E-PORTFOLIO AS A CORRECTIVE PLATFORM TOWARDS EFL STUDENTS' OVERALL/COMPONENTIAL WRITING PERFORMANCE

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Abstract

This paper aims at accentuating and exploring the effect of using electronic portfolio (EP) platform in providing corrective feedback (CF) on EFL students' overall and micro-componential writing performance. Moreover, by conducting a semi-structured interview, the study seeks to obtain students' attitudes towards the use of EP in three aspects, namely awareness, work/activity, and pros and cons. A total of 34 intermediate EFL students ranging from 20-25 years of age participated in this study. While students in the experimental group (N=17) received their corrective feedback via EP, the control group's (N=17) writing assignments were corrected using traditional paper-and-pen portfolio. An EP platform was designed using *DOKEOS* environment during eight instructional sessions.

The results of this investigation revealed that providing corrective feedback on EFL students' writing via EP has a constructive effect on students' overall writing performance (p=.02) and on writing micro-components except for idea development and idea wrap-up. The information obtained from the interview indicated that the EFL students developed affirmative attitudes towards the three aspects of using EP, namely, awareness, work/activity, and pros and cons. The findings of this study bear some implications for material developers and writing teachers and highlight the effective role EP plays in expediting CF on students' writing and equipping them with the ubiquitous technology to get involved in writing activities with a positive standpoint.

Keywords: corrective feedback**,** e-portfolio, micro-components, overall writing

1. Introduction and background

Interaction can be considered as an important factor in creating a way of success in the process of acquiring second language (L2) since as Gass, Mackey, and Pica (1998: 299) declare

"learner's comprehension of input, access to feedback, and production of modified output" is feasible by interaction. However, interaction needs to have some qualifications such as being motivating, involving learners in the process of learning, and being highly mutual and equal (Baturay & Daloglu; Chang, 2014; Saeedi, Meihami & Husseini, 2014; Storch, 2002) to fulfill the requirements of L2 learning. Baturay and Daloglu (2010) state that involvement of L2 learners in the process of L2 interaction is of great importance because other factors that can contribute to L2 learning such as motivation can originate from it. Moreover, authenticity, processability, assessing potentiality, and ability to provide learners with corrective feedback are among other crucial issues that should be considered when a new method is divulged for involving L2 learners in the process of interaction (Fielke & Quinn, 2011; Gipps 2002).

The emergence of e-portfolios (EP) may be due to the fact that they fulfill the aforementioned requirements for establishing an interaction. First, Phinney (1996) views EPs as motivating for language learners since they find its tools interesting and also can have real audiences to communicate with. Second, Perlman, Ross, Christner, and Lypson (2011) state that EPs are supplying the authenticity demanded by L2 interaction. Moreover, EPs put their focus on the process of learning (Baturay & Daloglu, 2010) and have the potentiality of assessing L2 learners' progress (Hung, 2012). In addition, since EPs are formative in essence, they are unique in providing L2 learners with the necessary corrective feedback (Kahtani, 1990). EPs created for the purpose of L2 teaching can include "students' work, peer response forms, and teachers' comments…" (Kahtani, 1999: 263).

As the starting point of EP, portfolio is defined as "a systematic and selective collection of student work that has been assembled to demonstrate the student's motivation, academic growth, and level of achievement" (Norton & Wiburg, 1998: 237). Nonetheless, defining EP is not that much straightforward since it is a brand new phenomenon (Himpsl-Gutermann & Baumgartner, 2010). Kahtani (1999) defines an EP as "a purposeful collection of a student's work that is made available on the World Wide Web or a recordable CD-ROM" (p. 262). EPs can indeed be extended by the emergence of such new platforms as blogs, virtual classes, electronic environments, and drop boxes.

Elaborating on the relation between EP and formative/summative assessments, Charney (1994) points out that it can "fundamentally change how we write, how we read, how we teach these skills, and even how we conceive of text itself" (p.239). Generally speaking, EPs belong to a group of online tools that are called asynchronous which is defined by Kupeliam (2001, p. 1) as "magnifying the power and immediacy of the written word and as such represent authentic communication with a delay which allows students time to think

and compose a message." Asynchronous tools in general, and EPs in particular, are acknowledged for the *delay* they impose between the sender of a message and its receiver, which reduces anxiety and provides a comfortable situation for L2 learners to express what they have learnt (Hoffman, 1994).

Another aspect of EP that shows its importance in SLA is lowering the affective filter. Xu (2009), for instance, notes down that the face saving essence of EP, which is the result of being asynchronous, is a great opportunity to provide corrective feedback. Corrective feedback which is in front of other students, as Ellis (2008) asserts, is sometimes obtrusive and harmful for the learners' affective attitudes. Hence, teachers need to consider their students' face in the language classrooms. Motivation is also intensified by using EP in the L2 learning context. Kahtani (1999) states that students write better when they write for public rather than write just for their teacher. Providing second language learners with a context of L2 community, EPs can enable L2 learners to write for each other.

Characterized by the aforementioned interactional features, the underlying basis for EP use is the cognitive learning theory that supports deep learning processes of creating, implementing, and evaluating L2 (Thang *et al*., 2012). In a similar vein to Barrtt and Wilkerson (2004), Combrige (2004) highlights the characteristics of deep-learning as involving reflection, being developmental, being integrative and self-directive, and possessing the potentiality of long life learning. Consequently, L2 learning can be reinforced by the use of the EP techniques.

