Throughout all stages of developing the integration of ePortfolios in our classes, students were encouraged to reflect on what best matched their needs, tastes, and learning styles. Bearing in mind that the students involved were enrolled in IELTS (International English Language Testing System) preparation classes, a consensus was reached to organize their ePortfolios according to different English language skills. Sections were created within each individual ePortfolio facilitating the collection of various activities, as described:

- Home – a brief introduction of the individual student;
- Listening – videos or audio recordings, assignments with exercises;
- Reading – reading texts, including posted answers;
- Writing – student written texts, created using Google Docs;
- Vocabulary – vocabulary quizzes, their results, and vocabulary lists created using Google Docs;
- Speaking – recorded audio files for practice IELTS speaking tests, both student-recorded and containing information on IELTS speaking preparation;
- Research – posting of their own research and data collected on ePortfolios;
- Reflection – a space for reflecting on the use of ePortfolios (including the questionnaires used for this research).

Throughout the creation and use of these ePortfolios, teachers allotted class time specifically for ePortfolio development and monitored student use of the ePortfolio, providing feedback and posting several marked activities on the students' ePortfolios, as noted above.

Collection and interpretation of data

Participants

The participants in this study were college-level students, both male and female, enrolled in the first year of a science degree at a tertiary institution in the Middle East. The first year is considered a Foundation Year, i.e. a preparatory year, in which students have General English and IELTS preparation classes in order to be officially accepted in year 2 of a science program, taught entirely in English. The participants were divided in two groups for this study: female students and male students, both in our courses and, accordingly, in the study itself. In total, there were 71 students who participated in the study, 9 of whom were 18-21-year-old female students and 62 were male students of the same age.

The questionnaires

As previously stated, two questionnaires were created, consisting of short questions about the students' knowledge of paper portfolios and ePortfolios as well as their knowledge of their potential usefulness and purpose. In the first questionnaire (see Appendix 2), a pre-questionnaire, the researchers wanted to know how familiar students were with the terms portfolio and ePortfolio, if they had ever used them before and, if so, in what context. We wanted to know if students might find ePortfolios important tools for instruction in their ESL

classes and, specifically, how they would organize ePortfolios for their English courses if they had a chance to create one.

The second questionnaire (see Appendix 3), a post-questionnaire, was aimed at gathering student opinions on using ePortfolios as academic learning tools in their ESL classes and how important they were for their learning. We challenged the students to write about what they liked the most and the least about the use of this digital tool and invited the students to comment on what they would change.

Questionnaires 1 and 2 were given three to five months apart, the variance in time depending on the course and group assigned to the researchers during the academic year. [1]

Categories of analysis

The categories of analysis of the data collected were created based on the works of Barrett (2005; 2007; 2009), Eynon, Gambino, and Török (2014) and Siemens (2004). Each of these authors in the field of ePortfolios created their unique list of possible purposes and/or benefits of ePortfolios in general, from which we then generated our own list of purposes. The creation of our own inventory of objectives emerged from a combination of part of the listings provided by the previously mentioned authors and an analysis of the students' answers to the open-ended questions in the questionnaires. Table 1 shows how some of the purposes identified by Barrett (2005; 2007; 2009), Eynon, Gambino and Torok (2014) and Siemens (2004) became our list of categories of analysis for this study. However, it is important to mention at this point that the final version of categories for data analysis created by us also includes uses, benefits and purposes mentioned by our students and, possibly not contained in the lists created by the authors mentioned.

Table 1 shows the purposes and benefits of ePortfolios from the authors we focused on next to our categories of analysis. A color code was used to highlight the match between the general purposes of digital portfolios suggested by the authors and our final categories of analysis (readers of the grey scale pdf version of this article can track these relationships through different fonts used with each color).

