

Canva-based E-portfolio in L2 Writing Instructions: Investigating the Effects and Students' Attitudes

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Abstract

As the new curriculum in Vietnam (promulgated in 2018) emphasises the development of students' communicative competence, the product-based approach to teaching writing has revealed various downsides. The need arises for a tool that can aid students' learning process besides the allocated time in class. Based on the theoretical framework of process writing and electronic portfolios, this paper proposes a supplementary tool for both teachers and students. The participants of the study were 69 tenth-graders at a secondary school in Thu Dau Mot city, Binh Duong province. Utilizing four research instruments including e-portfolios, tests, questionnaire and interview, this study aims to investigate the impacts of Canva as an e-portfolio constructing platform on students' abilities to use vocabulary and sentence structures, as well as its influences on their self-efficacy, anxiety and motivation. The results obtained from the e-portfolios and tests indicated that students improved both their overall writing skills and the language use criterion particularly. The responses from the questionnaire and interview also demonstrated Canva's positive impacts on students' attitudes, especially in terms of alleviating writing anxiety and increasing motivation. In addition, this paper postulates some recommendations for both teachers and students regarding the application of Canva-based e-portfolios in Vietnam's educational system.

Keywords: e-portfolio, L2 writing instruction, Canva, process writing

Introduction

In the prior approaches to teaching writing, students' writing skills are assessed primarily by tests with certain constraints regarding time and content. This mode of assessment fails to provide teachers with an insightful perspective of the essential skills required for authentic writing processes. In reality, the writing process encompasses numerous stages whilst the current product-based approach does not equip students with the crucial writing strategies to go through the necessary phases of a writing task. Hence, the requirement for a shift towards the process-based approach in teaching and assessment arises. However, the number of studies in Vietnam on such approach is still limited. In the new curriculum promulgated in 2018 for the English subject, the Ministry of Education and Training emphasizes on the incorporation of both summative and formative assessment in the curriculum. Besides, the teaching methodologies and assessment methods need to be attuned to the technological advancements of the world. However, teachers are still confronted with various challenges in this process of digital conversion as they have yet to familiarize themselves with the features of certain applications.

Canva is an online graphic design platform. With the release of the educational version, this website has created various opportunities for application in the classroom. Due to its user-friendly interface as well as the various features for multimedia resources, saving, sharing, and collaboration, Canva has the potential to become an efficient tool for e-portfolio development. This research aims to examine the effectiveness of using Canva-based e-portfolios in improving students' abilities to use vocabulary and sentence structures as well as the impacts of this tool on students' self-efficacy, writing anxiety and motivation.

Literature Review

Process Approach in L2 Writing Instructions

Past studies have asserted that students with proficient writing skills have a tendency to divide a writing task into multiple stages, such as brainstorming, planning, drafting, and editing. These aforementioned stages are executed flexibly and some phases, particularly the brainstorming and drafting stages, can be repeated throughout the writing process (Flower & Hayes, 1981). Unlike traditional methods, the process-based approach shifts the focus away from students' writing products and emphasizes on the different stages in the creation of a text (Seow, 2002). In process approach-oriented courses, students are provided with the proper facilitation to experience an authentic writing process through various activities (Harmer, 2004).