To understand the relationship between EP and corrective feedback (CF) one should first understand the essence of CF in SLA. While some scholars such as Ferris (1999, 2002, 2003) bring their evidence to convince others that providing corrective feedback is necessary and useful to improve their L2 knowledge, others such as Truscott (1996, 2008) claim that it has no effect on L2 learners' writing performance. However, it is always asserted that certain types of corrective feedback have positive effects on L2 learning (Sauro, 2009). According to Panova and Lyster (2002), as far as SLA is concerned the nature of corrective feedback requires some characteristics that make it efficient. First, it is suggested that corrective feedback should be provided diachronically and not just once in a while. For instance, Truscott's (2008) study manifested that the students who received CF in a short period of time had a statistically significant performance in the immediate post-test; however, their performance in the delayed post-test did not show any improvements. Second, to be effective, CF needs to take individual differences into account in order to lessen the affective factors. It is due to the fact that different individuals prefer different types of feedback (Russel & Spada,

2006). Finally, CF should be provided in a dialogic framework so that there can happen interaction in the process of correcting a form. As Martin-Beltrán and Chen (2013, p: 148) assert, "dialogic feedback was perceived to be effective by the L2 writers who appreciated the way their tutor guided their thinking and allowed them to ask questions throughout; which resulted in revisions of their writing."

Following the above line of research, the study aimed at exploring the effect of providing corrective feedback on EFL students' writing in two ways: traditional/paper-and-pen portfolio (TP) and electronic portfolio. Three writing domains including content, organization, and language were examined. Moreover, the attitudes of the EFL students were surveyed with regard to three aspects of the existence and usage of EP, namely awareness, work and activity, and pros and cons. To fulfill the above objectives the following research questions are addressed:

1. To what extent can providing corrective feedback via electronic portfolio improve the intermediate EFL students' overall and micro-componential performance?
2. What are the attitudes of the intermediate EFL students regarding the three aspects of using e-portfolio, namely, awareness, work and activity, and pros and cons?

2. The study

2.1. Participants

A total of 34 intermediate EFL students from two institutional contexts participated in this study. From a total of 45 students of Azad University who enrolled in an extra-curriculum writing program, 17 intermediate students were selected based on the Preliminary English Test (PET). This writing program held at Azad University was an effort undertaken by the university to improve the writing skill of the students. Through a predetermined syllabus, the program was aimed at improving the students overall writing performance. In the aforementioned syllabus, different writing components such as content, organization, and language were worked upon. The age range of the group of students was 20-25 and they were students of different non-English majors. They were assigned to the experimental group of this study and received their feedback via EP.

The other participants were from Sharif Language Center. In this language center students should attend a one-skill-program of English classes such as writing, speaking, and listening when they reach the intermediate level of proficiency in English. The sum total of 17 intermediate students of this institute with the age range of 23-26 attended the writing program and were assigned to the control group of this study whose writings were corrected

through paper-and-pen portfolio. It is worth mentioning that to guarantee the inter-rater reliability of the study a writing teacher who was an MA holder in Teaching English as a Foreign Language (TEFL) was trained to help the researchers to rate the students' essays.

2.2 Instruments

2.2.1 Proficiency test

The PET proficiency test was administrated among all participants of Azad University in order to randomly select the intermediate students. Prior to this test, all students that enrolled in this program were announced that this test would be administrated before the first session of this writing program. It should be stated that PET was not administrated among the control group who participated in the one-skill-program of writing since their proficiency level was assessed by the institute prior to this writing program and only those who were at the intermediate level were chosen.

2.2.2. Pretest/posttest design

To record the change, if any, in the students' overall and micro-componential writing performance, a pretest/posttest design was run in this study. The first session of the program was devoted to the pretest. In this session, students were required to write a-100-word essay on the topic *'Would you prefer to live in a traditional house or a modern apartment building'* and they were required to elaborate on their reasons for adopting a particular opinion. For the posttest, students were asked to write an essay with the same length as the one they wrote for the pretest on a conceptually similar topic of *'Would you prefer to have a dangerous job with a high income or a soft one with a low income'* and to support their opinions. The rationale for the conceptually similar topics was that during the eight sessions of treatment the students wrote their opinions about the different announced topics. In doing so, the conceptually similar topics helped to track the change in their writing between the pretest and the posttest, if any.

2.2.3 Rating scale

The students' writing performance, both overall and micro-componential, was assessed by a six-point rating scale extracted from He and Shi (2012). It included three writing components as content, organization, and language, with the distinguishing feature of providing a list of micro-components for each writing component. That is, the content micro-components included 'idea quality', 'idea warp up', 'length', and 'academic words'; the organization

micro-components comprised 'logical thinking', 'coherence', and 'cohesion'; and the language micro-components were 'length', 'accuracy', and 'academic words' (see Appendix A).

2.2.4 Instructional materials

Some chapters of the book *Step by Step Writing 1* by Linda L. Blanton (2008) were covered during the writing program. This book was written based on a process-oriented syllabus that was in line with the nature of this writing program. The book included five sections, called stages, started with the students' first try to write an essay and finished with their essay publication (publication metaphorically means to deliver their writings to their teacher). Other stages highlighted in this book were organizing, drafting, and revising.

Moreover, to familiarize the students with the procedures of creating and using EP a simplified version of *DOKEOS* 'instruction for user' was prepared for them. This handout had several sections such as *'Entering'*, *'Creating'*, and *'Using' DOKEOS EP* platform that helped students to create their EP and use it in a stepwise manner.

2.2.5 E-portfolio environment

This research required an electronic platform for its EP establishment. To this end, *DOKEOS* electronic platform was chosen. Some of *DOKEOS* platform characteristics are shown below (*DOKEOS*, 2014):

- Creating online training courses
- Following the progress of course participants
- Integrating the teacher's own existing content
- Connecting to (DOKEOS on) all devices
- No installation is required

These features made this e-learning environment an appropriate environment for creating an EP corrective platform. Using the aforementioned characteristics, the teacher could easily follow the progress of the course, collaborate either synchronously or asynchronously with the students, and assess students' progress online. Moreover, the participants of the course were able to manage their EPs easily, use the round-the-clock features of this EP environment, be in connection with other students, and track their progress.

2.2.6 Interview

The research also aimed at eliciting the students' attitudes about using EPs. Inspired by Alwraikat's (2012) study, the researchers conducted a semi-structured interview that investigated the attitudes of the participants regarding their awareness, opinions, and stance on EP. These interviews were not conducted in the EP platform since the participants of this research were at the intermediate level of English proficiency and were not able to express their ideas and opinions in English about different questions asked in the interview. Moreover, since *DOKEOS* did not support the Persian language, they were unable to write their responses in Persian.

