

E-Portfolios as Learning Tools in Business English Writing: Examining Thai Tertiary Students' Perceptions, Satisfaction, and Academic Performance

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Abstract: *This study aims to 1) examine Thai tertiary students' e-portfolio scores as well as their perceived benefits and obstacles, 2) assess their satisfaction with e-portfolio use, and 3) investigate the relationships between their GPA, perceived benefits and obstacles, course satisfaction, e-portfolio results, and academic achievement in a Business English writing course. The sample group comprises of 48 fourth-year students from the Faculty of Arts at Silpakorn University in Thailand. The Pearson's correlation coefficient and content analysis were employed to analyze descriptive data. The findings suggest that the students scored high on e-portfolio assessments, indicating outstanding academic performance. The students perceived significant benefits from e-portfolio use, while obstacles were reported as low to moderate levels. The students' satisfaction with e-portfolio use was very high and positively correlated with both GPA and academic achievement, while negatively correlated with perceived obstacles. Their satisfaction also had a positive relationship with their perceived benefits. The e-portfolio results were positively related to the students' GPA and satisfaction, and their perceived benefits were negatively related to their perceived obstacles. All relationships were statistically significant at the .05 level. Also, content analysis highlighted students' appreciation for e-portfolios' career applicability and writing skill enhancement, though platform usability challenges were noted.*

Keywords: E-portfolios, business English, students' perceptions, student's satisfaction, academic performance

INTRODUCTION

Online learning is an educational innovation that allows learners to study at a distance via the Internet. Learners can manage their own study time. In addition, it allows learners from anywhere in the world to be educated, helping to make education more equitable. Online teachers can present learning content in a more diverse and interesting

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format, allowing learners to learn faster and more effectively because they can study material in advance or review it later at any time as needed.

For current teaching management, teachers should play a role as facilitators and guide students to learn, and sometimes they may have to be co-learners with the students. Therefore, teachers in the digital age must embody the characteristics of e-teachers as outlined by Wonglekha (2015). These characteristics include experience in teaching through online platforms and technological media, a continuous pursuit of new knowledge to enhance their expertise, and the ability to effectively transfer or expand their own knowledge to students using technology. E-teachers should also excel in identifying, evaluating, and selecting up-to-date and relevant content beneficial to learners, as well as proficiently using technology as knowledge creators, disseminators, and users.

As a Business English writing teacher, the researcher usually assigns students to submit various types of written tasks, such as product brochures, newsletters, and various kinds of business letters. Therefore, using an electronic portfolio (e-portfolio) in teaching can be very useful for collecting and organizing students' work, improving their writing skills, enhancing their blended learning experience, and preparing them for job applications after graduation. It is also convenient for the teacher to review and evaluate the students' work.

The objectives of this study are as follows:

1. To examine the students' e-portfolio scores, perceived benefits and obstacles in using e-portfolios
2. To evaluate the students' satisfaction after using e-portfolios
3. To analyze the relationships between the students' GPA, perceived benefits, perceived obstacles, satisfaction, e-portfolio results, and academic achievement in a Business English writing course.

LITERATURE REVIEW

The reviewed relevant literature for this study is divided into four main areas: 1) Teaching and learning Business English writing, 2) Teaching using portfolios and e-portfolios, 3) Attitudes, behaviors, and motivation in learning English, and 4) Previous research on e-portfolios.

Teaching and Learning Business English Writing

Teaching and learning Business English writing falls under the category of English for Specific Purposes (ESP). Bhatia (1979) emphasized that learners must first achieve general English proficiency before studying English for specialized fields, such as business, engineering, or science. Similarly, Robinson (1980) defined ESP as teaching English to meet specific objectives, such as successfully performing tasks that require English in the workplace. Klapparsuek (2005) noted that business English writing skills should be taught as the final stage of language learning, as they require extensive instruction compared to other skills. Key types of business writing include 1) business

Publication of the European Centre for Research Training and Development UK letters, 2) short memos (memorandums), and 3) reports. Writing business reports, in particular, is complex and demands a solid understanding of English vocabulary and grammar.

Teaching Using Portfolios and E-Portfolios

A portfolio is a tool that provides a comprehensive way to assess students' abilities. It involves students in selecting their work, setting selection and evaluation criteria, and providing evidence of their performance and self-reflection. Norton and Wiburg (1998) defined a portfolio as a systematic collection of selected student work that demonstrates the owner's motivation, progress, and achievements.