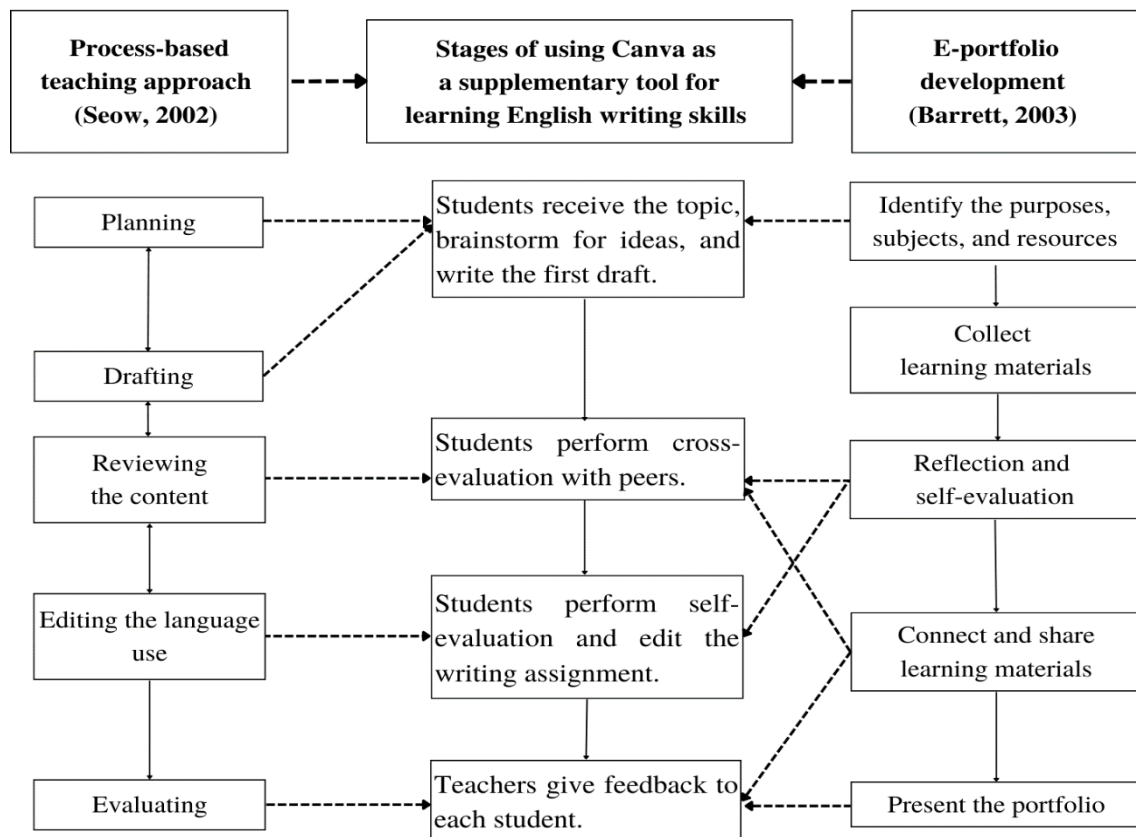
E-portfolios in L2 Writing Instructions

With the development of technology in the educational sphere, the integration of new applications into the teaching process has inevitably become a necessity (Suskie, 2018). This advancement has led to the emergence of e-portfolio - a digitalized form of the traditional learning portfolio (Al-Naibi et al., 2018; Meyer et al., 2010). Based on the theories regarding portfolio development and multimedia resources, Barrett (2003) constructs a framework for creating e-portfolios with five main stages (see Figure 1). As the focal point of e-portfolio is the reflection, feedback and collaboration processes, teachers and students can use the information garnered from those activities to develop plans for learning and teaching in the future.

Based on the aforementioned theoretical foundation, Canva is a potential research subject due to the user-friendly drag-and-drop interface, the incorporation of multimedia resources, and the collaboration features. Not only can Canva become an efficient tool in the language classrooms, but it can also eliminate the demerits of its predecessors, such as Facebook (the risk of cyber security on social media sites (Rojas-Kramer et al., 2015), or Google applications (the lack of features supporting multimedia materials) (Suparjan & Mariyadi, 2021). Figure 1 below presents the different stages in process-based writing instructions and e-portfolio development process, thus illustrating the procedure executed in the experimental group in this research.

Figure 1

Theoretical framework for developing e-portfolio in process-based writing instructions



Learners' Attitudes

According to Krashen (2009), motivation, self-confidence, and anxiety are the prime affective factors that impact second language acquisition. These aforementioned facets play an integral role in preparing students for success in second language learning as they can promote or hinder language input.

Compared to other language skills, writing skill is deemed the most complex during the teaching process (Tangpermpoon, 2008). Besides the linguistic knowledge and thinking strategies required in the writing process, the influence of self-efficacy, writing anxiety, and motivation also contribute to the intricacy of this productive skill (Wu & Wu, 2008). If these affective factors are stimulated properly, they can provide immense facilitation in the writing process (Farzana, 2015).

Self-efficacy is defined as an individual's confidence in their capabilities to perform a task (Pintrich & De Groot, 1990). Thus, writing self-efficacy is an indicator of a high sense of confidence in the writing assignment (Kirmizi & Kirmizi, 2015). To elucidate, when confronted with challenging projects, students with a high level of self-efficacy tend to display a high degree of resilience and proactivity (Schunk, 2003).

Besides self-efficacy, writing anxiety is also one of the affective factors. Al-Sawalha and Chow (2012) define this concept as the combination of multiple emotions, behaviours, and beliefs that stifle students' abilities to complete writing assignments within their intellectual capabilities. According to Wahyuni and Umam (2017), the causes of writing anxiety can be categorized into two groups: environmental aspects and personal aspects. The former includes test anxiety (Zhang, 2011, as cited in Wahyuni & Umam, 2017), pressure to produce high-quality writing, time constraint and heavy workload (Rezaei & Jafari, 2014, as cited in Wahyuni & Umam, 2017). The latter encompasses the lack of background knowledge (Zhang, 2011, as cited in Wahyuni & Umam, 2017), inexperience and insufficient practice in the writing skill (Gunge & Taylor, 1989, as cited in Wahyuni & Umam, 2017).