2.3. Procedure

A writing course was designed in the two institutional environments. The first one was in Sharif Language Center, in which the students have gone through some one-skill-programs that empowered them in different L2 skills. The other research environment of this study was Azad University, in which the writing syllabus was designed as an extra-curriculum course for the students. The first group of participants (N=17) was assigned into the control group in which their essays were corrected by the procedures of the traditional paper-and-pen portfolio. In the second institute (Islamic Azad University) 45 students registered for the writing program and after attending the PET proficiency test, 17 of them were randomly assigned the intermediate level of English proficiency and considered as the experimental group for the study. This group received their corrective feedback through the *DOKEOS* EP platform.

2.3.1 Corrective feedback provided via e-portfolio environment

Prior to the start of the program, an EP environment was designed based on *DOKEOS* e-learning platform, which was active for two months. The entire period of the writing program took one month and a half and it included 10 sessions in both groups. The EP environment was designed through http://www.dokeos.com/. In the first session of the program, when the participants of the experimental group took part in the pretest, the course instructor started to explain the program and the purpose of EP. Then, the instructor familiarized the students with the procedure for registering in the EP environment designed for the purpose of the class. This was done through a hands-on tutorial in which students observed instantaneously how the teacher enrolled an imaginary student in the EP environment. The fact is that after the teacher asked some of the students to create their account in the class, others could experience the procedure in practice. Moreover, a simplified manual of *DOKEOS* main instruction was

distributed among the students. Also, the students were provided with an email registered for the purpose of this program in order to raise their questions and problems while creating their EP account. In addition, the students were required to write their first essay with the topic of *'Why is it important to do sport? What is your opinion about doing sport?'* and submit it to the EP platform as they created the accounts. Due to the step by step training, none of the students had problems in creating an account since their first essay was received in the EP environment soon after they registered in *DOKEOS.*

Each session contained instruction of some aspects of the writing skill based on the pre-planned syllabus. The students were asked to write about the topics and submit their pieces to the EP environment. During the eight sessions of the instruction four topics were covered. The students went through the following procedures to submit their essays to the EP environment:

1. Students wrote their first draft and submitted it to the EP environment.

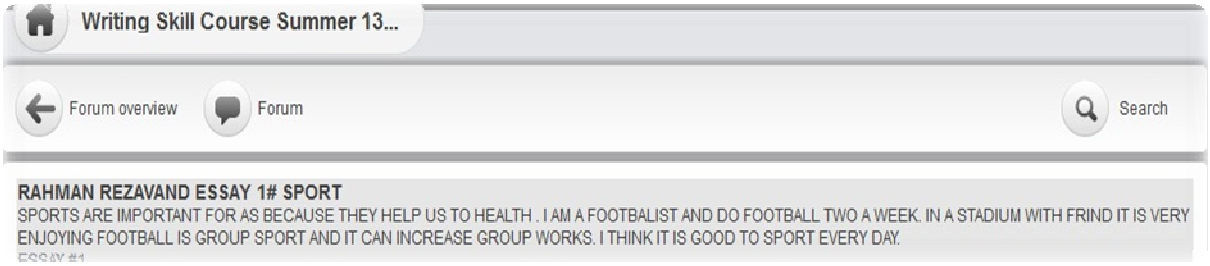

Figure 1. First draft essay.

2. Students received feedback from their teachers on their first draft.

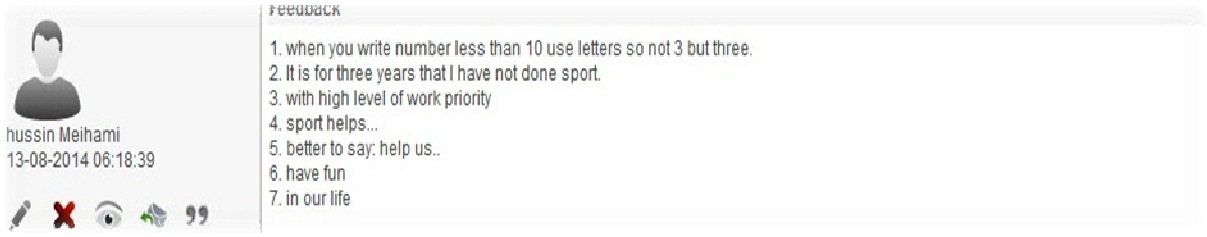

Figure 2. Teacher first direct CF.

3. Students revised their first draft based on the teacher's first feedback.

Figure 3. Students revised their essays based on the provided CF.

In fact, the students went through the process-oriented writing via three phases: drafting, receiving feedback, and redrafting and final essay.

Each session, the teacher published an announcement to the EP environment and reminded the students of the deadline for their essay submission.

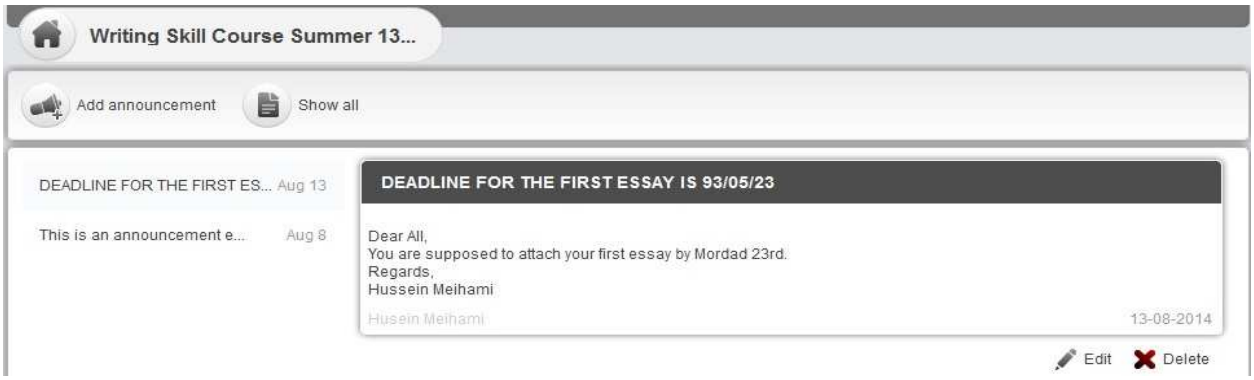

Figure 4. Submission announcement.

