Facilitating EFL Students' Active Learning Through Digital Portfolio Development

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Abstract:
A number of studies suggest that active learning enables learners to actively participate in the learning process, effectively assimilate their lessons, and gradually enjoy the learning process (Attaran & Moghaddam, 2014; Bonwell & Eison, 1991; D'Silva, 2010; Freeman et al., 2014; Koohang, 2009; Ryan & Martens, 1989; Tedesco-Schneck, 2013; Theobald et al., 2020). Developing a digital portfolio facilitates active learning among EFL students as it empowers them to plan their academic activities, reflect on their academic progress, and deepen their understanding of their lessons. This empirical study was conducted at Center for Preparatory Studies (CPS), Sultan Qaboos University during the Spring Semester of Academic Year 2022-2023. It gathered quantitative data through the Questionnaire for Portfolio Development; whereas it elicited qualitative data through focus group discussion sessions. The quantitative data were analyzed using IBM SPSS Statistics 26; whereas, the qualitative data were analyzed thematically. Results revealed that the respondents have mixed feelings towards portfolio development. The majority of the respondents believe that developing their portfolio facilitates their active learning in various ways. Both the quantitative and qualitative data reveal that developing a portfolio facilitates active learning among the learners and that there is no significant difference in the respondents’ attitude towards portfolio development when grouped according to their course. EFL students have mixed feelings towards portfolio development when grouped according to their course. EFL students generally have a positive attitude towards all the three components of their portfolio (academic planner, vocab log and reflection task) as they consider each component helpful in developing their language skills and allow them to learn actively.

Keywords: active learning, digital portfolio, EFL students, language skills, academic activities.

Introduction
Active learning has been given various definitions, and its relevance has been highlighted in various disciplines. For this study, active learning simply means empowering the learners by engaging them in the learning process. Active learning encourages learners to participate directly in the learning process (Ryan & Martens, 1989). A number of studies suggest that active learning enables learners to actively participate in the learning process, effectively assimilate their lessons, perform better in exams, and gradually enjoy the learning process (Attaran & Moghaddam, 2014; Bonwell & Eison, 1991; D'Silva, 2010; Freeman et al., 2014; Koohang, 2009; Ryan & Martens, 1989; Tedesco-Schneck, 2013; Theobald et al., 2020).
Moreover, a few studies posit that allowing students to use technology promotes active learning (Carvalho & Bauters, 2021; Gioiosa & Kinkela, 2019). One of the requirements that foster active learning and technology is the English Language Portfolio, otherwise known as “digital portfolio” or simply “portfolio.”

A portfolio is a student’s collection of work that features his “knowledge, skills and abilities, and growth over time” (California State University, 2015). A portfolio also provides students the opportunity to reflect on their learning gains (Fernsten & Fernsten, 2005). As an ongoing process, portfolio development exhibits a learner's problem-solving, decision-making and critical thinking skills (Baturay and Daloglu (2010). Furthermore, developing a portfolio enables students to enhance their writing skill (Efendi, 2017; Biglari, Izadpanah & Namaziandost, 2021), encourage them to represent and integrate their formal and informal learning experiences (Chen and Light, 2010) and enhance their active learning in different ways (Pospisilova, 2018). A digital or an electronic portfolio provides more advantages than the regular portfolios (Hung, 2008 in Baturay & Daloglu, 2010) as millennial students have the propensity to use their mobile phones, tablets or laptop computers. Besides enabling the teachers and students to collect and organize academic artifacts in many different formats, electronic or digital portfolios provide a stimulating environment and are not constrained by time as students may develop their portfolio during their free time at the comfort of their home, hostel or dormitory.