Table 1. Categories of analysis

Reference authors	Purposes and Benefits of a learning e-portfolio	<u>Our Categories of Analysis</u>
Helen Barrett (2005; 2007; 2009)	Learning e-portfolios are used for: <ul style="list-style-type: none"> ● Showcasing ● Collaboration ● Receiving feedback ● Showing evidence of work ● Reflection ● Documentation 	<ul style="list-style-type: none"> ● Showcasing work ● Knowledge sharing and collaboration tool ● Immediate feedback tool ● Evidence of progress ● Reflection ● Planning learning needs tool ● Communication tool ● Saving documentation for future use
George Siemens (2004)	Learning e-portfolios are used as: <ul style="list-style-type: none"> ● Personal knowledge management ● History of development and growth ● Planning/goal setting tool ● Assist learners in making connections between learning experiences ● Provide the metacognitive elements needed to assist learners in planning future learning needs based on previous successes and failures. ● Personal control of learning history 	
Eynon, Gambino & Török (2014)	<ul style="list-style-type: none"> ● Making Student Learning Visible ● Social Pedagogy (collaboration and exchange) ● Reflection ● Deepen students learning 	

Data Analysis

Pre-questionnaire

Previous knowledge and use of ePortfolios

According to the students' answers to question 1 in the first questionnaire, 89% of the female students stated they knew what a portfolio was, while only 50% of the male students said they were aware of what a portfolio was.

As for question 2, thirty-four per cent of the female students reported that portfolios were files where you keep important documents to avoid losing them and the remaining female students said portfolios were simply a compilation of a variety of information about them and their work as well as a file to save different types of artifacts. Approximately 11% of the girls also added that an ePortfolio could be a place where you express your opinion.

Regarding questions 3 and 4, more than half of the female group confirmed that, although they were knowledgeable about the features of an ePortfolio, they had never used one before. The majority of the girls who had used one before had done it in an academic context.

As for the male group, in question 2, 24% of students agreed with their female counterparts, describing a portfolio as a file where you keep your work safe. However, 8% of them stated that ePortfolios are different because they are created in the Internet. Eleven per cent of the male students claimed portfolios are folders to keep everything in, while only 3% mentioned they are a way of showing someone's expertise on a certain topic as well as a "modern way to teach".

As for questions 3 and 4, almost half of the male students said they had used a portfolio before, mainly for school purposes.

The role of ePortfolios

When asked about the importance of the use of ePortfolios in learning contexts, in question 5, 89% of the female students involved in this study said they considered electronic portfolios either very important or important. The male students, however, were slightly less convinced of the significance of ePortfolios in their academic lives, with only 68% indicating their importance as being very important, important, or not that important, and 32% saying ePortfolios are not important at all or not answering the question.

When asked why they had chosen that level of importance of an ePortfolio, question 5.1, the majority of the female students (31%) reported that an ePortfolio would help them to remember and to save what they had learned, while 23% of them mentioned that ePortfolios provided them with immediate and continuous feedback from the teacher on their performance:

"I can save all my work in it to learn from it later. Also my teacher can correct all my works and send it to me again to know my mistakes." (Female student)

Some female students (23%) also suggested in answer to the same question that ePortfolios can be used to “connect” with their teachers, to learn from mistakes, and to share assignments with their peers.

The male students, on the other hand, appeared to be much less informed about the uses of an ePortfolio in academic settings. Almost half of them did not answer the open-ended “Why?” question 5.1, and 10% admitted not being able to indicate the level of importance because they had never used one before. Sixteen percent of the male students regarded the ePortfolio as an organizational tool, 13% said a platform like an ePortfolio would help them to remember what they had learned, and 8% referred to the fact that it would become easier to access their information from anywhere. A very small percentage of these students (4%) also mentioned that using an ePortfolio would improve their expertise in the use of the Internet and suggested that it would turn them into more tech-savvy students and provide them more presence online.

In question 8, students were also asked how they thought they would use ePortfolios in their English classes and, again, their answers are quite diverse, especially among the female students. Although 14% of the female students did not answer this question and 7% claimed an ePortfolio would be useless, 29% of these students said they would like to use this digital tool as a platform to save all the documents used in their classes and 22% said they expected the ePortfolios to be a means of receiving immediate feedback on their work. The remaining 28% of female students assumed they would use ePortfolios as a communication and reflection tool, as well as a way of sharing knowledge, collaborating and identifying their learning needs.

“I think it’s easy to access it and very easy to use and show our progress in the semester.”
(Female student)

“It’s an easy [way] to contact your friends and share the stuff you’re studying and that will help you get great marks.” (Female student)

As far as the male students were concerned, a massive 51% did not answer this question and 10% of them said they did not know how to use ePortfolios in English learning contexts, while all the remaining students stated they expected ePortfolios to be used only for saving documentation.