One technique used in the present study was the connection of the EP environment to the teacher's email. The procedure was simple yet very helpful to accelerate providing feedback on the students' essays. Each time a new essay was uploaded to the EP platform, the teacher's mobile that was connected to the internet round the clock made an alarm. In so doing, the teacher entered the EP platform and provided corrective feedback on the newly received essay. This feature made the EP similar to a synchronous platform since the students always received CF on their essays simultaneously and moments after their submission.

After students received the teacher's corrective feedback they revised their essays and resubmitted them as the revision file of the EP platform. When they came to the class for the next session they could ask any questions about the feedback that might be vague to them. After this discussion, if necessary, the teacher taught new principles and points based on the syllabus. It needs to be mentioned that 15 minutes of the class period were devoted to in-class writing. In this way, the students were required to write about a topic of their interest and use

the points taught in that session in their essays. In order not to be confused with the topics, they consulted first with their teacher and then started to write. At the final session, this group participated in the posttest in which they were required to write a 100-word-paragraph essay about '*would you prefer to have a dangerous job with a high income or a soft one with a low income'*. Their essays were then rated based on the rating scale (Appendix A). At the end, ten students expressed their willingness to participate in an interview that sought to obtain their attitudes about the different aspects of using EP.

2.3.2 Corrective feedback provided via traditional paper-and-pen portfolio

The second group of participants in this investigation included 17 intermediate EFL students that participated in a writing course as one-skill-program. The syllabus of the group was the same in all aspects to the one run in the EP group. However, the major difference between these two groups was the way they received feedback. The paper-and-pen portfolio group received their feedback on their essays traditionally on the same paper they wrote their essays.

At the first session and after administrating the pretest, the instructor explained what portfolio meant and what would be its uses. The teacher, then, familiarized the students with different procedures of creating a portfolio and its different stages. A five-page instruction handout was provided for the students to know more about the portfolio. In the same way as the EP group, the paper-and-pen portfolio group wrote their essays in three phases. First, they wrote their first draft and gave it to the teacher; second, they were provided with teachers' corrective feedback, and finally they applied the teacher's feedback and rewrote their essays. The procedure was the same but the process of drafting, revising, and redrafting was done every three sessions. For instance, when the students were asked to write about '*Why is it important to do sport? What is your opinion about doing sport?*', they delivered it in the forthcoming session and the teacher provided feedback in a two-session-period from the announcement of the topic, finally the revised version of the essay based on the teachers' feedback was received three sessions later. To cover all the same topics of the EP group, the teacher announced two topics during each session and the students wrote about them, received feedback on them, and rewrote them based on the provided topics.

The students in the paper-and-pen portfolio group were asked to raise their questions about any problems they encountered in the different stages and phases of their writing process. Similar to the EP class, 15 minutes of the class time were devoted to the students' in-class writing. They were free to choose topics for their writing and they consulted their teacher if they had any problems finding a topic. They were asked to use the principles taught

in the classroom. In the tenth session, the posttest was administrated and the students' essays were rated by the same raters. One more point about the pretest and posttest procedure is that the topics assigned for the traditional paper-and-pen portfolio group were the same as the EP group.

3. Results

Before analyzing the students' essays in the pretest and posttest, Pearson Correlation Coefficient test was conducted to achieve inter rater-reliability. The result of this test indicated a high inter-rater reliability between the two raters (r=.82), which was due to the practice they had on the rating scale.

To address the first research question as '*To what extent can providing CF via EP improve intermediate EFL students' overall and micro-componential performance?*' the descriptive statistics of both groups were computed and shown in Table 1.

Table 1. Descriptive statistics of micro-components of EP and TP.

Components	Micro-components	Groups	N	Pre-test		Post-test	
				M	SD	M	SD
Content	*Idea Quality*	EP	17	2.29	.58	4.29	.84
		TP	17	2.88	.99	3.58	1.01
	Exposition	EP	17	2	.61	4.05	.65
		TP	17	2.4	1.06	3.41	.79
	Idea Development	EP	17	1.94	.55	3.88	.69
		TP	17	2.58	1.66	3.52	.87
	Idea Wrap-up	EP	17	2	.86	3.64	.70
		TP	17	2.58	.79	3.35	.86
Organization	*Logical Thinking*	EP	17	2.47	.71	4.0	.50
		TP	17	2.29	.98	2.94	.74
	Coherence	EP	17	2.05	.74	3.88	.78
		TP	17	2.35	1.05	3.05	.82
	Cohesion	EP	17	1.88	.60	3.88	.69
		TP	17	2.05	.74	2.64	.70
Language	*Length*	EP	17	2.08	.65	3.58	.50
		TP	17	1.65	.78	2.94	.74
	Accuracy	EP	17	1.76	.56	3.70	.46
		TP	17	1.85	.75	2.88	.60
	Academic Words	EP	17	1.70	.58	3.58	.61
		TP	17	2	.96	2.88	.85
Overall		EP	17	21.23	3.21	33.70	2.11
		TP	17	23	2.89	28.65	3.64

The findings shown in Table 1 exemplify that while the mean scores of the EP group (hereafter EPG) and the TP group (hereafter TPG) are 2.29 and 2.88 for 'idea quality' in the pretest, they are 4.29 and 3.58 in the posttest, respectively. 'Exposition' mean scores are 2 and 2.4 in the pretest for the EPG and the TPG; they are 4.05 and 3.41 in the posttest, respectively. 'Idea development' mean scores are 1.94 for the EPG in the pretest that increases to 3.88 in the posttest; 'Idea development' mean score is 2.58 for the TPG in the pretest and is 3.52 in the posttest. As the last micro-component of the content the mean scores of idea wrap up are 2 for the EPG and 2.58 for the TPG in the pretest while they are 3.64 for the EPG and 3.35 for the TPG in the posttest.

