Attitudes of Graduate and Undergraduate Students towards the Electronic Language Portfolio

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***Abstract*—The aim of this paper is to explore students' perceptions of the electronic version of the European Language Portfolio (eELP). The participants of this study were students of undergraduate and graduate degrees in education at two private universities in Spain. Both groups used the digital platform of the European Language Portfolio developed by Spanish Service for Internationalization of Education (SEPIE). The authors used a quantitative survey based on two questionnaires that were used in previously published and cited research, administered through Google Forms. The results of this study indicate that both undergraduate and graduate students value the eELP positively, however graduate students were consistently less positive about this tool. The researchers identified statistically significant levels of dissimilarity in four of the nine items on the survey. The findings of this study offer valuable insights into which aspects of the ePortfolio are most relevant to graduate students and which ones to undergraduate students. Additionally, students' comments complement the survey findings and shed light on what components of eELP could be improved. It is hoped that this research will encourage educators to consider these aspects in the implementation of the eELP in higher education.**

***Keywords*—electronic European Language Portfolio (eELP), Portafolio Europeo de las Lenguas electrónico (e-PEL +14), educational technology, higher education**

I. Introduction

The European Language Portfolio was developed and tested by the Language Policy Department of the Council of Europe in Strasbourg between 1998 and 2000. It was launched and promoted as a tool to support the development of plurilingualism and pluriculturalism during the European Year of Languages. It consists of three parts: the passport, the biography and the dossier, and is available in both electronic and paper versions. It is linked to the Common European Framework of Reference for Languages (CEFR), which organizes language proficiency in six levels: Breakthrough or Beginner (A1), Waystage or Elementary (A2), Threshold or Intermediate (B1), Vantage or Upper Intermediate (B2), Effective Operational Proficiency or Advanced (C1), and Mastery or Proficiency (C2).

The European Language Portfolio is a tool that collects information on language proficiency levels, cultural and learning experiences. It presents work, certificates and other evidence chosen by the individual to illustrate his or her language and intercultural skills. It includes all types of experiences, both formal and informal, which is defined as lifelong learning eclecticism [1]. It is a document that shows a person's achievements, qualifications, experiences and should be continuously updated. As Ziegler states [2] "it is important to reiterate that the ELP is not a curriculum. Rather, it is a set of activities designed to guide students toward becoming more autonomous" (p. 934). The European Language Portfolio is a very flexible and adaptable tool that accommodates the complex nature of lifelong learning and all the different manifestations by which knowledge can be acquired.

In Spain, several models of the European Language Portfolio (ELP) are offered in paper format. They were developed by the Spanish Service for the Internationalization of Education (SEPIE) and validated by the European Validation Committee of the Council of Europe in 2003 and 2004. The following validated European Language Portfolios are currently available and used in Spain: 1) the ELP for students from 3 to 7 years old, 2) the ELP for students from 8 to 12 years old, 3) the ELP for Secondary Education, 4) the ELP for Vocational Training and Baccalaureate (12–18 years old), and 5) the ELP for Adults (16 years old or older). In 2010 an electronic format of ELP called the eELP (+14) was also validated.

The European Language Portfolio generated great interest in the United States. Thus, between 2004 and 2007, two pilot projects were launched with the aim of adapting the European Language Portfolio to US standards, in particular to the five Cs of language learning (5Cs of Language Learning: Communication, Cultures, Connections, Comparisons and Communities) and to the ACTFL (American Council on the Teaching of Foreign Languages) language proficiency levels. Thus, the LinguaFolio of Virginia (LinguaFolio Virginia) and the LinguaFolio of five states: North Carolina, South Carolina, Georgia, Kentucky, and Virginia (Five-State LinguaFolio) were created. From these two portfolios, the Global Language Portfolio was developed at Virginia Commonwealth University, specifically designed for college students. Its electronic version was inspired by the Dutch electronic portfolio and EAQUALS-ALTE ePortfolio validated by the European Validation Committee of the Council of Europe.

The adoption of the European Language Portfolio in different countries in Europe, North America and in the Middle East indicates a great interest and recognition for this instrument on an international scale.