Main conclusions based on pre-questionnaire

As mentioned previously, based on the work of Barrett (2005; 2007; 2009), Siemens (2004) and Eynon, Gambino & Török (2014), specifically their ideas on the purposes and benefits of an ePortfolio, we created the eight new categories of analysis listed in the right-hand column of Table 1, above. The eight new categories include several of the aims of a learning ePortfolio cited by these authors; however, our own categories are informed by the students’ answers gathered in our pre-questionnaire. The eight new categories are:

1. Showcasing work
2. Knowledge sharing and collaboration tool
3. Immediate feedback tool

4. Evidence of progress
5. Reflection
6. Planning learning needs tool
7. Communication tool
8. Saving documentation for future use

Looking at the data collected in the pre-test as a whole, as far as the female students are concerned, almost one third of these students perceived the use of ePortfolios as a means of keeping many different documents and files together in a safe place and about 20% of them envisaged ePortfolios as a tool for immediate feedback for teachers and colleagues. Very few regarded electronic portfolios as a reflection and communication tool or a way of planning learning needs (Siemens, 2004).

As for the male students, a considerable number of them, 40%, stated they considered ePortfolios as a tool for saving documents only, with the remaining students admitting not knowing what ePortfolios were used for or not even answering this question of the questionnaire.

All in all, the majority of both the male and female students initially regarded ePortfolios as a saving and organizational tool before using one for learning purposes in the English classes.

Post-questionnaire

Students' reflections on an e-Portfolio

After employing ePortfolios as learning tools in their English classes over a minimum period of approximately 3 months, students were asked to complete a second questionnaire on the use of digital portfolios in educational settings. At this point, as they had become experienced users of ePortfolios, hearing their points of view gives us insightful, honest opinions on how ePortfolios helped (or not) in the learning process for these Arabic-speaking students in particular.

When asked if they had liked using ePortfolios in the English classes, question 1 in questionnaire 2, 100% of the female students stated they liked using them, and only 3% of the male students said they did not like to use this type of tool in their classes.

Regarding the importance of the use of ePortfolios in academic settings, question 2, more than half of the females said they considered this use very important, whereas the remaining female students stated they were important. As for the male students, about half of them considered ePortfolios as being very important in their learning process and 38% said they were important, whereas only 6% said not important.

Students were also asked in question 3 to express their opinion on what they most liked about using ePortfolios in the English classes. Forty-five per cent of the female students believed the possibility of saving their work in the same place and re-using/re-visiting the documents saved at a later date was very important. The remaining students listed other things they liked about

using ePortfolios, such as: saving vocabulary lists interactively, sharing resources with colleagues, learning from their own mistakes, checking their colleagues' portfolios and communicating with the teacher at any time:

“I like to see my friend’s e-Portfolios to learn about my mistakes and communicate with the teacher at any time.” (Female student)

“I liked [that] if we wanted to practice vocab or writing we can go back to our e-portfolio and practice there.” (Female student)

As for the male students, more than half of them, similarly to the female students, said they appreciated both the possibility of keeping all their work in the same place and the opportunity to immediately share their work with peers and teachers, since their work was available anywhere, anytime. Other ePortfolio features mentioned were: user-friendliness, the opportunity to reflect on their mistakes, the chance to be in touch with English whenever and wherever needed, re-using/re-visiting the documents saved, and constantly following their own progress. Only 3% of the male students stated there was nothing about their ePortfolios they liked the most.

“It’s very important because I save my writing, listening, reading and speaking skills in my e-portfolio to learn and remember the lesson and to keep the subject in my mind.” (Male student)

Recommendations from students for future uses of ePortfolios

A very important part of this research was to hear the students’ opinions on how to improve the use of ePortfolios in the English classroom. Having used them as a learning tool for three months, students became much more knowledgeable on what worked for them or could be changed as far as the use of digital portfolios is concerned. Therefore, we asked the students what they would change in their English ePortfolios and how useful they had been in their learning.

In response, 33% of the female students said they wouldn’t change anything in them, while the same percentage of students mentioned they would like to see a game-based section in their portfolios.

“We want to add a game section to be fun and exciting.” (Female student)

Seventeen per cent said they’d rather have a different ePortfolio design or layout and the remaining students even mentioned they would like to have added their own sections to their ePortfolios.