Developing an English Language Portfolio—or simply called portfolio—is one of the requirements among university students in the Sultanate of Oman. In the context of Sultan Qaboos University (SQU), students enrolled in all the Foundation Program courses (FPEL0120, FPEL0230, FPEL0340, FPEL0450 and FPEL0603) have to develop their portfolio (either digital or paper format) as it is an essential part of their curriculum that helps them achieve the desired learning competencies. SQU students have expressed mixed views* about the importance of the portfolio in their English language learning journey (classroom discussions, end of semester reflections/portfolio conferences, etc.); however, no empirical research has ever been conducted to ascertain SQU students’ attitude toward this requirement. The inclusion of active learning as a priority at SQU (Al Nadabi, Al-Hurmuzi, and Dehdary, 2021) as well as the conduct of the Active Learning-Awareness Seminar at Al Wahat Club on March 24, 2022 served as impetus for this empirical study.

This empirical study aimed to shed light on the following research questions:

1) What is the respondents’ attitude towards portfolio development?
2) What is the respondents’ perception towards the different components of their portfolio?
3) Based on the respondents’ perspective, how does portfolio development facilitate their active learning?
4) What challenges/ issues do the participants encounter while developing their portfolio?
5) What are the participants’ suggestions/recommendations for the improvement of their Portfolio?
6) Is there a significant difference in the respondents’ attitude towards portfolio development when grouped according to their foundation program course?

**Literature Review**

**Active Learning**

It is important to note that authors and researchers define active learning differently. Bonwell and Eison (1991) defined active learning as the process of actively and collaboratively engaging learners to analyze, synthesize and evaluate problems in order to construct new knowledge. Ryan and Martens (1989) posited that active learning involves engaging and involving learners in the learning process; whereas, Petress (2008) proposed that active learning requires students to take a
“dynamic and active role in the learning process.” Hung (2015) and Kusumoto (2018 as cited by Al Nadabi, Al-Hurmuzi and Dehdary, 2022) defined active learning as a student – centered approach that fosters the application of instructional methods, learning activities and teaching strategies that improve their engagement and activate their thinking in the learning process. Moreover, Bell and Kahrhoff (2006) pointed out that active learning is “a process wherein students are actively engaged in building understanding of facts, ideas and skills through the completion of instructor-directed task and activities.” Despite the lack of consensus among these authors/researchers on the definition of active learning, it is noteworthy that they all indicated the significance and positive impact of active learning in the academe, be it in English, Math, Science, Technology, Accounting, Robotics, or Engineering.

Numerous studies have ascertained the positive impact of active learning among the students. In a study, Niemi (2002) argued that active learning is viewed as a relevant goal that teachers must promote among their learners. Koohang, Paliszkiewicz, Klein and Nord (2016) highlighted that active learning fosters higher order thinking skills. Furthermore, Brown & Freeman (2000), Tedesco-Schneck (2013) and Gholami, Attaran and Mogaddam (2014) noted that active learning nurtures critical thinking and interaction among the students. A number of empirical studies ascertained that active learning allows students to assimilate their lessons actively (Koohang, 2012), benefits all students (Freeman et al, 2014; Theobald et al, 2020), engages students towards love for learning and integrative reasoning (D’Silva, 2010), allows students to reflect on their academic progress (Bonwell & Eison, 1991) and engages students in deep processing (Niemi, 2002).

**Portfolio Development**

Portfolios have been recognized as a valuable proof of achievement and progress. In academic contexts, a portfolio refers to a collection of student’s work that features his “knowledge, skills and abilities, and growth over time” (California State University, 2015). Portfolios also provide students the opportunity to reflect on their learning gains (Fernsten & Fernsten, 2005), hence educators deem portfolio useful not only as a ‘product’ but also a ‘process.’ As an ongoing process, portfolio development exhibits a learner’s problem-solving, decision-making and critical thinking skills (Baturay and Daloglu, 2010), and enhance their learning within social contexts (Bagheri & Ghaﬃr, 2017). Furthermore, developing a portfolio enables students to enhance their writing skill (Efendi, 2017; Biglari, Izadpanah & Namaziandost, 2021), encourage them to represent and integrate their formal and informal learning experiences (Chen and Light, 2010) and enhance their active learning in different ways (Pospisilova, 2018). A digital or an electronic portfolio provides more advantages than the regular portfolios (Hung, 2008 in Baturay & Daloglu, 2010).