In addition to being used as an assessment tool by various educational institutions, the language portfolio can also serve as an excellent didactic tool, since it teaches a series of strategies that facilitate learning. Its three parts teach both direct and indirect learning strategies.

The passport briefly summarizes the student's language skills in one or more languages. It contains information that formally accredits his or her knowledge of a language, for example, test or exam results and diplomas or official certificates obtained. A copy of these certificates should be included in the dossier. The passport is also linked to the self-assessment charts that constitute an important part of the biography, the second component of the language portfolio. Both the passport and the assessment charts, which present a more detailed analysis of the degree of foreign language proficiency, teach students how to assess their current language skills and inform others about their level of fluency in different languages. In addition, the self-assessment charts contain a column where the learners can determine how to target the language skill they do not currently possess. This helped students to establish personal short- and long-term goals with respect to learning a foreign language and to set realistic objectives and strategies to acquire those desired skills. Assessing one's own learning (monitoring and evaluating oneself), planning, identifying, and formulating goals are considered indirect metacognitive learning strategies [3–5].

The dossier collects certificates, samples of assignments and other evidence chosen by the individual to illustrate their language and intercultural skills. Learners can also include audio and video files in the dossier to demonstrate their verbal proficiency. Thus, the dossier demonstrates their linguistic achievements and can motivate them to keep learning, which is classified as another learning strategy [3].

Oxford [3] states that learning strategies promote learner autonomy, and which is considered fundamental when learning a language. The European Language Portfolio teaches these strategies, encouraging the learner's autonomy and acceptance of responsibility.

II. Literature Review

Numerous researchers indicate that students value positively the ePortfolio as a learning tool [6–12]. The study conducted by Bolliger and Shepherd [13] revealed that 85% of participants stated that the ePortfolio fostered their desire to learn. Additionally, 90% of participants of the Wakimoto and Lewis [14] study found the ePortfolio useful, although 45% of the participants considered the task confusing. Students who participated in Welsh's [11] research reported an increased acquisition of metacognitive skills, as well as increased motivation and self-esteem as compared to the control group that did not use the ePortfolio. The learning gains of the experiential group in general were higher as well.

Various studies suggest that students are more motivated to learn when using the ePortfolio [7–9]. Additionally, Klampfer and Köhler [7], who researched factors influencing motivation and attitude toward the ePortfolio, indicate that perceived usefulness and relevance were the two factors that most affected students' motivation.

It should be mentioned that issues with the ePortfolio platform and technology can negatively affect student motivation [15]. Birks *et al*. [16] also reported that students' perception of the ePortfolio was negatively impacted in their study by a series of problems with IT infrastructure.

Zainal-Abidin *et al*. [17] observed a direct relation between students' positive perception of the ePortfolio and the ease and simplicity of use, as well as reliability of the technology used. Furthermore, Mobarhan *et al*. [15] discovered a positive correlation between the digital literacy of students using the ePortfolio and their appreciation of the same. Nevertheless, Klampfer and Köhler's study [7] does not confirm these findings as they did not find a significant correlation between digital literacy and motivation to use the ePortfolio. However, they did observe a very high correlation between perceived support and motivation to use the ePortfolio. According to Wakimoto and Lewis [14], students who participated in their study also highly valued the help and support they received to solve technology-related problems. Ninety percent of the participants perceived the ePortfolio as beneficial. Additionally, Harrington and Luo [18] observed that when the ePortfolio was first used at their institution, students did not evaluate it positively; however, after providing support to students and fostering the development of metacognitive skills, students changed their opinion and found the ePortfolio beneficial.

Two different research projects, Ciesielkiewicz [19] and Ciesielkiewicz *et al*. [20] explored intrinsic motivation factors that inspire students to create and use ePortfolios. The participants of the first study where students in preschool and primary school initial teacher education in a private university in Spain while the participants of the second study were students in master's degree programs in secondary education from three different Spanish universities. In both studies the most important intrinsic factors motivating students were the appreciation of the value and usefulness of the ePortfolio.