The second component of writing investigated in the study was organization. It contains 'logical thinking', 'coherence', and 'cohesion'. Table 1 indicates that the mean score of 'logical thinking' for the EPG in the pretest is 2.47 and 4 in the posttest; these amounts are 2.29 and 2.94 in the pretest and posttest for the TPG. The mean score of the EPG for 'coherence' is 2.05 in the pretest and 3.88 in the posttest. In the posttest the TPG mean score for 'coherence' is 2.35 which increase to 3.05 in the posttest. The mean scores for the final micro-component of the organization feature are 1.88 in the pretest and 3.88 in the posttest for the EPG. The mean scores of the 'cohesion' for the TPG are 2.05 in the pretest and 2.64 in the posttest.

The last component of writing investigated in this study was language. The mean scores of 'length' for EPG are 2.08 and 3.58 in the pretest and posttest, respectively. These amounts are 1.58 and 2.88 for the TPG in the pretest and posttest. 'Accuracy' mean score is 1.76 in the pretest and 3.70 in the posttest for the EPG while for the TPG group they are 1.85 and 2.88 in the pretest and posttest, respectively. The mean scores of 'academic word' as another micro-component of language are 1.70 and 3.58 for the EPG group in the pretest and posttest, respectively; and its mean scores are 2 and 2.88 for the TPG in the pretest and posttest. Finally, the overall mean score for the EPG is 21.23 in the pretest and 33.70 in the posttest whereas they are 23 and 28.65 for the TPG in the pretest and posttest, respectively.

To see whether the mean score differences are statistically significant between the two types of portfolios (EP and TP), an independent sample *t*-test was run to obtain the effect size. Table 2 presents the findings of the statistical analysis.

Table 2. Independent sample t-test results for overall/micro-componential writing performance.

Components	**Micro-components**	***df***	***T***	***f***	***Sig.***
Content	*Idea Quality*	32	2.21	.06	.03
	Exposition	32	2.58	2.34	.01
	Idea Development	32	1.30	2.18	.20
	Idea Wrap-up	32	1.09	1.21	.28
Organization	*Logical Thinking*	32	4.58	1.46	.001
	Coherence	32	2.98	.14	.005
	Cohesion	32	5.15	.15	.001
Language	*Length*	32	2.95	.05	.006
	Accuracy	32	4.45	.001	.001
	Academic Words	32	2.75	.32	.01
Overall		32	2.41	.6	.02

As shown in Table 2, the findings indicate that the mean score differences for the 'idea quality' and the 'exposition' are statistically significant (p=.03 and p=.01, respectively). However, the mean score differences in the two other micro-components of content, namely the 'idea development' and the 'idea wrap up', are not statistically significant (p=.20, and p=.28, respectively). The organization micro-components, i.e. the 'logical thinking', 'coherence', and 'cohesion', are statistically significant (p=.001, p=.005, and p=.001, respectively). Table 2 also shows that the mean score differences of language micro-components as the 'length', 'accuracy', and 'academic word' are also statistically significant (p=.006, p=.001, and p=.01, respectively). Moreover, the overall mean score difference between the EP and the TP groups is statistically significant (p=.02).

3.1 Students' attitudes about three aspects of e-portfolios

The students' attitudes about the three aspects of using EP in the writing classroom were surveyed through a semi-structured interview. Inspired by Alwraikat's (2012) survey study, nine questions were asked to the students and their answers were categorized based on the frequency of each answer. Out of the 17 students whose essays were corrected by using an EP environment, 10 students participated in the interview. The three first questions were about learners' awareness about EP, for which the students provided consistent answers. The first question was '*Do you think that the creation and completion of EP require a clear ability to organize?*' and the rationale was related to the very essence of having EP in language classes.

It was aimed at assessing whether students associated their difficulty, if any, in creating their EP with their ability to do so. All 10 participants agreed that there should be some abilities in order to organize EP. The following transcription is the answer provided by one of the participants:

> In my opinion the ability to organize your EP was the most important section of creating EP since the ability in using the features of EP depends on the ability to organize it in a way that it will prevent from the future problems and obstacles.

Their consistent answers to this question highlight the importance of preparation of the students for the classes that EP is planning to be a part of the syllabus (Alwraikat, 2012). EP is more effective in language classes when students are cognitively and affectively prepared. Cognitive preparation means that students should not only be able to create their EP, but they also need to know about its different characteristics. Students should also be prepared affectively, which means that they should reach the capacity in which they can maneuver on different effective situations.

Another question asked to elicit the participants' awareness on the EP was *'Do you think the content of the EP is very important?'* The answers varied to some extent. Five interviewees were so rigid about the importance of EP content, three interviewees' ideas were a little bit smoother, and for two of the interviewees it was not that much important. Below is one of the student's opinions:

> The content of EP itself was important for me because I think if the content is hard for the students, they never be able to take advantage of it. The situation will be difficult if we add to this the strictness of the writing skill that is on progress through EP.

The answers to this question provided by the students can be considered as a good confirmation of the previous question. EP should be user friendly (Alwraikat, 2012), which means that it should not be over complicated, as this participant referred to, for instance, is strict and hard; moreover, we have to add the EFL context characteristics to it, which makes the situation even harder (Negari, 2011). Consequently, if we have a complicated EP environment and unprepared students, the entire syllabus is quite likely to fail.

The final question that explored the students' awareness about EP was *'Would you be comfortable with using EP for learning other skills in language classrooms?'* While responding to this question one of the students who was so enthusiastic about the use of EP said:

> The experience with EP was quite comfortable for me in this writing program and I am so much optimistic about using EP with regard to other skills due to ever increasing technology

> around the world. I think we need to prepare our constructs in our language classes then we can easily follow EP principles in other skills.

Seven students also suggested that they liked to have such tools in the speaking courses. Two of the participants thought that other skills were as hard as writing to be taught and learnt with the help of EP. This shows that the participants of this investigation were satisfied with their writing class held via EP and they liked to experience other skills in the EP environment. What these three questions prompt the EP designers to do for the purposes of language learning are: first, preparatory materials should be provided for the students before they enter an EP based classroom; second, the content of the EP environment should not be too complex that digress their attention from learning; third, learners' awareness needs to be assessed continuously for the essential changes in the program.