In a study conducted in a higher education institution in Oman, Al Naibi, Al Hatali & Al Hadhrami (2019) ascertained that students encountered some challenges regarding portfolios, which include the large amount of time spent on portfolios, the large number of tasks involved in the portfolio, and the lack of a clear organization and selection process. Meanwhile, Brown (2004) identified some challenges that may affect the students’ perception towards portfolios as well as their actual commitment to regularly develop their portfolio. These challenges include vague objectives, miscommunication of guidelines, absence of periodic review, and lack of feedback.

In summary, active learning and portfolio development have been explored in different disciplines as significant concepts, which may help students realize their learning goals in the long run. However, no empirical research has ever been conducted to examine EFL students’ attitude towards portfolio development as well as how active learning is facilitated by the process of developing a portfolio in an EFL setting. Hence, this empirical study was conducted.
Methods

This empirical study made use of the quantitative-qualitative approach to shed light on the respondents’ attitude towards digital portfolio development and how it facilitates their active learning. The quantitative data were elicited through an online questionnaire designed by the researchers, while the qualitative data were elicited through focus group discussion sessions.

The Questionnaire on Portfolio Development (QPD) was developed and pilot tested with select Language for Credit (LANC) students who developed and submitted their portfolios during the Fall semester 2022. The QPD comprises two parts: Part I includes 21 statements about portfolio development and active learning, while Part II has two open-ended questions that elicited the challenges encountered by the respondents while developing their portfolio as well as their suggestions for the improvement of their portfolio. Between February and April 2023, the QPD was administered to select students (see Table 1) enrolled in the various courses under the Foundation Program on English Language (FPEL).

<table>
<thead>
<tr>
<th>Foundation Program Courses</th>
<th>Total Population</th>
<th>Sample</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPEL (FPES/ FPEH) 340</td>
<td>51</td>
<td>12</td>
<td>4.1</td>
</tr>
<tr>
<td>FPEL (FPES/ FPEH) 450</td>
<td>226</td>
<td>54</td>
<td>18.4</td>
</tr>
<tr>
<td>FPEL (FPES/ FPEH) 560</td>
<td>374</td>
<td>89</td>
<td>30.4</td>
</tr>
<tr>
<td>FPEL (FPES/ FPEH) 603</td>
<td>576</td>
<td>138</td>
<td>47.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1227</strong></td>
<td><strong>293</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

To elicit the qualitative data, a total of six FGD sessions were conducted between February and March 2023. Three criteria were considered in selecting the FGD participants. Each FGD participant should: a) have developed and submitted at least one complete English language portfolio at SQU; b) be developing a portfolio as part of his/her course requirement; and c) be willing to participate in a focus group discussion session.

The quantitative data were treated by Mr. Rufo Tuddao, the researchers’ data consultant, using the software IBM SPSS Statistics 26. On the other hand, the qualitative data were analyzed thematically.

Results

The study aimed to ascertain the EFL students’ attitude towards their portfolio, their perception towards its various components, and how their digital portfolio facilitate their active learning. The majority of the respondents have mixed feelings about developing their portfolio as shown by their responses in Table 2. Though the respondents conveyed that they do not enjoy developing their portfolio, they expressed that the portfolio components are significant and useful. This finding suggests that the respondents develop their portfolio despite their mixed attitude towards this course requirement. It may further imply that the respondents are motivated to achieve the desired learning competencies, hence they develop their portfolio regardless of their attitude towards this university requirement.