The students in Farrell and Seery's research [21] viewed ePortfolios as deeply personal, informal, real, and as a flexible experience. They defined it as a place, a platform, a sounding board, and not just a tool. They reported that the retrospective aspect of reflecting on their learning via ePortfolios was beneficial for revising and summarizing the acquired knowledge, as well as reviewing and visualizing progress and change in attitudes and approaches. It also helped them to plan and set their future learning goals.

According to Marín's research [22], students most valued learning by doing, while fostering creativity, the acquisition of digital skills, and the fusion of theory and practice in their ePortfolios. However, they considered it to be a time-consuming task.

Thibodeaux *et al*. [23] conducted two studies on students' continued use of ePortfolios. They pointed out the following aspects that students most appreciated in their ePortfolio: real-world projects and authentic artifacts, control of the ePortfolio and development process, use of the ePortfolio as a career tool, assessment of one's own learning and management of the ePortfolio, receiving feedback and comments on the ePortfolio, choice over evidence of learning, opportunity to be creative with ePortfolio presentation and development, and management of the ePortfolio.

In a more recent study, the participants had a positive perception of their self-directed learning and the value of learning with ePortfolios. They also highly valued organization of work and collaborative efforts between team members. Nevertheless, they reported that more could be done to increase their work productivity, efficiency, and

effectiveness in learning using ePortfolios [24].

Regarding students' perceptions of the ePortfolio as a tool for professional development and job search, a study by Wakimoto and Lewis [14] reveals that the majority of the participants who were graduate students in a counseling and counseling psychology program viewed their ePortfolio as a useful tool for their careers and job search. Research from both Mobarhan *et al*. [15] and Ciesielkiewicz [19] coincide with the above and suggest that students find the ePortfolio helpful in their careers and plan to continue using it.

As for the perception of the electronic portfolios used in teaching and learning foreign languages, the participants in the research conducted by Sharifi *et al*. [9] perceived the ePortfolio as helpful and beneficial in learning English. They appreciated the continuous practice and feedback it afforded, as well as the self-evaluation opportunities which helped them to identify their strengths and weaknesses. The study also suggests that the ePortfolio has the potential to boost learner autonomy and motivation. Regarding negative perceptions, students complained about the time and effort the ePortfolio requires.

In a similar vein, the students who participated in Wang and Jeffrey's study [25] also reported improvement in their English, as well as increased engagement, motivation for learning, and satisfaction with assessment through the ePortfolio. Additionally, they also expressed a desire to use their ePortfolio in future courses. As for students' complaints regarding the ePortfolio, similarly to Sharifi *et al*.'s findings [9], they mentioned the workload as a major challenge.

The students who participated in the research undertaken by Dougherty and Coelho [26] also considered the ePortfolio a valuable and helpful tool for language learning. Specifically, they valued such aspects as: knowledge sharing, opportunities for collaboration and reflection, planning, and monitoring their own learning, providing evidence of progress, ability to organize and share their academic work, as well as save it for future use. Overall, they acknowledged its positive impact on their language learning.

A study by Ngui *et al*. [27] indicates that technology-enabled portfolios can be beneficial for academic writing. The participants of this study valued most the ease in receiving feedback, as well as comments from instructors and classmates. They also appreciated the assessment process and experience.

Mira Giménez explored the perception of the Spanish digital version of the European Language Portfolio in two different studies [28, 29]. The participants of the study published in 2016 affirm that the eELP was helpful in their language learning. The aspect that they most valued was the opportunity for reflection which allowed them to identify and address their weaknesses. They also praised the features of the eELP that foster the development of learning strategies, as well as self-assessment. The participants of the study published in 2017 evaluated positively the eELP, in particular the following aspects: descriptors (71%), learning to learn (76.75%), and self-assessment (77.8%). According to Wang and He [10], the electronic language portfolios are accepted and adapted by students with enthusiasm as they "accommodate the needs of the new generation brought up in the information age, who like to communicate and share stuff with each other in the virtual world" (p. 80).