Lankes (1995) described an e-portfolio as a systematically organized collection of student work in digital format, which reflects the owner's efforts, progress, and achievements. Students actively participate in selecting content, setting quality criteria, and reflecting on their work. Portfolios also serve as evidence for teachers to assess students' knowledge through two types of evaluations: summative and formative. Both evaluations rely on a collection of work that showcases the learner's knowledge, abilities, and skills. Additionally, they help students understand and evaluate their own progress.

When evaluating portfolios, it is essential to follow clear objectives based on Gottlieb's CRADLE principle, which encompasses Collecting, Reflecting, Assessing, Documenting, Linking, and Evaluating (Gottlieb, 1995). These objectives should align with the curriculum or course content and include clear guidelines, transparent assessment criteria, a designated timeline, scheduled reviews, and appropriate storage solutions. Gottlieb (1995) emphasized the importance of positive final assessments or portfolio scoring.

Chiaranai (2013) highlighted that rubric assessment criteria are effective for evaluating e-Portfolios. Rubrics clearly define the skills, behaviors, or qualities expected in the work, enabling students to self-monitor and understand teacher expectations. Teachers can customize rubric criteria to accommodate students' diverse abilities by using two types of scoring: 1) Holistic Scoring, which evaluates the overall quality of the work or behavior, highlighting strengths and weaknesses with descriptions for each performance level, and 2)

Analytical Scoring, which breaks the evaluation into specific components, assessing the quality of each aspect individually.

For this research, the holistic scoring method was chosen, as it is widely used and allows for the division of quality into five levels. Mertler (2001) proposed a five-level holistic scoring template:

Score 5: Demonstrates a complete understanding of the task, with correct and complete work, including new ideas.

Score 4: Shows a good understanding of the task, with correct and complete work.

Score 3: Reflects a partial understanding, with mostly correct work.

Score 2: Displays limited understanding, with mostly incorrect work.

Score 1: Indicates a lack of understanding, with incorrect work.

Score 0: Shows no evidence of understanding or effort.

Corcoran & Nicholson (2004) recommended that portfolio assessment should emphasize focusing on collecting various works of students together to reflect the knowledge, abilities, skills, development, efforts, interests, attitudes and practices of students. The teacher should consider and judge the results and send feedback to students so that they can understand themselves, know their abilities, potential and progress.

Attitudes, Behaviors, and Motivation in Learning English

Attitude refers to a person's feelings about something shaped by their responses to experiences in their surroundings. It is not innate and can change over time. Attitudes can be positive, negative, or neutral. Brown (2001) defines attitude as an emotional thought related to feelings, identity and community relationships. Learning cannot occur if learners lack positive attitudes. Thongmark, et al. (2012) emphasized that a positive attitude enhances learning, memory and effective language use. It also affects learners' motivation and behavior. Therefore, these three components—attitude, motivation, and behavior—are interconnected in the process of learning English, whether as a second or foreign language. Effective teaching should foster positive attitudes, stimulate motivation, and encourage learners to adopt appropriate learning behaviors.

Previous Research Related to E-Portfolios

Koraneekij and Khlaisang (2019) surveyed undergraduate students' beliefs about blended learning using e-portfolios. They found that most students believed e-portfolios could promote learning through product creation, creativity, problem-solving, analytical thinking, and authentic assessment. Students also showed a strong preference for such methods. Similarly, Chiaranai (2013) studied e-portfolios in a nursing course and found high academic achievement among students, who valued e-portfolios for supporting independent and self-directed learning, self-development, and motivation from feedback. However, some obstacles including time constraints, heavy workload, stress from feedback, and personal ability limitations were reported.

When examining research on the use of e-portfolios in English writing classes, it was found that Wanchid (2011) studied the impact of electronic portfolios in English writing classes, using Google weblogs. This study suggested that 1) students' English writing achievement significantly improved after using e-portfolios, 2) general English proficiency positively affected writing achievement, and 3) all student groups (high, medium, and low proficiency) had positive attitudes towards e-portfolios. This aligns with Doig et al. (2006), who found that e-portfolios foster reflective thinking and learner-centered learning, leading to successful and lifelong learning. Aygün and Aydın (2016) also reviewed studies on e-portfolios in English writing and found they enhance writing skills and motivation. However, they can also cause stress for learners who resist technology or feel uncomfortable with a large audience viewing their work.

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From the review of literature and related research, it was found that the use of e-portfolios is very useful for teaching management in various subjects. While research on using e-portfolios to develop English writing skills exists, there is a lack of studies focusing on their use in Business English writing, including an exploration of the perceived benefits, obstacles, and learners' satisfaction. As a business English writing teacher, the researcher is motivated to investigate this topic further.

METHODOLOGY

Population and Samples

The population in this study consisted of 63 fourth-year students of the Faculty of Arts, Silpakorn University enrolled in the English Writing for Business Purposes course. Using purposive sampling, 48 students (76.19%) in total voluntarily participated in this study.