Results of the quantitative data are supported by the qualitative data elicited through the FGD sessions. The participants have expressed ambivalent attitudes towards portfolio development as shown in Figure 1. This suggests that majority of the participants develop their portfolio even if some of them do not have a positive attitude towards this requirement. While several respondents believe that it is both “useful and important”; others consider their digital portfolio “time-consuming, not-so-beneficial and boring.”
Table 2. Respondents’ Attitude Towards Portfolio Development

<table>
<thead>
<tr>
<th>#</th>
<th>Statements</th>
<th>Weighted Mean</th>
<th>Descriptive Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I enjoy working on my portfolio regularly.</td>
<td>2.7372</td>
<td>Disagree</td>
</tr>
<tr>
<td>2</td>
<td>I always complete the portfolio components by the deadline set by my teacher.</td>
<td>1.8294</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>The portfolio activities allow me to apply what I am learning.</td>
<td>2.0614</td>
<td>Agree</td>
</tr>
<tr>
<td>4</td>
<td>In general, working on my portfolio makes me love learning.</td>
<td>2.7133</td>
<td>Disagree</td>
</tr>
</tbody>
</table>

**Legend:** 1.0-1.75– Strongly agree; 1.76-2.5–Agree; 2.51-3.5–Disagree; 3.51-4.0–Strongly disagree

Some of the FGD participants expressed a positive attitude towards portfolio development as they conveyed the following:

- “portfolio develops the skills of students”; “it is good for students”; “helps us to improve our language skills”; “we learn a lot of English words”; “I think all of them are enjoyable;” “The portfolio activities link us to the studies and the curriculum;” “The portfolio activities as they are very beneficial...” and “The self-study log motivates us in doing the portfolio activities as it helps us acquire new skills."

On the other hand, others perceived it negatively as they shared that:

- “it is a waste of time”; “portfolio is time-consuming”; “it is boring”; “it is not-so-beneficial to me”; it wastes my time for studying my other courses”; “to be honest, sometimes it’s boring to do it,” “it takes so much time;” and “Portfolio activities are not challenging but very boring that’s why we delay them.”

When asked about their perception towards the different components of their portfolio, majority of the respondents conveyed a positive attitude towards all the three components. The data in Table 3 reveal that majority of the respondents expressed that they agree that the academic calendar enables them to manage their study time properly while the reflection component enables them to ponder on their academic progress. Moreover, they claimed that doing their vocab log allows them to enlarge their reservoir of vocabulary. A number of FGD participants expressed that the Vocab Log helps them to “improve all the language skills and enhance communication by using the new words”, while others posited that “it is the most important and beneficial component” of the portfolio. The results imply that the respondents have realized the essence of developing their portfolio (writing their academic planner, doing their vocab log, and reflecting on their learning experiences), and that they believe that all the components help them achieve the desired learning competencies set for their FPEL course.

Generally, the respondents have a positive attitude towards academic planner, which is the first component of their portfolio. This is conveyed by the FGD participants as well. As one participant put it: “Academic planner helps me organize my time.” Other FGD participants expressed that the academic planner helps them to plan and complete their different tasks: “The academic planner is okay,” and “I would complete the academic planner even if no grades are given to it as it helps organize our time and university life”.

Figure 1. Students’ attitude towards portfolio development
Table 3. Respondents’ Attitude Towards the Different Components of Their Portfolio

<table>
<thead>
<tr>
<th>#</th>
<th>Statements</th>
<th>Weighted Mean</th>
<th>Descriptive Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Updating the ‘academic calendar’ in my portfolio enables me to manage my self-study time properly.</td>
<td>2.3515</td>
<td>Agree</td>
</tr>
<tr>
<td>2</td>
<td>The reflection component (or self-study log) of the portfolio enables me to reflect on my academic progress particularly on my strengths and weaknesses.</td>
<td>2.2082</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Completing my portfolio helps me to enlarge my vocabulary.</td>
<td>1.9181</td>
<td>Agree</td>
</tr>
<tr>
<td>4</td>
<td>Completing the components (academic planner, vocab log, self-study log/reflection) of my portfolio engages or involves me in the learning process.</td>
<td>2.0887</td>
<td>Agree</td>
</tr>
</tbody>
</table>

Legend: 1.0-1.75–Strongly agree; 1.76-2.5–Agree; 2.51-3.5–Disagree; 3.51-4.0–Strongly disagree

Regarding Vocab Log, majority of the respondents have a positive attitude towards this second component of their portfolio. Some of the FGD participants’ responses include:

“Vocab log improves my skills;” “It helps us to improve our language skills;” “We learn a lot of English words;” “Vocab log helps me improve my vocabulary;” and “I can use it when I speak.”