Kwong & Churchill [30] stress the importance of conducting studies in higher education on ePortfolio implementation as they are necessary to provide guidelines and insights into current methodologies on effective use of ePortfolios. Furthermore, Artino and Stephens [31] confirm that there are significant differences in academic motivation and self-regulation between undergraduate and graduate students and they should be taken into account while teaching and learning online. While students' perceptions of ePortfolios in higher education have been extensively studied in the literature, there are relatively few studies on students' attitudes towards ePortfolios used in teaching and learning foreign languages, and even fewer on the differences in the perceptions of graduate and undergraduate students. In contrast, this research explores students' perceptions of language ePortfolios comparing and contrasting these two educational levels. This study addresses this research gap and is unique in that it explores students' attitudes in a comparative way. Additionally, it aims to gain insight into which aspects of eELP could be improved in order to derive implications for future application.

III. Method

A. Context

The ePortfolio assignment was part of a one semester course on Applied Linguistics in Teaching English as a Second Language in the case of the graduate student participants and of a semester-long course on Instructional Technology in Bilingual Education in the case of the undergraduate students. The graduate course was taught during the first semester of the academic year and the undergraduate course during the second semester. Undergraduate students were in their second year of their four-year degree program and the graduate students were studying in one-year intense MA degree program. The eELP was used during approximately 14 weeks. Students had to complete assigned activities during that time period. All participants used the digital platform of the European Language Portfolio developed by SEPIE as part of their course of study. The students could choose their own artefacts to evidence their learning. All participants were given access to and encouraged to complete the online survey, and the response rate was 100%.

B. Participants

The participants in this study were students (N=66) enrolled in education degree programs in two private universities in Spain. Both undergraduate (n=43) and graduate (n=23) students participated in this study. Of the students, 12% were male (n=8) and 88% were female (n=58). 37 participants were aged 19–22, of which 36 were undergraduate students and one was a graduate student. 18 participants were aged 23–30, with 7 being undergraduate students and 11 being graduate students. There were 11 participants aged between 31 and 50 years of age, all of whom were graduate students.

C. Instrument

After having created and used their language portfolio,

students took an online, quantitative survey, administered through Google Forms. The online survey was conducted in 2017 and 2018.

After the questions that obtained demographic information, there were nine items in which the answers were given on a five-point Likert-type scale with the range of responses from strongly disagree (1) to strongly agree (5). The survey was based on two questionnaires in previously published research developed by Mira Giménez [28]. and López Fernández and Ayguasanosa-Riu [32]. The items asked about different facets of the usefulness (or lack thereof) of the eELP. The answers were tabulated, and closed questions were analyzed using SPSS version 27. There were no missing data. Internal reliability was calculated using Cronbach's Alpha, giving a result of 0.904, considered to be excellent or strong reliability [33], and an indication that the survey items were measuring the same construct.

IV. Results and Discussion

The results of the survey showed that the participants appreciated the benefits that the eELP has to offer. The means of the items were consistently between 4 (Agree) and 5 (Strongly agree). See Table 1. All items were also negatively skewed, indicating a distribution heavy to the right.

Table 1. Means of the items

Item	Mean
The eELP allows me to better communicate my linguistic abilities.	4.50
The eELP allows me to be informed about the level and progress of the foreign language that I am learning.	4.52
The eELP encourages language learning as well as the development of foreign language competences and abilities.	4.08
The eELP encourages self-evaluation and reflection on my foreign language learning experience.	4.45
The eELP can facilitate the learning of a foreign language.	4.03
The eELP encourages the language learner to assume responsibility for his/her progress.	4.33
The eELP can promote learning another language in the future.	4.12
The eELP can have an impact on my higher education.	4.08
The eELP can be useful in my future career.	4.45

The researchers sought to examine if there were differences in the ways that undergraduate students and graduate students evaluated the eELP. As such, Pearson Chi-Square values, identified by Shih and Fay [34] as an appropriate calculation to determine association for categorical responses, were calculated in order to determine if the responses to specific items from the two groups of students were statistically significant ($p < 0.05$).