Motivation also plays a fundamental role in second language learning. According to Ong (2015), motivation is a complex and multi-faceted concept with various elements such as personal preferences, intrinsic motivation, confidence, and direction. In general, motivation increases if students attribute success to factors within their control. Besides, personal values and preferences may also affect the level of motivation during the writing process (Kyllonen et al., 2014).

Methodology

Research Questions

This research addresses the following questions:

1. To what extent does the use of Canva-based e-portfolio affect students' usage of vocabulary and sentence structures in L2 writing performance?
2. To what extent does the use of Canva-based e-portfolio affect students' self-efficacy, writing anxiety and motivation?

Research Design

This research adopts an explanatory sequential design with the mixed methods approach. The explanatory sequential design encompasses two separate phases: the quantitative phase and the qualitative phase later (Creswell et al., 2003).

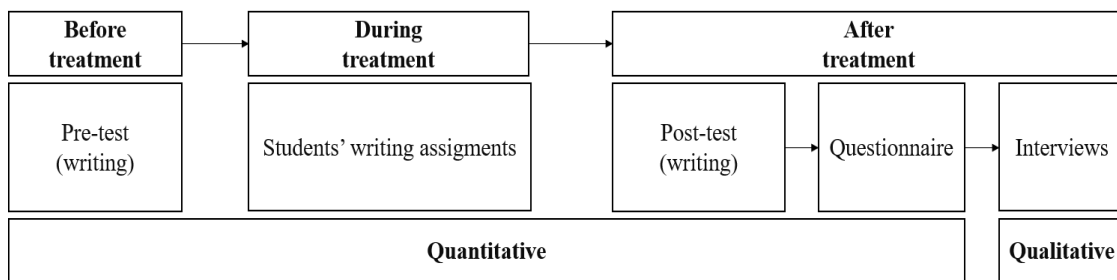
Participants

The participants of this research consist of 69 students at a secondary school in Thu Dau Mot City, Binh Duong Province, Vietnam. The two groups of participants share several common characteristics. They are tenth-graders at the same secondary school with similar scores on the entrance exam. Besides, they are of the same age (16 years old) and all of them are not students of English major. Both groups also use the same textbook piloted in 2012 by the Vietnamese Ministry of Education and Training.

The research assistants include two assessors involved in the evaluation of students' writing assignments as well as the pre and post-tests. They are senior and junior students majoring in English Language Teaching at Ho Chi Minh City University of Education with C1 English proficiency based on The Common European Framework of Reference for Languages. Throughout the process, the two assessors evaluate students' work individually based on the marking criteria of the PET Cambridge exam, including four criteria, namely content, communicative achievement, organization, and language (Cambridge Assessment English, 2020).

Data Collection and Analysis

Figure 2 below visualises the data collection procedure of the study. Quantitative data include written tests before and after the treatment, writing assignments during the treatment and survey results through questionnaires. Qualitative data include interview records that were conducted to clarify the students' views and attitudes expressed through the previous questionnaire.

Figure 2*Experiment and data collection procedure*

Students' written tests before and after treatment are rated using the PET Cambridge writing scale, on four aspects including content, communicative achievement, organization and language (Cambridge Assessment English, 2020). Each aspect accounts for 5 points, making the total 20 points. Each paper is rated by two examiners and the Pearson correlation test is used to examine the correlation between two test-raters before average scores are calculated for further use. Independent samples t-tests are used for checking disparity in two groups' performance before treatment. Paired-samples t-tests are used for determining the changes after treatment within each group. Student papers are also compared and checked with the list of vocabulary-sentence structure criteria of Aryadoust (2010). Numbers and percentages of students fulfilling each criterion are recorded. Writing assignments during the treatment are rated using the same PET Cambridge writing scale (Cambridge Assessment English, 2020). Scores for each student are recorded during the weeks of treatment to indicate changes in their writing performance.

Questionnaire data are statistically described in terms of frequency, percentage, mean and standard deviation of each question, on the Likert 1-5 scale. Among 19 questions, there are 5 items about students' self-efficacy, 6 items about anxiety, 6 items about motivation and 2 items about students' general impressions (see Table 1 below). Participants are given the questionnaire in their mother tongue. See Appendix A for the full English version of the questionnaire.