In contrast to the first two components, the majority of the respondents expressed ambivalence towards Reflection Task. Some FGD participants have a positive attitude towards this component as they claim that

“reflection helps in skill development” and it [reflection] is enjoyable because I can say what I want.”

On the other hand, some of them perceive Reflection Task negatively. This was verbalized during the FGD sessions as some participants opined that:

“The Reflection part is useless.” and “All the activities are beneficial to students...except the reflection.”

This finding highlights the claim of Fernsten and Fernsten (2005) that “reflection pieces are a critical component of the portfolio.” If students realize the relevance of scrutinizing their own performance, understanding what went wrong and appreciating what went right during their learning process, they will definitely perceive this component positively. If, however, they are not sold to the significance of this component, they will perceive this component negatively. Hence, it implies that instructors must allot ample time to explain the significance of developing a portfolio at the beginning of the semester, while the students have to fully grasp its relevance to their English language learning.

Table 4. Respondents’ Perception on How Portfolio Development Facilitates Their Active Learning

<table>
<thead>
<tr>
<th>#</th>
<th>Statements</th>
<th>Weighted Mean</th>
<th>Descriptive Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Working on my portfolio (in Week 1) helps me to set my learning goals or objectives in my English course.</td>
<td>2.1604</td>
<td>Agree</td>
</tr>
<tr>
<td>2</td>
<td>I negotiate with my teacher the aims and components of my portfolio.</td>
<td>2.1843</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Completing my portfolio activities helps me to develop my higher-order thinking skills (i.e. analysis, synthesis, and evaluation).</td>
<td>2.2696</td>
<td>Agree</td>
</tr>
<tr>
<td>4</td>
<td>Completing my portfolio helps me improve my English communication skills (e.g. reading, listening, speaking and writing).</td>
<td>2.1809</td>
<td>Agree</td>
</tr>
<tr>
<td>5</td>
<td>To complete the portfolio activities, I need to take a dynamic and active role in the learning process.</td>
<td>2.1843</td>
<td>Agree</td>
</tr>
<tr>
<td>6</td>
<td>Completing my portfolio develops my creativity.</td>
<td>2.3345</td>
<td>Agree</td>
</tr>
<tr>
<td>7</td>
<td>Completing my portfolio (academic planner, vocab log, and self-study log or reflection) enables me to improve my skill in problem solving.</td>
<td>2.3379</td>
<td>Agree</td>
</tr>
</tbody>
</table>
Completing my portfolio enables me to perform better in dialogues, debates, group discussions and other group or pair work activities.

2.4403 Agree

When I find difficulty in completing my portfolio, I seek the help of others (classmates, siblings, parents, friends, etc.).

2.0478 Agree

Completing my portfolio enables me to perform better in monologues and other individual tasks.

2.3003 Agree

Completing my portfolio helps me to improve my interaction with my teacher.

2.1775 Agree

Completing my portfolio activities helps me to internalize or deepen my understanding of my English lessons.

2.2355 Agree

Before submitting my portfolio, I evaluate all the portfolio components.

2.1092 Agree

Legend: 1.0-1.75–Strongly agree; 1.76-2.5–Agree; 2.51-3.5–Disagree; 3.51-4.0–Strongly disagree

Based on the participants’ perspective, how does portfolio development facilitate their active learning? Table 4 reveals that the respondents believe that developing their portfolio facilitates their active learning in various ways. It is evident that the respondents perceive portfolio development as an integral part of their active learning, particularly in terms of performing better in group activities like dialogues, pair work and debates. This finding supports the claim of Pospisilova (2018) that active learning may be enhanced using digital portfolio. Moreover, this finding is consistent with the findings of earlier studies (Duch et al, 2001; Gonzalez-Cacho & Abbas, 2022; Koohang, 2009; Meyers & Jones, 1993; Petress, 2008; Ryan & Martens, 1989) that while students habitually develop their portfolio, they slowly and sub-consciously learn actively as they participate directly in the learning process.