Upon examining the means of the undergraduate and graduate student responses, it is clear that undergraduate students consistently rated the eELP higher than the graduate students. See Table 2. There were four items identified by Pearson Chi-Square calculations, as having differences that were statistically significant. The authors will consider each of these four items individually.

Table 2. Undergraduate and graduate means

Item	Undergraduate Mean	Graduate Mean	Pearson's Chi-Square Asymptotic Significance
The eELP allows me to better communicate my linguistic abilities.	**4.60**	4.30	0.032**
The eELP allows me to be informed about the level and progress of the foreign language that I am learning.	4.65	4.26	0.050
The eELP encourages language learning as well as the development of foreign language competences and abilities.	4.26	3.74	0.109
The eELP encourages self-evaluation and reflection on my foreign language learning experience.	4.49	4.39	0.593
The eELP can facilitate the learning of a foreign language.	4.19	3.74	0.169
The eELP encourages the language learner to assume responsibility for his/her progress.	4.47	4.09	0.089
The eELP can promote learning another language in the future.	**4.30**	3.78	0.009**
The eELP can have an impact on my higher education.	**4.33**	3.61	<0.001**
The eELP can be useful in my future career.	**4.65**	4.09	0.026**

**Statistically Significant ($p < 0.05$)

The eELP allows me to better communicate my linguistic abilities. It is of note that no responses indicated disagreement with the above statement. However, 98% of the undergraduate students either agreed or strongly agreed with this statement, while this is true of only 78% of the graduate students. See Fig. 1.

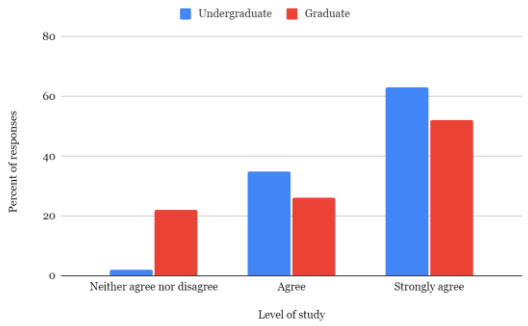

Fig. 1. The eELP allows me to better communicate my linguistic abilities.

The eELP can promote learning another language in the future. For this item, there was one graduate student who did disagree with this statement, and it is worth noting that almost half of the graduate level participants did not agree that the eELP would promote further language learning. Almost

ninety percent of the undergraduate students agreed that the eELP would promote future language study, while this is true of only slightly more than half of the graduate students. See Fig. 2.

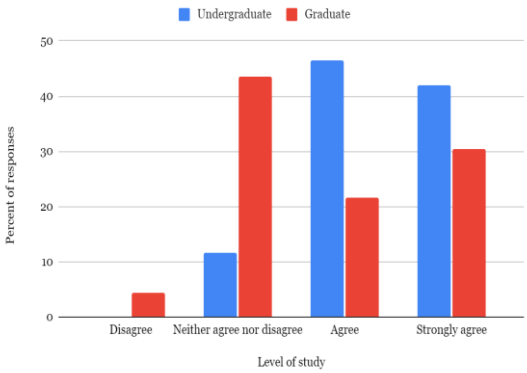

Fig. 2. The eELP can have an impact on my higher education.

The eELP have an impact on my higher education. This item had the greatest disparity between graduate and undergraduate students ($p < 0.001$). Well over half of the graduate students did not agree with the statement, while over 90% of the undergraduate students agreed that the eELP could have an impact on their higher education. See Fig. 3.

The eELP can be useful in my future career. This item is remarkable because it has the highest percentage of agreement by both groups for the items that we are examining (95.4% for undergraduate participants 69.6% for graduate school participants). Once again, it stands to reason that the undergraduate participants would be more likely to believe that the eELP could be useful in a future career, as presumably they have yet to enter the workforce. See Fig. 4.

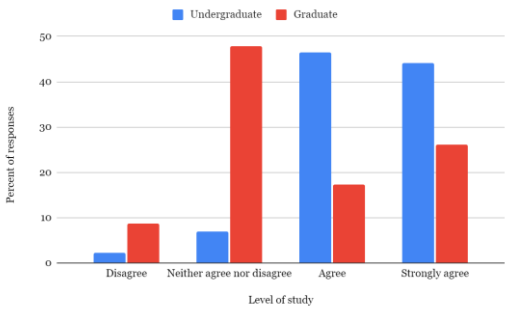

Fig. 3. The eELP can have an impact on my higher education.