Table 1*Taxonomy of the questionnaire used after treatment*

	Components	Corresponding items
Self-efficacy	Task management	1.1, 1.3
	Idea development	1.4
	Language Use	1.2, 1.5
Writing anxiety	Personal aspects	2.1, 2.2, 2.6
	Environmental aspects	2.3, 2.4, 2.5
Motivation	Personal values and interest	3.1, 3.5
	Autonomy	3.2, 3.3, 3.4, 3.6
General comments	The effectiveness of the tool	4.1
	Future application	4.2

10 students, including 6 males and 4 females, from the experimental group, were chosen randomly to participate in the interview. The interviewees study in the same class, under the same curriculum, at their upper-secondary school. Half of them have used Canva for various purposes before the research process and all of them are familiar with some basic computer skills. Each interview is recorded and transcribed for analysis. Thematic analysis is used, following the six phrases from Braun and Clarke (2012). Firstly, the researchers read through the data several times individually to familiarise themselves with the data, making notes of initial observations. After the researchers compare their observations, they create and adjust a color coding scheme for the data. Then, they go through the data again to code with constant revisions and comparisons. When coding is complete, the emerging themes are identified and revised. The final report is developed around the main themes that help answer the research questions, supported by quotes from the interviewees.

Findings

Students' overall writing performance

The data about students' overall writing performance was drawn from the pretest and posttest. Table 2 demonstrates the statistically significant difference between the scores of the pretest and posttest. It shows that students' overall writing performance in both experimental and control groups increased significantly after treatment.

Table 2

Paired differences between pretest and posttest scores of experimental and control groups

		N	Mean	SD	Paired differences			
					MD	df	t	Sig. (α) (2-tailed)
<i>Experimental Group</i>	Pretest	34	13.04	2.08	2.87	33	11.96	0.00
	Posttest	34	15.91	1.84				
<i>Control Group</i>	Pretest	35	13.90	2.54	2.26	34	6.46	0.00
	Posttest	35	16.15	1.90				

If $\alpha < 0.05$, the mean difference is statistically significant.

MD = mean difference, SD = standard deviation.

Table 2 indicates that students' overall writing performance improved significantly after treatment. In the experimental group, students had a higher posttest mean score ($M = 15.91$) compared to the pretest's ($M = 13.04$). Similarly, students in the control group also had their score growing from the pretest ($M = 13.90$) to the posttest ($M = 16.15$). Although in the posttest, the mean scores of the control group were slightly higher than that of the experimental group, the mean difference of the experimental group ($MD = 2.87$) was larger than the control group ($MD = 2.26$). In other words, the improvement in the scores of the experimental group was more noticeable.

Students' ability to use language in writing

Results about students' ability to use language in writing were collected from the pretest, posttest and learning products during the intervention. Table 3 demonstrates a statistically significant difference between scores of the pretest and posttest. It shows that students' language use in the experimental group increased significantly after treatment.

Table 3

Paired differences between pretest and posttest language use scores of experimental and control groups

		N	Mean	SD	Paired differences			
					MD	df	t	Sig. (α) (2-tailed)
<i>Experimental Group</i>	Pretest	34	2.69	0.74	1.04	33	7.99	0.00
	Posttest	34	3.74	0.65				
<i>Control Group</i>	Pretest	35	3.24	0.81	0.19	34	1.22	0.23
	Posttest	35	3.43	0.76				

If $\alpha < 0.05$, the mean difference is statistically significant.

MD = mean difference, SD = standard deviation.

Table 3 indicates that students' language use improved significantly after treatment in the experimental group. The change in the control group is not statistically significant. In the experimental group, students had higher mean score for language use in the posttest ($M = 3.74$) compared to the pretest ($M = 2.69$). In the control group, the mean score of the language use criterion in the posttest ($M = 3.43$) was not significantly different from the pretest ($M = 3.24$) although the mean score of the posttest was slightly higher.

Table 4 illustrates how the language use scores changed during the treatment weeks.

Table 4

Language use scores achieved by the experimental group during the treatment

Language use scores	Week 1	Week 2	Week 3
5	N	0	10
	Percentage	0%	29.4%
4	N	10	15
	Percentage	29.4%	44.1%
3	N	22	7
	Percentage	64.7%	20.6%
2	N	2	2
	Percentage	5.9%	5.9%
1	N	0	0
	Percentage	0%	0%

As shown in Table 4, the language use scores of the experimental group had a positive change over the three weeks. The number of students achieving grades 4 and 5 increased. In week 1, the majority of students in the experimental group (64.7%) scored 3 in the language use criterion. However, by week 3, grades 4 and 5 make up the majority of the class, 41.2% and 35.3% respectively.