Portfolio development fosters active learning primarily through the vocab log. The FGD participants conveyed that they learn more actively when they look up the meaning of unfamiliar words on an online dictionary, copy both the English and Arabic definitions along with “source sentences”, and write their own sentences using the unfamiliar words. Some responses from the FGD participants include:

“Vocab Log helps me in learning new words;”
The vocab log helps us with the project component in terms of putting the glossary together; and “The vocab log also helps us with essay writing.”

In addition, the participants expressed that planning their academic activities for each week helps them to learn more actively and to develop good study habits as they are reminded of the expected activities, submissions or quizzes.

Both the quantitative and qualitative data reveal that developing a portfolio facilitates active learning among the learners primarily through the Vocal Log and Academic Planner components of their portfolio. Such is expressed in the responses of two FGD participants:

“Yeah, I think it is useful for our individual tasks,” and “It is useful…you will develop your skills.”

This finding supports the findings of earlier studies (Bonwell and Eison, 1991; D’ Silva, 2010; Freeman, et al. 2014; Gholami, Attaran & Moghadam, 2014; Koohang, 2012; McPherson, 2020; Niemi, 2002; Tedesco-Schneck, 2013; & Theobald, et al., 2020) that developing a portfolio facilitates students’ active learning as it enables them to: a). expand their reservoir of vocabulary; b) deepen their understanding of their lessons; c) reflect on their academic progress; d) plan their academic activities; e) perform better in exams; and f) enhance their higher order thinking skills.

Is there a significant difference in the respondents’ attitude towards portfolio development when grouped according to their foundation program course? The data in Table 5 reveal that there is no significant difference in the respondents’ attitude towards portfolio development when grouped according to their foundation program course. This implies that the respondents, regardless of their course, have mixed feelings towards portfolio development.
Table 5. Analysis of Variance on the Significant Difference in the Respondents’ Attitude Towards Portfolio Development when Grouped According to Their Foundation Program course

<table>
<thead>
<tr>
<th></th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1.828</td>
<td>3</td>
<td>.609</td>
<td>2.721</td>
<td>.045</td>
</tr>
<tr>
<td>Within groups</td>
<td>64.732</td>
<td>289</td>
<td>.224</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>66.560</td>
<td>292</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What challenges/ issues do the participants encounter while developing their portfolio? The FGD participants identified three common problems or challenges which they typically encounter while developing their portfolios. These common challenges include a) time management, b) shallow motivation/ ill-motivation and c) hectic schedule. This finding supports the claim of Brown (2004) that developing a portfolio is time-consuming. Some participants said they have a hard time doing all their requirements, especially that they are enrolled not only in English but also in Math and/or Information Technology. Besides, some participants explained that they are not well-motivated to develop their portfolio as this requirement has negligible weight (It is only allotted 5% of their total mark for the course). This implies that some students have the ill-motive or shallow motive to develop their portfolio as they just think of the minimal mark they can receive for doing this requirement. They believe that the mark allotted to their portfolio is not commensurate to their effort since they have to do all the three components of their portfolio. As some FGD participants articulated: “It is time-consuming” and “It is a waste of time.” Finally, hectic schedule was cited as one of the challenges encountered by the participants in developing their portfolio. Considering that some of them are enrolled in one or two other courses during the semester, some of the participants believe that they need to prioritize their other activities, submissions or quizzes. Others opined that “the time given to portfolio can also be used to enhance writing and grammar.”

When prodded on their suggestions/recommendations for the improvement of their portfolio, the participants shared the following:

1) Limit the vocab log words (5 each week). The participants believe that the number of the words in the Vocabulary Log is too much. They suggest that five words may be considered instead of the required 10 words, saying that this component takes much time, especially that they need to take the English definition, Arabic definition, and source sentence before they write their own sentence.