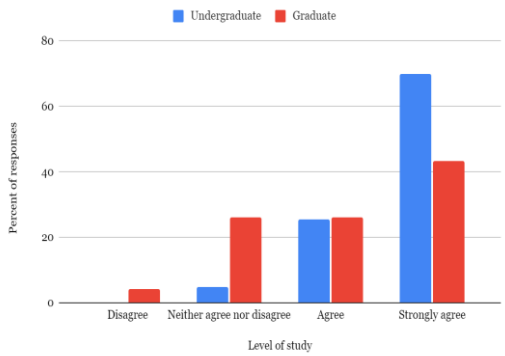

Fig. 4. The eELP can be useful in my future career.

Upon considering the item that asked about whether the eELP could promote learning another language in the future, in which almost half of the graduate students did not agree with this statement, the researchers suspected that this response may have been reflecting the lack of future plans to study another foreign language because the graduate students in our sample were, as one would expect, consistently.

Older than the undergraduate participants. However, upon calculating the Pearson Chi-Square values for age of participants, the disparity of responses to this item based on age were not statistically significant ($p = 0.12$).

The dissimilarity is the most pronounced for the item referencing the impact the eELP can have on their higher education. This, too, is understandable, as it seems likely that someone who is in graduate school is nearing the end of their academic career, so the eELP would have a smaller window of time during which to positively affect the higher education of the participant.

Though the last item examined, which asked about the eELP being useful in my future career, shared the highest percentages of agreement of the four items discussed, the lower ratings by the graduate students can also be explained by considering that undergraduate students have, presumably, yet to enter the workforce, while one would expect at least some of the graduate students may have already entered into a stable job in their chosen career.

Thibodeaux *et al*. [23, 35] advocate that students should be given a voice, choice and ownership in their learning process and emphasize that ePortfolios are key in that process. Wuetherick and Dickinson [12] assert that in order to facilitate the implementation of ePortfolios, educators need to be aware of how students naturally use different components of ePortfolios and what they most value in them. Therefore, this study included some open-ended questions which allowed students to add their comments on what they most and least liked about the eELP and what they would change about it. A summary of responses is found in Table 3.

Table 3. Undergraduate and graduate students' comments

Undergraduate Students	Graduate Students
Aspects of the eELP they liked the most	
-The possibility that the tool offers for self-evaluation of the knowledge of the language - Having a digital document that shows their learning process - Usefulness and ease of ePortfolios as a job search tool	- The possibility that the tool offers for self-evaluation of the knowledge of the language - Learning about their strong points, as well as weak points that they need to focus more on - Having a digital document that shows all what they learned. -Clarity, conciseness, and speed
Aspects of the eELP they liked the least	
- It requires a lot of time and dedication to fill it in - Complexity - Difficult to understand and to fill it in - Not very flexible - Rigidity - Limitation of the possible answers -Format, presentation of the platform - Subjectivity	- Length, too many questions - Complexity - Difficult to fill in - Not very intuitive
Aspects of the eELP they would change	
- Make it shorter - Make it simpler, less complex - Change format /design	- Make it shorter, less complex

Similar to our findings, the students who participated in

Dougherty and Coelho's research [26] appreciated having evidence of progress and the ability to share their work while the participants in the research presented by Mira Gimenez [29], Wang and Jeffrey [25] and Sharifi *et al*. [9] highly valued the opportunity for self-evaluation inherent to the eELP.

Additional comments from the students complement the survey findings and shed light on what aspects and components of eELP can be improved. Students most frequently complained about its rigidity, lack of choice, limited possible answers, reduced flexibility, closed-ended design, little intuitive structure, length, and complexity. The eELP is a highly structured platform that was carefully designed by SEPIE, however, there is always a place for improvement in its design and implementation.