In addition to the scores recorded in the tests, in order to closely examine students' level of vocabulary and sentence structure in writing, their papers are further evaluated in comparison with five requirements by Aryadoust (2010). Table 5 illustrates the numbers and percentages of students fulfilling each requirement.

Table 5

Results from evaluating students' papers with five vocabulary–sentence structure requirements by Aryadoust (2010)

			(1)	(2)	(3)	(4)	(5)
Experimental Group N = 34	Pretest	N	13	25	15	22	14
		%	38.24	73.53	44.12	64.71	41.18
	Posttest	N	29	30	16	28	21
		%	85.29	88.24	47.06	82.35	61.76
Control Group N = 35	Pretest	N	29	19	9	24	11
		%	82.86	54.29	25.71	68.57	31.43
	Posttest	N	31	21	8	23	13
		%	88.57	60.00	22.86	65.71	37.14

Five requirements:

- (1) using appropriate, topic-related and correct vocabulary
- (2) correct spelling, punctuation, and capitalization
- (3) appropriate and correct syntax
- (4) avoiding use of sentence fragments and fused sentences
- (5) appropriate and accurate use of synonyms antonyms

Table 5 shows that in the control group, there was not much change in the total number of students who met the criteria for using vocabulary and grammar when writing. For requirements 1, 2 and 5, the number of students was higher after the treatment. In contrast, for requirements 3 and 4, the number of students who achieved decreased by 1 each in the posttest. In the experimental group, the change in the total number of students who met these requirements was more pronounced. It can be seen that the students performed best on requirement 2 both before and after the treatment and the progress was most evident in requirement 1. Students in the control group performed better on requirements 1 and 4 than those in the experimental group. The experimental group showed better performance in the remaining requirements 2, 3 and 4. The control group did not record the increase as much as the experimental group after the treatment.

Students' attitudes towards Canva-based e-portfolio

Students' attitudes are measured based on their responses in the questionnaires and the interviews.

Questionnaires

Table 6 below illustrates students' responses (on a Likert 5-point scale) towards the survey items. See appendix B for a full version of students' responses.

Table 6

Summary of students' responses (on a Likert 5-point scale) towards the survey items

SD = strongly disagree, D = disagree, U = undecided, A = agree, SA = strongly agree

Taxonomy of the questionnaire	Items	Response						
		SD	D	U	A	SA		
Self-efficacy	Task management	1.1	5.9%	5.9%	38.2%	32.4%	17.6%	
		1.3	0.0%	8.8%	44.1%	32.4%	14.7%	
	Idea development	1.4	2.9%	20.6%	29.4%	41.2%	5.9%	
		Language Use	1.2	2.9%	14.7%	41.2%	38.2%	2.9%
			1.5	8.8%	26.5%	50.0%	8.8%	5.9%
Writing anxiety	Personal aspects	2.1	2.9%	5.9%	29.4%	55.9%	5.9%	
		2.2	2.9%	11.8%	26.5%	50.0%	8.8%	
		2.6	2.9%	8.8%	26.5%	41.2%	20.6%	
	Environmental aspects	2.3	2.9%	17.6%	17.6%	44.1%	17.6%	
		2.4	8.8%	20.6%	29.4%	35.3%	5.9%	
		2.5	5.9%	17.6%	17.6%	41.2%	17.6%	
Motivation	Personal values and interest	3.1	2.9%	14.7%	47.1%	29.4%	5.9%	
		3.5	5.9%	8.8%	20.6%	50.0%	14.7%	
	Autonomy	3.2	5.9%	5.9%	8.8%	55.9%	23.5%	
		3.3	5.9%	11.8%	29.4%	47.1%	5.9%	
		3.4	5.9%	11.8%	32.4%	47.1%	2.9%	
		3.6	8.8%	8.8%	35.3%	41.2%	5.9%	
General comments	The effectiveness of the tool	4.1	2.9%	5.9%	32.4%	50.0%	8.8%	
	Future application	4.2	5.9%	11.8%	47.1%	29.4%	5.9%	

In items related to students' self-efficacy when writing (items 1.1 – 1.5), the average result in 4 out of 5 items is above the middle level. Item 1.3 received the most positive response. All the items about students' anxiety (items 2.1 – 2.6) had the most responses distributed on point 4 – Agree. Item 1.6 had the most positive response recorded. It can be observed that items regarding students' motivation (items 3.1 – 3.6) had a more favourable pattern. Except for item 3.1, all the items had the majority of responses distributed on point 4 – Agree.