Research instruments

In this research, the research instruments include 1) E-portfolio created from Google Sites, 2) English Writing for Business Purposes textbook, 3) Questionnaires on perceived benefits, perceived obstacles, and satisfaction, 4) Students' GPA, 5) E-portfolio results, and 5) Post-test scores.

Data Collection

There are three steps to the data collection of this study as follows:

Step 1: The students were trained by the researcher to create e-portfolios using Google Sites (<http://sites.google.com>). After initial submission, the researcher, as the course instructor, provided feedback for improvement. Final e-portfolios were submitted after the last class for evaluation.

Step 2: After completing the course, the students completed a questionnaire on the benefits, obstacles, and satisfaction with using e-portfolios.

Step 3: Students then completed a post-test, serving as the final exam to assess their academic achievement.

Data Analysis

Quantitative data from the questionnaires were analyzed using Microsoft Excel for descriptive statistics, including frequency, percentage, mean, and standard deviation. Pearson's Product-Moment Correlation Coefficient, calculated via the Social Science Statistics website (<https://www.socscistatistics.com/tests/pearson/default2.aspx>), was used to examine correlations between perceived benefits, obstacles, satisfaction, e-portfolio results, and academic achievement, with significance set at .05. Qualitative data from open-ended responses were analysed using content analysis.

FINDINGS

E-portfolio scores, perceived benefits, and obstacles to using e-portfolios

Table 1 shows the e-portfolio and academic achievement scores of the students enrolled in the English Writing for Business Purposes course.

Table 1: Results of e-Portfolios and Academic Achievement

Topic	Full Score	N	Mean	SD	Min	Max
E-portfolio Evaluation	10	48	9.28	0.85	5	10
Academic Achievement	100	48	81.33	5.25	71	94

The study found that students achieved high scores for e-portfolio evaluation (Mean = 9.28, S.D. = 0.85), likely due to the ease of using Google Sites and the opportunity to revise work based on teacher feedback. Sharing portfolios on Google Classroom allowed students to learn from peers and teacher feedback, aligning with Corcoran and Nicholson's (2004) emphasis on feedback in portfolio assessment. Students also demonstrated high academic achievement in the English Writing for Business Purposes course (Mean = 81.33, S.D. = 5.25). This indicates that students with high e-portfolio evaluation scores tend to achieve high academic performance.

Table 2 illustrates the perceived benefits of the students after using e-portfolios in the English Writing for Business Purposes course. Please note that from Table 2 to Table 4, the interpretation of scores is as follows:

- An average score between 1.0 and 1.49 indicates the lowest level.
- An average score between 1.50 and 2.49 indicates a low level.
- An average score between 2.50 and 3.49 indicates a moderate level.
- An average score between 3.50 and 4.49 indicates a high level.
- An average score between 4.50 and 5.00 indicates the highest level.

Table 2: Students' perceived benefits

Topic	N	Mean	SD	Level
Using an e-portfolio is useful for the course.	48	4.44	0.71	High
Using an e-portfolio is a good tool in supporting learning thorough technology.	48	4.46	0.74	Highest
Using an e-portfolio is a good tool for self-development.	48	4.27	0.87	High
Using an e-portfolio is a good tool for collecting work.	48	4.65	0.64	Highest
Feedback from the teacher and peer makes it challenging to seek additional knowledge.	48	4.23	0.83	High

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The present study found that students highly valued e-portfolios as tools for systematic work collection (Mean = 4.65, S.D. = 0.64) and technology-supported learning (Mean = 4.46, S.D. = 0.74). This suggests that e-portfolios help organize work efficiently, suited the digital age, and enhanced motivation in the blended-learning environment of the course. However, this finding contrasts with Chiaranai (2013), who identified self-development as the primary benefit in her nursing course. This may result from the different nature of the two courses.

Table 3 demonstrates the perceived obstacles of the students after using e-portfolios in the English Writing for Business Purposes course

Table 3: Students' perceived obstacles

Topic	N	Mean	SD	Level
Technological incompetence is an obstacle to using the e-portfolio	48	3.19	1.21	Moderate
Time is an obstacle to using the e-portfolio.	48	2.44	1.09	Low
The amount of work assigned in this course is an obstacle to using the e-portfolio.	48	2.21	0.90	Low
Internet instability is an obstacle to using the e-portfolio.	48	3.33	1.24	Moderate
Feedback from the teacher and peer can cause stress and hinder the pursuit of additional knowledge.	48	1.68	0.86	Low

The results of this study suggest that overall perceived obstacles of the students were low to moderate. Internet instability (Mean = 3.33, S.D. = 1.24), common among dormitory residents, and limited familiarity with website tools (Mean = 3.19, S.D. = 1.21) were noted as moderate challenges while other obstacles were noted as low. These findings align with Chiaranai's (2013) study, which reported similar obstacles.