2) Include more ‘practical’ (i.e. speaking, listening) activities. The participants also suggest that more practical activities be considered so that they can enhance their speaking and listening activities while doing their portfolio.

3) Modify reflection guide questions. As some participants expressed that they find the Reflection Task boring, they suggest that the reflection guide questions be modified in order to include fascinating questions that may motivate them to reflect on their language learning.

4) Re-consider the frequency of submission (once in two weeks). Pointing out their hectic schedule and other courses during the semester, the participants suggest that the frequency of submission be re-considered as they feel that doing it weekly is taxing and time-consuming.

5) Increase weight of portfolio mark. Considering their effort in developing their portfolio regularly, the participants suggest that they be given an encouraging mark commensurate to their effort. They conveyed that students will do their portfolio more enthusiastically if they receive an encouraging mark.

6) Provide constructive feedback promptly. The participants also suggest that constructive feedback be provided promptly in order for
them to know how to enhance the different components.

7) Incorporate grammar into the portfolio components. Some participants suggest that grammar be incorporated into the portfolio components to enable them to apply the grammar rules they learn in their courses.

Summary

Generally, SQU students perceive their portfolio as a useful tool that facilitates active learning as shown in Figure 2. With the three components of their portfolio, the participants feel more engaged in the learning process as they learn independently, process lessons subconsciously and practice discipline in their student life. It must be noted that a digital portfolio must not simply be considered as a learning “product” but a “process”; hence, educators should realize that developing a portfolio is a worthwhile endeavor that may promote learner autonomy, enhance the learners’ higher order thinking skills and help them form good study habits.

Conclusions

The study endeavored to shed light on EFL students’ attitude towards digital portfolio development and how it facilitates active learning. EFL students have mixed feelings towards portfolio development. Despite their ambivalent feelings towards portfolio development, they understand the significance of developing their portfolio. Furthermore, EFL students generally have a positive attitude towards all the three components of their portfolio: academic planner, vocab log and reflection task, as they consider each component helpful in developing their English language skills and allow them to learn actively in various ways.

Developing a portfolio may become burdensome for students if: a) they do not fully understand the purposes of developing their portfolio, b) they do not manage their time properly, and c) they do not work smarter on the different components of their portfolio. Hence, there are pedagogical implications that instructors may consider to facilitate active learning through portfolio development. Educators must fully explain the significance of the portfolio (both as a “process” and as a “product”), follow up the students’ portfolios on a regular basis, provide both positive feedback and corrective feedback, let students associate their lessons with the different components of their portfolios, and let them reflect on how they can apply their knowledge to their lives.

As the current study delved only on the students’ attitude towards portfolio development as well as how active learning is facilitated by developing a portfolio, further research may be conducted to ascertain the specific learning competencies achieved through portfolio development as well as the effective active learning strategies among university students.

Acknowledgment

The authors thank the CPS administrators, faculty and students.

Conflicts of Interest/Competing Interests

Not applicable

Authors’ Contributions

Both authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by
Joseph Dayag and Murtada Abdalla. The first draft of the manuscript was written by Joseph Dayag and Murtada Abdalla, and both authors commented on previous versions of the manuscript. Both authors read and approved the final manuscript.

**Ethics approval**

This research project was conducted under the ethical approval granted by the CPS Conference and Research Committee in October 2022.

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Appendix 1

Questionnaire on Portfolio Development
Academic Year 2022–2023

Dear SQU students, thank you in advance for participating in this research endeavor that may serve our academic community. We assure you that your responses will be used for research purposes only.

SQU ID: ___________          Course (Tick ✓ 1): __ FPEL0340  __ FPEL0450  __ FPEL0603

Part 1: Read each statement below, and tick (✓) whether you strongly agree (1), agree (2), disagree (3) or strongly disagree (4) with it.