Torre [36] mentions technical characteristics of ePortfolio platforms as one of the factors that predicts its successful or unsuccessful implementation. Furthermore, Thibodeaux *et al*. [23] point out that "if students perceive technology and the ePortfolio as a rigid tool that is structured and "bolted" onto the learning environment used to assess "checkbox" tasks or to meet the needs of a numerical rubric, little will be gained academically" (p.29).

Mira Gimenez [29] also indicates that some components of the eELP platform could be improved. He recommends adding "user's search tool and tasks to promote telecollaboration, and tasks to carry out telecollaborative projects, training materials and support manuals for educators" (p.217).

The insights gained from this study may help to improve some components of the electronic version of the European Language Portfolio that students repeatedly complained about. It can also help instructors with an adequate and more realistic implementation of the eELP without overwhelming students with extra work which can decrease their perception of effectiveness and usefulness of the platform. Furthermore, our findings suggest that it might be more beneficial for students to implement just some components of the platform purposefully chosen to fit their needs and expectations according to their educational level.

V. Conclusions

This study contributes to the literature on students' perception of ePortfolios. It furthers the discussion on ePortfolios in teaching and learning foreign languages, in particular using highly structured ePortfolio tools such as eELP. It offers unique data on the attitudes of graduate and undergraduate students towards eELP, comparing and contrasting these two educational levels.

Our findings indicate that both graduate and undergraduate education degree students consistently agreed with positive statements about the eELP. Nevertheless, graduate students were consistently less positive about this tool. Our data suggest that these two groups have different needs and expectations regarding the eELP which should be taken into account as they are crucial for a successful implementation. The researchers found statistically significant levels of dissimilarity in four of the nine items on the survey. Some of these differences may be attributed to the life circumstances common to students of a given level in their respective courses of study.

It is vital to consider the above differences when implementing the eELP in higher education, in order to better motivate students and address their needs and expectations depending on their educational level. The findings of this study offer valuable insights into which aspects of the ePortfolio are most relevant to graduate and undergraduate students. It is hoped that the findings of this research will encourage educators to consider these aspects and help them to implement the eELP more successfully and effectively.

The results of this study have practical implications for instructors and curriculum designers as they can help to better understand and more effectively incorporate the eELP into the curriculum and course design to support students' learning and to adequately meet their needs. Our findings indicate that the eELP is perceived to be a very useful tool to support language learning, however, it can also be overwhelming to them if not appropriately implemented. Therefore, it is suggested that the instructors carefully select those components and activities that can be most useful to their students instead of requiring the completion of all the activities. It may require necessary refinements to the course design, delivery and assessment.

Furthermore, the instructors could facilitate the implementation by familiarizing students with the platform and the types of activities required for the course, as well as offering training workshops at the beginning of the semester. It may prevent some of the frustration and confusion and may ensure students become more adept and confident at using it.

The findings of this study may not be generalizable to other contexts, however, as long as the limitations are identified, we hope that this study could be of help for instructors and curriculum designers and add to the dialogue on electronic portfolios in teaching foreign languages.

One of the limitations of this study is the limited number of participants, which is due to the size of students' classes. As the universities in which this study was conducted have a low teacher to student ratio, and the courses that implemented the eELP was not compulsory, there was a limited number of students that were able to participate. Future research could consider replicating the study in a larger sample, as well as contrasting the findings with groups of freshmen, sophomore, junior and senior students. Additional research could also investigate the notion of platform choice and whether students prefer highly structured language portfolios with templates or more flexible platforms.

Other limitations lie in the gender of the participants as the majority of students were female. This can be attributed to the fact that education degrees are very popular among young women in Spain. The comparison of attitudes towards language ePortfolios of male and female participants is worthy of further research.

Another aspect that should receive further attention is the familiarity and comfort level with the technology used which has not been examined in this research and may have played a role in the responses. It would be of interest to explore this aspect in the use of language ePortfolios in future studies.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Monika Ciesielkiewicz designed and conducted the research study. Claire Bonilla and Carlos Olave analyzed the data. All authors wrote the paper and approved the final version.

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