The students' satisfaction with using e-portfolios

Table 4 reports the satisfaction levels of the students after using e-portfolios in the English Writing for Business Purposes course.

Table 4: Students' satisfaction with using e-portfolios

Topic	N	Mean	SD	Level
Creating the e-portfolio is easy.	48	3.81	1.00	High
The e-portfolio can be designed beautifully and modern.	48	3.79	1.11	High
Logging in and out of the e-portfolio is easy to do.	48	4.04	0.94	High
Storing data is easy to do.	48	4.06	0.95	High
The font size can be adjusted and easy to read.	48	4.08	1.01	High
The image size can be adjusted and easy to see.	48	3.90	1.15	High
Accessing peers' e-portfolio is convenient and easy to do.	48	4.23	0.86	High
Overall, I am satisfied with using the e-portfolio.	48	4.06	0.95	High

The findings of this study suggest that students were highly satisfied with using electronic portfolios, aligning with Chiaranai (2013). The top three satisfaction factors were: 1) easy access to peers' information, due to the convenience of using devices like phones and tablets; 2) adjustable font size for easy reading; and 3) easy and organized data storage. Students also expressed positive opinions about learning English Writing for Business Purposes with e-portfolios, believing they could apply the skills to future careers. This supports Aygün and Aydın's (2016) findings on motivation and skill improvement.

Additionally, in response to the open-ended question, "How do you feel after studying the English Writing for Business Purposes course using an e-portfolio?", the students shared their opinions in five main areas:

- 1) They can apply their knowledge to future careers.
- 2) Their writing has become more professional.
- 3) They learned various forms of document writing.
- 4) They expanded their vocabulary and sentence structures for different documents.
- 5) The e-portfolio is a good platform, though not very convenient to use.

This confirms that the students recognize the benefits of using e-portfolios in a Business English writing course, though some technical challenges with Google Sites may need to be addressed.

The relationship between GPA, perceived benefits, perceived obstacles, satisfaction, e-portfolio results, and academic achievement

Table 5 shows the relationship between the studied variables by using Pearson's Product Moment Correlation Coefficient ($p < .05$).

Table 5: Relationship between the studied variables

Variable	GPA	Perceived Benefits	Perceived Obstacles	Satisfaction	E-Portfolio Results	Academic Achievement
GPA	1					
Perceived Benefits	.261	1				
Perceived Obstacles	-.087	-.445	1			
Satisfaction	.169	.708	-.444	1		
E-Portfolio Results	.357	.176	-.061	.022	1	
Academic Achievement	.517	.284	-.193	.220	.431	1

The research results indicate a statistically significant relationship between the students' GPA, perceived benefits, perceived obstacles, satisfaction, e-portfolio results, and academic achievement in the English Writing for Business Purposes course at the .05 level, consistent with Chiaranai (2013). Academic achievement showed a strong positive correlation with GPA ($r = .517$, $p < .05$), indicating that students with higher GPAs tend to perform better. It also had a positive relationship with satisfaction ($r = .220$, $p < .05$) and a negative relationship with perceived obstacles ($r = -.193$, $p < .05$). This suggests that students who are satisfied with the course and perceive fewer obstacles tend to achieve better academic results. Satisfaction was positively related to perceived benefits ($r = .708$, $p < .05$) and negatively to perceived obstacles ($r = -.444$, $p < .05$), indicating that students who perceive more benefits and fewer obstacles are more satisfied with their studies. E-portfolio results were positively correlated with GPA ($r = .357$, $p < .05$) and weakly correlated with satisfaction ($r = .022$, $p > .05$), indicating that students with high GPAs and satisfaction scores tend to achieve better e-portfolio results. Lastly, perceived benefits were negatively related to perceived obstacles ($r = -.445$, $p < .05$), suggesting that students who identify more benefits perceive fewer obstacles.

DISCUSSION

E-portfolio scores, perceived benefits, and obstacles to using e-portfolios

The findings from the present study suggest that the students achieved high average scores on their e-portfolios assessment. This may be due to the ease of creating e-portfolios using Google Sites. Moreover, the work that students included in their e-portfolios had already been reviewed once, allowing students to incorporate feedback from instructors to improve their work before including it in their e-portfolios. Since each student shared their e-portfolios on Google Classroom, which was specifically created for the English Writing for Business Purposes course, students could access their peer's e-portfolios. This enabled them to learn from their peers' work along with the feedback provided by the instructor, offering guidance to improve their own e-portfolio. This align with Cocoran and Nicholson's (2004) assessment approach, which suggests that portfolio assessment must include feedback to learners, helping them to understand themselves, recognize their potential, and track their progress.