With the general comments on the process of practicing writing on Canva, the results show that, for the effectiveness, most students chose points 4 and 5 – Agree (50%) and Strongly Agree (8.8%). Regarding the desire to continue using the tool, the majority

of the opinions obtained were neutral – Undecided, with 16 students (47.1%). There were 6 students (17.7%) who did not want to continue using the tool and 12 students (35.3%) wanting to continue using it. Thus, the number of students who wanted to continue using Canva to practice writing was twice as high as the number of students with a rather negative view.

Interviews

The interview results show that the majority of students have a positive attitude towards the application of Canva-based e-portfolio. To be more specific, students' opinions mainly circulate three main themes, including (1) impacts of Canva-based e-portfolio on their self-efficacy, anxiety and motivation in writing practice, (2) some favourable features of Canva and (3) desire to apply Canva for future learning process.

8 out of 10 interviewed students mentioned that they felt more confident after practicing with Canva-based e-portfolio. They were aware of their own process in generating ideas, organizing sentences and using vocabulary and grammar. Also, students implied that feedback from peers and teachers made them feel more confident when writing, as X01 and X03 expressed:

X01: After finishing three writing assignments with the comments of my friends, I felt I could write more than before and be more confident.

X03: [...] when I had this chance to practice writing, I read more on the Internet. This helped me in coming up with ideas to write.

When asked about anxiety while writing, all interviewees shared the same feeling of ease with low pressure. Canva can be comparable to other popular digital word processing platforms, specifically in helping writers draft and revise their pieces more easily and comfortably. Therefore, such familiarity allows students to quickly adapt to this new tool and easily utilize all these convenient features. Some reasons recorded include less pressure about the time limit and the ability to edit drafts several times. These are clearly illustrated through the voices of Y06 and Y07.

Y06: [...] when writing on Canva, we can delete and rewrite. When writing on paper, if I made a mistake, I might need to start from the beginning again. That made me feel quite stressed.

Y07: Canva helped me ease the tension because there was less pressure on the time limit and it is also easy to organize the time when doing the assignment.

In addition, 8 out of 10 interview participants shared that activities introduced on Canva made them feel more motivated to finish the writing assignment. Among them, some mentioned the creative aspect of using Canva in writing activities, as below:

X09: I see that this application is quite interesting, suitable for those who love thinking out of the box.

Some students also mentioned the usefulness of Canva's features such as multimedia integration, auto-save, sharing and collaborating, graphic designs and so on. These are illustrated through the following responses:

Y04: One more point is that you can insert the background without having to search for images on the web and since it is available right on Canva, it doesn't take long.

X01: Canva is very convenient in the sense that it allows me to share my work with my friends to edit and give me feedback. Submitting assignments to teachers is also very simple.

X08: I'm quite impressed with my templates on Canva. They give me a motivation to write which is normally a dull activity. With Canva, writing is more colorful.

During interviews, 3 students mentioned that they struggled with the tool at the beginning but then quickly adapted. In particular, Y05 expressed:

Y05: At the beginning, I had some difficulties in completing my assignment. However, for the next assignments, I felt easier and more familiar.

In general, 9 students expressed that they would like to use Canva in their learning process. For better use of Canva, they also suggested some changes, specifically with instructional videos, class discussions and deadline extensions. These are revealed as follows:

X02: I think we should have more specific guidelines for using Canva because finding out about them by ourselves is rather time-consuming and challenging.

Y06: [...] between the assignments, if we can have some instructional videos and class discussions on how to write, writing sub-skills can be improved.

Discussion

The findings on students' overall writing performance once again emphasize that in any form, teachers' comments have a positive effect (Ismail et al., 2008), helping students reinforce their writing skills. However, when looking closely at the level of

improvement in the two groups, the group of students who used the Canva tool improved more significantly. For the experimental group, comments and evaluation are considered the core of the learning process. When drafting and conducting peer review, students focus on the writing content, thereby developing the ability to think critically. This stage is similar to the responding activity in the model of Seow (2002). Then, at the self-assessment and rewriting stage, students review the vocabulary and sentence structure used. This is the time for students to focus on grammatical and lexical errors to complete the writing, similar to the formal editing phase in the model of Seow (2002) and Martínez et al. (2020).

Regarding the ability to use vocabulary and sentence structure in writing, the aforementioned results show that the group of students using the Canva tool improved their sub-skills after the writing process. The results of the assessment of learning products clarify the progress through each lesson of the students in the experimental group. More specifically, when analysed according to the five requirements for using vocabulary and sentence structure (Aryadoust, 2010), students' papers indicated that the impact of this teaching practice on vocabulary development was high. Similar results were also obtained from the subjective perspective of students (Que Nhi & Mai, 2018). E-portfolio on Facebook was positively evaluated by students considering their vocabulary development. Thus, this study continues to promote students' initiative in learning words and the same effect is promoted by Canva-based e-portfolio.