The other three questions of the interview explored the students' attitudes about the work/activity aspect of the EP/TP and their design. It should be mentioned at this point that the teacher explained TP in class and the students were well-familiar with TP environment. The first question of this section was *'Are you more comfortable with EP than TP when collecting and presenting your writing?'* Eight of the students answered that EP was more comfortable for them to be used since they could do every process of their writing and also obtain their feedback via the electronic platform. Next, in responding to the questions *'Do you know how to design EP of your writing assignment in the future?'* and *'Did EP increase your desire to write effectively?'* they declared their positive attitudes about the effectiveness of EP in their writing program by saying that they thought their improvement in their writing skill was due to using the EP system in their writing classroom. Seven of the students stated that they were eager to take part in other EP programs in the future. Also, eight of the students believed that their writing ability had increased and they had more desire to write essays.

The final series of questions investigated the students' attitudes about the pros and cons of EP. The first question asked was *'Did creating an e-portfolio help you review your essays in order to present them in the best manner?'* In responding to this question seven students believed that since EP is a rule-based and well-organized e-learning environment, it helped them to present their writings in the best possible way. Below the opinion of one of the participants is reported:

> One of the features that our EP program possessed was that it helped us to review our project every time that we needed to revise or review it. As for this, we were able to prepare our project in a good way. Also, we could use the teacher's feedback in the process of reviewing [revising].

It is apparent that since EP is a combination of synchronous and asynchronous tools it creates a hybrid environment that allows students to use it round the clock. Thus, learning is not limited to class hours. In this writing program, for instance, students of the EP group connected with their teacher during class sessions. They could ask their questions through the teacher forum (one feature provided by *DOKEOS* e-learning environment). However, this privilege was not available for the TP group.

The answers to the second and third questions also showed the participants' positive attitudes to the advantages of EP. In responding to '*Did creating e-portfolio help you to make an effort for learning outside the classroom?'* six students stated that EP helped them to fulfill their responsibilities in an organized manner outside the class; hence, it motivated them to do their assignments. Three students also declared that EP procedures helped them to meet the deadline. Eight students responded to the question *'Did creating e-portfolio help you to know your strengths and weaknesses?'* positively and one participant declared that '*The feedback provided by the teacher and the rewriting of our first writing clarified our weakness and also our points of strength*'. Similarly, these responses indicated that the participants of this study who received CF through EP were cognitively matured to use the received CF. Applying CF in the forthcoming revisions of their essays made them eager and enthusiastic about using EP. This, in turn, provides an exemplification of their ideas about EP benefits.

4. Discussion

The main purpose of this study was to explore the effect of using EP as a corrective platform on students' overall and micro-componential writing performance. Moreover, the research investigated the students' attitudes regarding different aspects of using EP in the writing classroom such as awareness, work/activity, and pros and cons. The findings indicate that the overall writing performance of the participants of this study improved more significantly in the EP group than in the traditional one. It showed that providing CF via EP had a positive effect ($F(32, 31.14) = .06$, $p < .05$) on the students' overall performance. The focus of the research question towards the micro-componential writing performance was also acknowledged in this study. The results revealed that all the investigated micro-components of the students' writing skill in this study improved via the use of EP as the corrective platform except for idea development and idea wrap up (see Table 2 above).

Considering the electronic aspect of EP corrective platform, this study is in line with those studies that showed the positive effect of providing CF in an electronic environment (AbuSeileek & Abualsha'r, 2014; Campbell, 2003; Dippold, 2009; Recep & Aysel, 2010). The

results achieved in this study can be elaborated via EP characteristics and advantages it provides to language learners. As the first feature, it can be stated that it helps students to self-regulate their knowledge (Zimmerman, 1989, 2000). According to Meyer *et al.* (2004), the most important features of self-regulated learning are awareness, control and obtaining knowledge. This suggests that self-regulation of feedback received by students via EP contributes to feedback internalization and finally to their improved performance in the posttest. Moreover, while students use EP, they feel they are more responsible about their learning (Hillyer & Ley, 1996). This responsibility to learn and the processability of CF provided by the teacher stepwisely helped the students to internalize the new rules and principles and finally to improve their writing at both micro-componential and overall levels of performance.

Another feature that shows the effectiveness of the EP is that it improves the "core fundamental competencies such as literacy" (Meyer *et al.*, 2004, p. 4). This is compatible with the first feature since through effective visualization of the materials, students' literacy can improve. This literacy is of two types. First, as the findings of the study, including the interview results, indicate using EP increases students' literacy in implementing the EP itself. As a result, they will be more competent in utilizing EP features. The second type is an increase in students' knowledge about language which is the consequence of the first literacy. By taking advantage of the teacher's simultaneously provided feedback and its visualization through the use of EP, the students will be able to self-regulate the provided feedback and add it to their permanent knowledge.

One more feature of EP is the enjoyment it provides for students while they learn L2 (Erice and Ertas, 2004). The new generation is fond of being on-line, and use of digital platforms, such as blogging, etc. gives them a sense of achievement in learning a language. The use of *DOKEOS* as an EP platform can be another option that can provide the learners with well-organized wikis, quizzes, surveys, and modules. In addition, one more important feature of EP that does not exist in other digital platforms is its scoring system. The scoring system can track the progress of students' performance and provides both teachers and learners with some useful reports and documents. This feature can also increase students' motivation to use EP and lead to improvement in their writing performance.

Nevertheless, the results of this study indicate that the students' writing performance in the two micro-components of writing, i.e. idea development and idea wrap up did not improve in the EP group. It seems that since the students of this study were not taught a standard format of writing (for example, a one-paragraph essay) they were unable to develop their

ideas and wrap them up appropriately. Furthermore, the teacher did not emphasize the idea development and the idea wrap up since they were not included in the program syllabus.