The male students presented a wider range of answers. Although 10% of the students did not seem to have understood the question, almost half of them said they were quite happy with the way the ePortfolio was laid out. However, 14% per cent of the male students admitted they would alter the layout and the same percentage of students also mentioned they would add new

sections to their English ePortfolios, though they did not specify which ones. The remainder of the male students said they would have liked to liaise their English ePortfolios with other subjects as well as to create one for professional purposes:

“In future maybe I will create a new portfolio for my daily work.” (Male student)

As for the usefulness of their English ePortfolios, more than half of the female students mentioned again the possibility of saving documents easily for later and 22% of the students considered ePortfolios very useful for knowledge sharing and collaboration. Other answers mentioned how important an ePortfolio was as a communication and reflection tool.

“Miss, you get us to think in ways we never have.” (Male student)

The male students mostly agreed with the female students on the usefulness of this electronic tool. Approximately half of them highlighted the importance of being able to save work and documents for future use and 24% emphasized how useful ePortfolios were in knowledge sharing and collaboration. Twenty per cent of the students said they were crucial tools for planning their learning needs and for reflection, and 4% stated that electronic portfolios also worked as evidence of progress.

Main conclusions based on post-questionnaire

After creating and employing ePortfolios for a period of three months in their English classes, we noted a change in student opinions on the purposes and benefits of this digital tool in language learning contexts. There was an increase in the number of both female and male students who praised the ePortfolios for their ability to save a variety of documents used in their classes. In addition, more students also told us that ePortfolios were very important for knowledge sharing and collaboration in their English classes (see Table 2).

Among the female students, another shift of opinion was noticed as well: after utilizing ePortfolios, they started to see this tool more as a tool for communication and reflection. In addition, no female students stated that ePortfolios were useful in planning for their learning needs or for immediate feedback after using them.

As for the male students, who initially stated that ePortfolios were only useful for saving documents, they seemed to have found them convenient to plan learning, to reflect, and to show evidence of progress (see Table 2). Indeed, all students were able to express their opinions on the potential of ePortfolios for learning after having used them for a period of three months, something they had not mentioned in the first questionnaire.

Table 2. Pre-questionnaire versus post-questionnaire comparison reflecting responses to open-ended questions on usefulness of ePortfolios and subsequent categorization

Categories of analysis	Female students		Male students	
	Pre-questionnaire	Post-questionnaire	Pre-questionnaire	Post-questionnaire
1. Showcasing work	0%	0%	0%	0%
2. Knowledge sharing and collaboration tool	7%	22%	0%	24%
3. Immediate feedback tool	22%	0%	0%	0%
4. Evidence of progress	0%	0%	0%	4%
5. Reflection	7%	11%	0%	10%
6. Planning learning needs tool	7%	0%	0%	10%
7. Communication tool	7%	11%	0%	0%
8. Saving documentation for later	29%	56%	39%	52%
Useless	7%	0%	0%	0%
I don't know	0%	0%	10%	0%
No answer	14%	0%	51%	0%

Conclusions

Given the unfamiliarity of these students with academic, electronic portfolios, this study aimed to examine Arabic-speaking students' personal opinions in regard to the usefulness of these tools for language learning purposes. It also intended to identify potential changes in their opinions after experimenting with using ePortfolios in their English classes.

At the beginning of our study, both female and male students generally had little knowledge of how a portfolio, yet alone an ePortfolio, could be used for language learning. However, by the end of this study, students commented on the positive impact of ePortfolios on their language learning, specifically praising their organizational features and the "saving for later" possibilities. What is more, students seemed to have benefited from the sharing and collaboration opportunities that arose from the use of ePortfolios.

Our students also voiced their opinions on how to improve ePortfolio usage in their English language classes, namely suggesting the inclusion of language and video games, and providing for even more peer interaction tools and opportunities through ePortfolio sharing.

Despite needing guidance in how to use ePortfolios for reflection as this process did not come naturally for our students, their post-questionnaire answers clearly demonstrate that reflecting became a more valued aspect of ePortfolios, especially among the male students.

Overall, the results of our study indicate that after three months of employing ePortfolios in their English language courses, our Arabic-speaking students, members of the millennial generation, voiced their positive reception of ePortfolios as a tool to enhance their learning in English language classes. Specifically, they viewed these digital tools as a means to collaborate with their peers and teachers, to organize and share their academic work, and most importantly to save their academic work for future use. A percentage of students noted the effectiveness of ePortfolios as tools for reflection and began using them as a means to take responsibility for monitoring their own learning. Our students began to use their ePortfolios to plan their own learning needs and to provide for evidence of their own progress.