For self-efficacy, the results of questionnaires and interviews show that the influence of Canva-based e-portfolio is at an average level, with no significant change. In other words, Canva has not yet fully helped students with their self-efficacy in their writing skills. Specifically, from the questionnaire data, it can be seen that students are still not completely confident with their ability to generate ideas and use appropriate language to express their thoughts. On the other hand, Canva-based e-portfolio had a positive effect on students writing anxiety. Notably, the ability to use the Canva tool, the level of practice, and the time pressure were the three factors that received the most positive feedback from students. Therefore, research results have emphasized the role of increasing opportunities to practice writing skills (Gungle & Taylor, 1989), reducing time pressure (Rezaei & Jafari, 2014) and ability to use tools (EUFOLIO, 2015; Yastibas & Cepik, 2015) on students' comfort in writing practice. The results of the questionnaires and interviews also show that Canva-based e-portfolio has played a positive role in creating motivation for students in the learning process. This study also clarifies the conclusion that student motivation increases when students perceive that success is due to factors within their control (Kyllonen et al., 2014). Besides, factors related to interests will also affect students' motivation.

Limitations

To begin with, due to the systematic organisation of the research site in particular and Vietnamese public high schools in general, the participants of this research were not chosen randomly. The lack of random sampling in the selection of the participants impacts the generalisation of the research participants. Furthermore, due to the complications of the Covid-19 pandemic, most of the activities were conducted online. Hence, some students residing in the dormitory were confronted with challenges regarding the Internet connection. This technical difficulty, to some extent, affected students' learning experiences as well as their submission processes.

Conclusion

The findings of this study clearly indicate positive effects of applying Canva-based e-portfolio in teaching L2 writing skills to Vietnamese upper-secondary school students. Specifically, this model has contributed to the improvement of students' overall writing scores and when language use criterion is examined closely, it is clear that students perform better after using Canva-based e-portfolio in practicing writing. Students also exhibit favorable views towards their learning experience. Canva-based e-portfolio has helped them feel less inhibited and more motivated when practicing writing. However, this tool does not show a clear effect on their self-efficacy.

On that premise, the authors would propose some notes for teachers and students when teaching and learning L2 writing skills. Firstly, given the limited time of the current curriculum, the organization of supplementary exercises after school will have a positive effect on the development of students' writing skills. To be most effective, Canva-based e-portfolio needs to be harmoniously combined with classroom activities. Teachers can consider different functions of Canva for classroom activities such as group work, draft writing, peer review, self-assessment, and essay editing. Classroom lessons can be used to present and analyze sample works to help students understand the structure, and provide them with vocabulary, and ideas. Then, online activities on Canva have the role of helping students practice more, thereby writing better. Second, teachers need to clarify requirements as well as guide students through the platform. The instructions need to be comprehensive and can be animated through illustrative videos. Pre-writing tasks are also advisable in helping students familiarise themselves with the topic and language. At the same time, post-writing tasks such as sharing, or class discussion would also be supportive. In addition to rubrics and checklists, clear templates for peer review and self-editing are also crucial since they can give students a transparent idea of what they are supposed to do. Third, in the process of applying and introducing Canva to students, teachers also need to consider employing the powerful features of the tool such as collaboration, sharing, and multimedia integration to help students develop communication skills as well as creativity. Fourth, when using the tool, students need to follow the instructions from the teacher to use the tool properly. In the process of

performing peer review and self-editing, students need to strictly follow the criteria that have been introduced from the beginning.

Further studies can be conducted to examine the effects of this model on other sub-skills of L2 writing performance. More investigations should be made on the difficulties students and teachers may encounter when applying Canva in constructing e-portfolio. The authors also acknowledge that due to the setting of Vietnamese secondary schools, sampling was not random. Therefore, other studies in the future may want to expand the scope and scale to other EFL learners, including but not limited to test-prep students, ESP learners, etc.