<table>
<thead>
<tr>
<th>#</th>
<th>Statements</th>
<th>Strongly Agree (1)</th>
<th>Agree (2)</th>
<th>Disagree (3)</th>
<th>Strongly disagree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Working on my portfolio (in Week 1) helps me to set my learning goals or objectives in my English course.</td>
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<td>2.</td>
<td>I negotiate with my teacher the aims and components of my portfolio.</td>
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<td>3.</td>
<td>Completing the components (academic planner, vocab log, self-study log/reflection) of my portfolio engages or involves me in the learning process.</td>
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<td>4.</td>
<td>I enjoy working on my portfolio regularly.</td>
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<td>5.</td>
<td>I always complete the portfolio components by the deadline set by my teacher.</td>
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<td>6.</td>
<td>Updating the ‘academic calendar’ in my portfolio enables me to manage my self-study time properly.</td>
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<td>7.</td>
<td>Completing my portfolio activities helps me to develop my higher-order thinking skills (i.e. analysis, synthesis, and evaluation).</td>
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<tr>
<td>8.</td>
<td>Completing my portfolio helps me improve my English communication skills (e.g. reading, listening, speaking and writing).</td>
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<td>9.</td>
<td>To complete the portfolio activities, I need to take a dynamic and active role in the learning process.</td>
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<td>10</td>
<td>Completing my portfolio develops my creativity.</td>
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<tr>
<td>11</td>
<td>Completing my portfolio (academic planner, vocab log, and self-study log or reflection) enables me to improve my skill in problem solving.</td>
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<td>12</td>
<td>Completing my portfolio enables me to perform better in dialogues, debates, group discussions and other group or pair work activities.</td>
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<tr>
<td>#</td>
<td>Statements</td>
<td>Strongly Agree (1)</td>
<td>Agree (2)</td>
<td>Disagree (3)</td>
<td>Strongly disagree (4)</td>
</tr>
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<td>13</td>
<td>When I find difficulty in completing my portfolio, I seek the help of others (classmates, siblings, parents, friends, etc.).</td>
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<td>14</td>
<td>Completing my portfolio enables me to perform better in monologues and other individual tasks.</td>
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<td>15</td>
<td>Completing my portfolio helps me to improve my interaction with my teacher.</td>
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<td>16</td>
<td>The reflection component (or self-study log) of the portfolio enables me to reflect on my academic progress particularly on my strengths and weaknesses.</td>
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<td>17</td>
<td>Completing my portfolio activities helps me to internalize or deepen my understanding of my English lessons.</td>
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<tr>
<td>18</td>
<td>The portfolio activities allow me to apply what I am learning.</td>
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<td>19</td>
<td>Completing my portfolio helps me to enlarge my vocabulary.</td>
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<tr>
<td>20</td>
<td>Before submitting my portfolio, I evaluate all the portfolio components.</td>
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<tr>
<td>21</td>
<td>In general, working on my portfolio makes me love learning.</td>
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</tbody>
</table>

Part 2. Share your insights about Portfolio Development.

1. What challenges/ issues have you encountered while doing your portfolio?

2. Based on your experience in developing/ doing your portfolio, what are your suggestions/ recommendations for the improvement of your Portfolio?

Thank you very much for your cooperation.
Appendix 2

Focus Group Discussion (FGD) Guide

1. What motivates you in doing your e-portfolio?

2. Which activities/components do you enjoy doing the most?

3. Do the portfolio components help you to be actively engaged in the learning process? How?

4. Do the portfolio activities encourage you to participate in group activities (like discussion, dialogues and other group activities)? Elaborate…

5. Do the portfolio activities help you to perform better in individual tasks (like monologues and essay writing)? How?

6. Which of the components (Vocab Log, Reflection, Academic Calendar) help you learn more actively? How?

7. Which of the portfolio activities are most beneficial to you? Why?

8. Do the portfolio activities help you to actively improve your communication skills (Listening, Speaking, Reading and Writing)? Which skills?

9. How do the portfolio activities help you to actively improve your interaction with your teacher and your classmates?

10. Do the portfolio activities help you to improve your higher order thinking skills (problem solving, analysis, synthesis and evaluation)?

11. What challenges/ issues have you encountered while doing your portfolio?