As regards the second research question that asked '*What are the attitudes of the intermediate EFL students regarding the three aspects of using e-portfolio namely awareness, work and activity, and pros and cons?'*, the findings of this research revealed positive attitudes of the students about EP in a writing classroom. The results showed that the students' awareness about EP was quite high. Consequently, the improvement in the EP group writing performance can be put in correlation to the students' high awareness of EP. As Schmidt (1994) states, there will be very little induction of knowledge without awareness. Hence, it shows that students' ability to utilize the feedback they received depends on their understanding of the corrective feedback platform. This is evidenced when teachers provide their students with very implicit CF. As students do not understand the input provided by the teacher in the form of feedback, they ignore it most of the time (Ellis, 2008).

Moreover, the students indicated positive attitudes towards EP work/activities that can be considered as a reason for their writing performance improvement. This can be explained by the Theory of Reasoned Action (TRA) proposed by Ajzen and Fishbein (1980). The essence of this theory states that actions can be influenced by attitudes of doers. Hence, attitudes can shape the way people do their activities in different phenomena. Similarly, some scholars (e.g., Popham, 2005; Royster, Kimharris, & Schoeps, 1999) asserted that students' perceptions and attitudes towards a subject, a process, or a method in SLA might facilitate success or, conversely, lead to failure in academic contexts. Having positive attitudes towards the activities will motivate students to learn with the materials. Finally, the advantages of EP expressed by the participants of the study outweigh the disadvantages, indicating that they were satisfied with the use of EP in their writing program.

5. Conclusions

The results of the present study support the hypothesis that using EP as a corrective platform can improve both overall and micro-componential writing performance in intermediate EFL students, which is in line with the findings of previous studies (AbuSeileek *et al.* 2014; Dippold, 2009; Recep & Aysel, 2010). The results revealed that the gain in knowledge of the overall writing and its micro-components tended to be larger when CF was provided through EP. At one contour, the participants showed a greater performance in the micro-componential aspects of the writing performance except for two of them. Moreover, the interview conducted in this study showed students' positive attitudes with regard to awareness, work/activity, and

also pros and cons of EP. Nevertheless, it should be stated that to determine which of the available online platforms is more effective, some further comparative research studies need to be carried out.

The pedagogical implication of this study is that providing CF via EP in a controlled way and with care (Saeedi, 2013) can remove many problems that the writing teachers encounter in their classes. Moreover, it can accelerate the process of providing feedback, i.e. using an EP has several benefits for students, such as helping them to self-regulate, learn in a process-oriented way, and visualize the materials in a more motivating way.

Acknowledgements

Our sincere appreciation goes to the anonymous reviewers who helped us to improve this work with their sensible and constructive suggestions.

References

AbuSeileek, A., & Abualsha'r, A. (2014). Using peer computer-mediated corrective feedback to support EFL learners' writing. *Language Learning & Technology, 18*(1), 76-95.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall.

Alwraikat, M. (2012). Graduate students' attitudes towards the use of electronic-portfolios in the college of educational sciences at the University of Jordan. *International Journal of Humanities and Social Science. 2* (12), 154-163.

Barrett, H.C., & Wilkerson, J. (2004). Conflicting paradigms in electronic portfolio approaches: Choosing an electronic portfolio strategy that matches your conceptual framework. Retrieved December 3, 2014, from http://electronicportfolios.com/systems/paradigms.html.

Baturay, M.H., & Daloglu, A. (2010). E-portfolio assessment in an online English language course. *Computer-Assisted Language Learning, 23*, 413–428.

Blanton, L., L. (2008). *Step by Step Writing: A Standards-based Approach*. Boston: Heinle.

Cambridge, B. (2004). Electronic portfolios: Why now? *Educause Live Teleconference*. Retrieved December 3, 2014 from http://electronicportfolios.com/portfolios/educauselive.html.

Campbell, A.P. (2003). Weblogs for use with ESL classes. *The Internet TESL Journal, 9* (2). Retrieved December 1, 2014 from http://iteslj.org/Techniques/Campbell-Weblogs.html.

Chang, Y., L. (2014). Characteristics of motivated L2 class groups: From language teachers' and students' perspectives. *English Language Teaching. 7*(7), 159-167.

Charney, D. (1994). The effect of hypertext on processes of reading and writing. In C. Selfe & S. Hilligoss (Eds.) *Literacy and Computers*: *The Complications of Teaching and Learning with Technology* (pp.238–63). New York: Modern Language Association of America.

Dippold, D. (2009). Peer feedback through blogs: Student and teacher perceptions in an advanced German class. *ReCALL*, *21*(1), 18-36.

DOKEOS (2014). Retrieved November 28, 2014 from http://www.dokeos.com.

Ellis, R. (2008). *The Study of Second Language Acquisition (2nd ed.).*Oxford: Oxford University Press.

Erice, D., & Ertas, A. (2011). The impact of e-portfolio on foreign language writing skills. *Journal of Faculty of Educational Sciences. 44*(2), 73-94.

Ferris, D. R. (1999), The case for grammar correction in L2 writing classes. A response to Truscott (1996). *Journal of Second Language Writing, 8(1),* 1-10.

Ferris, D. R. (2002). *Treatment of Error in Second Language Student Writing*. Ann Arbor: University of Michigan Press.

Ferris, D. R. (2003). *Response to Student Writing: Implications for Second Language Students*. Mahwah, NJ: Lawrence Erlbaum Associates.

Fielke, J., & Quinn, D. (2011). Improving student engagement with self-assessment through e-portfolio. Proceeding of the AAEE Conference, Fremantle, Western Australia.

Gass, S., Mackey, A., & Pica, T. (1998). The role of input and interaction in Second Language Acquisition: Introduction to the special issue. *Modern Language Journal, 82*, 299-307.

Gipps, C. V. (2002). Sociocultural perspectives on assessment. In G. Wells & G. Claxton (Eds.), *Learning for Life in the 21st Century* (pp. 73–83). Oxford, UK: Blackwell.

He, L., & Shi, L. (2012). Topical knowledge and ESL writing. *Language Testing, 29*(3), 443-464.