As with any action research project, once an intervention or strategy has been implemented, the data gathered and analyzed, and the researchers have had the time to reflect on the evidence, the research cycle begins again (Zwiers, 2017). We as teachers and researchers were fortunate to teach many of the same students upon termination of this research project and we continued to implement ePortfolios in our new courses. Reflection on how to improve the integration of ePortfolios in our new courses was informed by our students' voices.

We were pleasantly surprised by the positive reception towards the integration of ePortfolios in these new courses. Former students helped new students, unfamiliar with ePortfolios, to successfully create and integrate these digital tools into their digital learning strategies. Several students suggested that faculty members in other departments at the college be encouraged to use ePortfolios to integrate coursework throughout the college. Consequently, a workshop was offered on integrating ePortfolios in learning during an official pedagogical training week for staff at the institute in which the research was carried out. The action research cycle began again; what we had learned from and with our students provided new opportunities for critical reflection on our educational practices as we continued to integrate ePortfolios as learning tools to enhance our students' learning, as well as the professional development of our colleagues.

References

- Abrami, P. C., Wade, C. A., Pillay, V., Aslan, O., Bures, E. M., & Bentley, C. (2008). Encouraging self-regulated learning through electronic portfolios. *Canadian Journal of Learning and Technology*, 34(3). Retrieved from <https://cjlt.ca/index.php/cjlt/article/view/26414/19596>.
- Barrett, H. (2005). White paper researching electronic portfolios and learner engagement. *The REFLECT Initiative*. Retrieved from <http://taskstream.com/reflect/whitepaper.pdf>.
- Barrett, H. (2007). Researching electronic portfolios and learner engagement: The REFLECT Initiative. *Journal of Adolescent & Adult Literacy*, 50(6), 436–449. doi:10.1598/JAAL.50.6.2 <http://electronicportfolios.org/reflect/03-JAAL-50-6Barrett.pdf>.

Barrett, H. (2009). Balancing the two faces of ePortfolios. *electronicportfolios.org*. Retrieved from <http://electronicportfolios.org/balance/>.

Creswell, J. W. (2009). *Research Design. Qualitative, Quantitative and Mixed Methods Approach*. California: SAG.

Cummins, P., & Davesne, C. (2009). Using electronic portfolios for second language assessment. *The Modern Language Journal*, 93(1), 848-867.

Dahlstrom, E. (2012). ECAR Study of undergraduate students and information technology. *EDUCAUSE Center for Applied Research*. Retrieved from <https://library.educause.edu/~media/files/library/2012/9/ers1208.pdf>.

Elliot, J. (1991). *Action Research for Educational Change*. Buckingham: Open University Press.

Eynon, B; Gambino, L. M., & Török, J. (2014). What Difference Can ePortfolio Make? A Field Report from the Connect to Learning Project. *International Journal of ePortfolio*, 4(1), 95-114. Retrieved from <http://theijep.com/pdf/ijep127.pdf>.

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.

Lewin, K. (1946). Action Research and Minority Problems. *Journal of Social Issues*, 2(4), 34-46.

Love, D., McKean, G., & Gathercoal, P. (2004). Portfolios to webfolios and beyond: Levels of maturation. *EDUCAUSE Review*. Retrieved from <https://er.educause.edu/~media/files/article-downloads/eqm0423.pdf>.

McWhorter, R. R., Delello, J. A., Roberts, P. B., Raisor, C. M., & Fowler, D. A. (2013). A cross-case analysis of the use of web-based ePortfolios in higher education. *Journal of Information Technology Education: Innovations in Practice*, 12, 253-286. Retrieved from <http://jite.org/documents/Vol12/JITEv12IIPp253-286McWhorter1238.pdf>.

O'Keefe, M., & Donnelly, R. (2013). Exploration of ePortfolios for adding value and deepening student learning in contemporary higher education. *International Journal of ePortfolio*, 3(1), 1-11. Retrieved from <http://theijep.com/pdf/IJEP92.pdf>.

Rhodes, T., Chen, H.L., Watson, C.E., Garrison, W. (2014). Editorial: A call for more rigorous ePortfolios research. *International Journal of ePortfolio*, 4(1), 1-5. Retrieved from <http://theijep.com/pdf/IJEP144.pdf>.

Richardson, T. M., Watkins, D., & Field, S. (2012) The use of the electronic portfolio in evaluating and assessing the efficacy of graduate project management education. *Project*

Management Institute. Retrieved from:
http://pages.leadlife.com/PMI/Repository/Documents/The_Use_of_ePortfolio_paper.pdf.