Author Notes

Hereby, the authors declare that they have no conflicts of interest to disclose. Correspondence concerning this article should be addressed to Anh N. N. Le, English Department, Ho Chi Minh City University of Education, 280 An Duong Vuong St., District 5, Ho Chi Minh City, Vietnam. Email: anhlnn@hcmue.edu.vn

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Appendix A

Full version of the survey questionnaire

Instructions: Below are statements about learners' experience learning writing with Canva-based e-portfolio. Please rate how much you agree or disagree with these statements. Use the following scale:

- (1) Strongly disagree
- (2) Disagree
- (3) Undecided
- (4) Agree
- (5) Strongly agree

	(1)	(2)	(3)	(4)	(5)
1.1. I can use Canva to complete writing assignments.					
1.2. I can use appropriate vocabulary to express opinions when writing.					
1.3. I can continue the assignment after dealing with difficulties.					
1.4. I can generate a lot of ideas for writing assignments.					
1.5. I can write complete sentences without grammatical mistakes.					
2.1. Canva-based e-portfolio gives me chances to practice writing.					
2.2. Canva-based e-portfolio allows me to familiarize myself with the topic before writing.					
2.3. I do not feel under the pressure to complete my work within a time limit.					
2.4. I do not feel under the pressure to create the perfect first draft.					
2.5. I do not feel stressed when receiving feedback from my peers and teacher.					
2.6. I do not have difficulties using Canva to present my writing.					
3.1. The workload in developing Canva-based e-portfolio is reasonable.					

3.2. It is convenient to save works on Canva-based e-portfolio.					
3.3. Canva-based e-portfolio makes me more responsible for my own writing.					
3.4. Canva-based e-portfolio helps me track my writing progress.					
3.5. Canva-based e-portfolio makes the writing process more interesting.					
3.6. Canva-based e-portfolio helps me realize my strengths and weaknesses.					
4.1. Canva-based e-portfolio is an effective supplementary tool for writing.					
4.2. I would like to use Canva-based e-portfolio in learning writing skills.					

Appendix B

Students' responses (on Likert 5-point scale) towards the survey items

SD = strongly disagree, D = disagree, U = undecided, A = agree, SA = strongly agree

Items	Response					
	N	SD	D	U	A	SA
1.1. I can use Canva to complete writing assignments.	N	2	2	13	11	6
	%	5.9	5.9	38.2	32.4	17.6
1.2. I can use appropriate vocabulary to express opinions when writing.	N	1	5	14	13	1
	%	2.9	14.7	41.2	38.2	2.9
1.3. I can continue the assignment after dealing with difficulties.	N	0	3	15	11	5
	%	0.0	8.8	44.1	32.4	14.7
1.4. I can generate a lot of ideas for writing assignments.	N	1	7	10	14	2
	%	2.9	20.6	29.4	41.2	5.9
1.5. I can write complete sentences without grammatical mistakes.	N	3	9	17	3	2
	%	8.8	26.5	50.0	8.8	5.9
2.1. Canva-based e-portfolio gives me chances to practice writing.	N	1	2	10	19	2
	%	2.9	5.9	29.4	55.9	5.9
2.2. Canva-based e-portfolio allows me to familiarize myself with the topic before writing.	N	1	4	9	17	3
	%	2.9	11.8	26.5	50.0	8.8
2.3. I do not feel under the pressure to complete my work within a time limit.	N	1	6	6	15	6
	%	2.9	17.6	17.6	44.1	17.6
2.4. I do not feel under the pressure to create the perfect first draft.	N	3	7	10	12	2
	%	8.8	20.6	29.4	35.3	5.9
2.5. I do not feel stressed when receiving feedback from my peers and teacher.	N	2	6	6	14	6
	%	5.9	17.6	17.6	41.2	17.6
2.6. I do not have difficulties in using Canva to present my writing.	N	1	3	9	14	7
	%	2.9	8.8	26.5	41.2	20.6
3.1. The workload in developing Canva-based e-portfolio is reasonable.	N	1	5	16	10	2
	%	2.9	14.7	47.1	29.4	5.9

3.2. It is convenient to save works on Canva-based e-portfolio.	N	2	2	3	19	8
	%	5.9	5.9	8.8	55.9	23.5
3.3. Canva-based e-portfolio makes me more responsible for my own writing.	N	2	4	10	16	2
	%	5.9	11.8	29.4	47.1	5.9
3.4. Canva-based e-portfolio helps me track my writing progress.	N	2	4	11	16	1
	%	5.9	11.8	32.4	47.1	2.9
3.5. Canva-based e-portfolio makes the writing process more interesting.	N	2	3	7	17	5
	%	5.9	8.8	20.6	50.0	14.7
3.6. Canva-based e-portfolio helps me realize my strengths and weaknesses.	N	3	3	12	14	2
	%	8.8	8.8	35.3	41.2	5.9
4.1. Canva-based e-portfolio is an effective supplementary tool for writing.	N	1	2	11	17	3
	%	2.9	5.9	32.4	50.0	8.8
4.2. I would like to use Canva-based e-portfolio in learning writing skills.	N	2	4	16	10	2
	%	5.9	11.8	47.1	29.4	5.9