Hillyer, J., & Ley, T. C. (1996). Portfolios and second graders' self-assessments of their development as writers. *Reading Improvement, 133*, 148–159.

Himpsl-Gutermann, K., & Baumgartner, P. (2010). Evaluation of e-portfolio systems. In A. Buzzetto-More (Ed.), *E-portfolio Paradigm: Informing, Educating, Assessing, and Managing with E-portfolios* (pp.19–33). Santa Clara: Informing Science Press.

Hoffman, R. (1994). Powerful, personal: Electronic mail and the L2 writing process. *ReCALL Journal, 6*(2), 53–62.

Hung, S-T., A. (2012). A washback study on e-portfolio assessment in an English as a Foreign Language teacher preparation program. *Computer-Assisted Language Learning, 25*(1), 21-36.

Kahtani, S. A. (1999). Electronic portfolios in ESL writing: An alternative approach. *Computer-Assisted Language Learning, 12*(3), 261-268.

Kupelian, M. (2001). The use of email in the L2 classroom: An overview. *Second Language Learning & Teaching, 1*(1). Retrieved November 1, 2015 from http://www.apacall.org/member/sonjb/sllt/1/Kupelian01.htm.

Martin-Beltran, M., & Chen, P. J. (2013). From monologue to dialogue: A case study on mediated feedback in a transnational asynchronous online writing tutorial. *Academic Exchange Quarterly, 17*(1), 145-150.

Meyer, E., Abrami, P., Scherzer, R., & Wade, A. (2009). Electronic portfolios in the classroom: Factors impacting teachers' integration of new technologies and new pedagogies. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Negari, G. M. (2011). A study on strategy instruction and EFL learners' writing skill. *International Journal of English Linguistics, 1*, 299–307.

Norton, P. & Wiburg, K. (1998).*Teaching with Technology*. Orlando: Harcourt Brace College Publishers.

Panova, I., & Lyster, R. (2002). Patterns of corrective feedback and uptake in an adult ESL classroom. *TESOL Quarterly, 36*(4), 573-595.

Perlman, R. L., Ross, P. T., Christner, J., & Lypson, M. L. (2011). Faculty reflections on the implementation of socio-cultural eportfolio assessment tool. *Reflective Practice, 12*, 375–388.

Popham, W. J. (2005). Students' attitudes count. *Educational Leadership, 62*(5), 84-85.

Recep Ş. A., & Aysel, Ş. (2010). How can the use of blog software facilitate the writing process of English language learners? *Computer Assisted Language Learning*, *23*(3), 183-197.

Reed, M. (1990). The effect of computer-and-writing instruction on prospective English teachers' attitudes toward and perceived uses of computers in writing instruction. *Journal of Research on Computing in Education*, *23*(1), 3-27.

Royster, D. C., Kimharris, M., & Schoeps, N. (1999). Dispositions of college mathematics students. *International Journal of Mathematical Education in Science and Technology*, *30*, 317-333.

Russell, J., & Spada, N. (2006). The effectiveness of corrective feedback for second language acquisition: A meta-analysis of the research. In J. Norris & L. Ortega (Eds.*), Synthesizing Research on Language Learning and Teaching* (pp. 133-164). Amsterdam: Benjamins.

Saeedi, Z. (2013). Care with Computer Assisted Technology. In D. Tafazoli & S. C. Chirimbu (Eds.), *Language and Technology* (pp. 40-47). Tehran: Khate Sefid Publication.

Saeedi, Z., Meihami, H., & Husseini, F. (2014). Email platform and its effects on providing corrective feedback to EFL students. *English Language Teaching. 1*(2), 43-67.

Sauro, S., (2009). Computer mediated corrective feedback and the development of L2 grammar. *Language Learning and Technology, 13*(1), 96-120.

Schmidt, R. (1994). Implicit learning and the cognitive unconscious: Of artificial grammars and SLA. In N. Ellis (Ed.). *Implicit and Explicit Learning of Languages* (pp. 165-209). London: Academic Press.

Storch, N. (2002). Patterns of interaction in ESL pair work. *Language Learning, 52*(1), 119-158.

Thang, M., S., Lee, S., Y., & Zulkifli, F., N. (2012). The role of the electronic portfolio in enhancing Information and Communication Technology and English language skills: the voices of six Malaysian undergraduates. *Computer Assisted Language Learning*, 25(3), 277-293.

Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning, 46*, 327–369.

Truscott, J., & Hsu, A.Y-P. (2008). Error correction, revision, and learning. *Journal of Second Language Writing, 17*, 292-305.

Xu, C. (2009). Overgeneralization from a narrow focus: A response to Ellis et al. (2008) and Bitchener (2008). *Journal of Second Language Writing*, *18*(1), 270-275.

Zimmerman, B. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*, 329–339.

Zimmerman, B. J. (2000). Attaining self-regulation: A social-cognitive perspective. In M. Boekaerts & P. R. Pintrich (Eds.),.*Handbook of Self-regulation* (pp. 13–39). San Diego: Academic Press.

Appendix A. Six-point analytic rating scale (extracted from He and Shi, 2012).

Components and Scoring	**Indicators**	**Definitions/focuses**	**Rating*** **0 1 2 3 4 5 6**
Content (Average of the four indicator scores)	Idea quality	Relevance, originality and depth of ideas	
	Exposition	Thesis statement and position taken	
	Idea development	Topic sentence and supporting details	
	Idea wrap-up	Summary of main ideas	
Organization		Logical thinking (coherence) and transitions within and between sentences/ paragraphs (cohesion)	
Language (Average of the three indicator scores)	Length	Total number of words	Calculated by the first author
Prior to the calculation of the component scores. Each raw indicator score was converted to six point scale.	Accuracy	Percentage of error-free T-units of the total number of T-unit in each essay	Errors underlined and T-units identified by the raters. Percentage of error-free T-units calculated by the first author
	Academic words	Percentage of academic words of the total number of words in each essay.	Frequency of the academic words calculated by using an online software program Percentage of the academic words calculated by the first author