Siemens, G. (2004). ePortfolios. *elearnspace*. Retrieved from
<http://elearnspace.org/Articles/eportfolios.htm>.

Stiggins, R. (2005). Assessment for learning defined. ETS/Assessment Training Institute's International Conference: Promoting Sound Assessment in Every Classroom. Retrieved from
<http://downloads.pearsonassessments.com/ati/downloads/afldefined.pdf>.

Turner, J. (2014). Implementing ePortfolios in a Multi-Disciplinary Tertiary Context in the UAE. *UAE Journal of Educational Technology and eLearning*, 5, 4-10.

Wakimoto, D. K., & Lewis, R. E. (2014). Graduate student perceptions of eportfolios: Uses for reflection, development, and assessment. *Internet and Higher Education*, 21, 53–58.

Zwiers, J. (2017). [Jeffzwiers.org](http://jeffzwiers.org). Retrieved from <http://jeffzwiers.org/research/>.

Appendix 1

Name of ePortfolio resource	URL
Annual E-Portfolio Forum	https://aacu.org/meetings/annualmeeting/am16/EPForum
British Council	http://teachingenglish.org.uk/article/portfolios-elt
Dr Helen Barrett's ePortfolios.org	http://electronicportfolios.com/
ePearl	http://concordia.ca/research/learning-performance/tools/learning-toolkit/eppearl.html
E-Portfolios: The Association of American Colleges and Universities (AAC&U)	https://aacu.org/eportfolios
European Language Portfolio (ELP)	http://coe.int/t/dg4/education/elp/
Global Language Portfolio	http://glp.eleenes.com/index.html
Google Sites	https://sites.google.com/site/resourcecentereportfolio/about-portfolios https://sites.google.com/site/resourcecentereportfolio/how-to-use-google-sites https://sites.google.com/site/eportfolioapps/ https://sites.google.com/
International English Language Testing System (IELTS)	https://ielts.org/
International Journal of ePortfolio (IJeP)	http://theijep.com/about.html
Linguafolio	http://ncssfl.org/LinguaFolio/index.php?linguafolio_index
National Capital Language Resource Center	http://nclrc.org/
Portfolio Assessment in the Foreign Language Classroom	http://nclrc.org/portfolio/modules.html

Appendix 2

Questionnaire 1

Thank you for agreeing to take a few minutes to complete this questionnaire. It will take about 3 minutes to complete it.

1- Do you know what a portfolio is?

- a. Yes
- b. No

2- If yes, how would you define it?

3- Have you ever used a portfolio?

- a. Yes
- b. No

4- If yes, in which of the following situations?

(tick as many boxes as you think best represent your answer)

- a. School
- b. Work
- c. Personal purposes

5- How important do you think portfolios are for your academic life?

- a. Very important
- b. Important
- c. Not that important
- d. Not important at all

5.1- Why?

6- What do you think about using ePortfolios (Electronic Portfolios produced in the Internet) instead of Paper Portfolios? Would you like to have an ePortfolio to organize your academic achievements?

- a. Yes
- b. No

7- If yes, how important do you think they are?

- a. Very important
- b. Important

- c. Not that important
- d. Not important at all

8- If you had an ePortfolio for your English subject, how would you organize it? What would you include in it?

9- How do you think an ePortfolio could be useful for you to reflect on your own learning style and achievements?

Appendix 3

Questionnaire 2

Thank you for agreeing to take a few minutes to complete this questionnaire. It will take about 2 minutes to complete it.

1- How important was your ePortfolio for your academic life (school)?

- a. Very important
- b. Important
- c. Not that important
- d. Not important at all

2- Did you like using your ePortfolio?

- a. Yes
- b. No

3- What did you like most about using ePortfolios in the English classes?

4- What did you like least about using ePortfolios in the English classes?

5- What would you change in your English ePortfolio?

[1] In questionnaire 1, answers to questions 6 and 7 were ignored in this paper, as we realized these questions were quite similar to questions 5 and 5.1. Question 9 was disregarded as well, as it did not serve the purpose of this paper in particular. It was added to the questionnaire with the aim of being used for another research on reflection about learning. As for questionnaire 2, question 4 was also ignored here given the goal of this paper, which focuses on the purposes and benefits of ePortfolios from a student perspective.

© Copyright rests with authors. Please cite *TESL-EJ* appropriately.