Regarding the perceived benefits of using e-portfolios, the students found them highly to extremely beneficial. The two most significant benefits of e-portfolios recognized by the students were 1) Using an e-portfolio is a good tool for collecting work and 2) Using an e-portfolio is a good tool in supporting learning thorough technology. The former may be because e-portfolios help students systematically compile their work and are appropriate for the digital era where information typically comes in electrical or digital format, allowing students to store work in various file formats. The latter may be because the English Writing for Business Purposes course incorporated blended learning with Google Classroom as the medium for technology-enhanced learning, students could access information and various learning resources, including online lessons and e-portfolios, which increased their motivation to learn Business English writing. These findings regarding perceived benefits differ from Chiaranai's (2013) study, which found that learners most valued benefits related to self-directed learning and independent learning the most.

Regarding perceived obstacles in using e-portfolios, the students perceived few to moderate obstacles. The two most significant obstacles recognized by the students were 1) Internet instability is an obstacle to using the e-portfolio and 2) Technological incompetence is an obstacle to using the e-portfolio. The former may be because most students in the sample group lived in dormitories, and some might reside in areas with unstable internet connections, creating occasional obstacles to accessing their e-portfolios. The latter may be due to the students' unfamiliarity with using Google Sites or certain e-portfolio features. These findings align with Chiaranai's (2013) research, which also found that students perceived moderate obstacles in using e-portfolios.

The students' satisfaction with using e-portfolios

The findings from the present study suggest that the students had high satisfaction with using e-portfolios, which aligns with Chiaranai's (2013) research. The top two satisfaction rankings were 1) E-Portfolios as Learning Tools in Business English Writing: Examining Student Perceptions, Satisfaction, and Academic Performance and 2) The font size can be adjusted and easy to read. The former may primarily stem from accessibility because students could access peers' e-portfolios anytime, anywhere through electronic devices such as mobile phones, tablets, and laptops. Additionally, Google Sites portfolios are designed to be user-friendly, allowing students to access peers' e-portfolios. The latter is probably because the text in e-portfolios could easily be resized for reading. This feature may help students comfortably read information on screen without worrying about text being too small or large.

From the open-ended question, "How do you feel after studying the English Writing for Business Purposes course using an e-portfolio?", the students expressed positive opinions about learning the course using e-portfolios. Most of them believed they could apply the knowledge in real work situations or future careers. This may be because students learned business document writing skills, vocabulary, and sentences used in actual workplace situations. It also made students' writing more professional due to frequent practice and instructor feedback. Students could also learn various document formats, as they studied diverse business document types, structure, content, and language appropriate for each type. They could also learn more vocabulary and sentences used in writing various documents. Using portfolios to motivate English writing learning aligns with Aygün and Aydın's (2016) research findings, which showed that portfolios not only motivate but also help improve English writing skills. Nevertheless, some students found that while e-portfolios were a good platform, they were not particularly user-friendly. This may be because students found certain features challenging to use, perhaps requiring more time to learn how to use these specific features.

The relationship between GPA, perceived benefits, perceived obstacles, satisfaction, e-portfolio results, and academic achievement

The research found that relationships between various variables and academic achievement in the course, English Writing for Business Purposes, were statistically significant at the .05 level. This is consistent with Chiaranai's (2013) research findings. Firstly, academic achievement had a strong relationship with GPA, consistent with the expectation that students with higher GPAs tend to be more academically successful. Secondly, academic achievement had a positive relationship with satisfaction, indicating that students who were satisfied with their learning tended to be more academically successful. Conversely, academic achievement had a negative relationship with perceived obstacles, consistent with the expectation that students who perceived fewer learning obstacles tended to be more academically successful. Additionally, satisfaction had a positive relationship with perceived benefits, indicating that students who recognized the benefits of learning tended to be more satisfied with their learning. Conversely, satisfaction had a negative relationship with perceived

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obstacles, consistent with the expectation that students who perceived fewer learning obstacles tended to be more satisfied with their learning. In terms of e-portfolio results, they had a positive relationship with GPA, consistent with the expectation that students with higher GPAs tended to have better e-portfolio results. Furthermore, e-portfolio results had a positive relationship with satisfaction, indicating that students with good e-portfolio results tended to have some satisfaction with their learning. Lastly, perceived benefits had a negative relationship with perceived obstacles, indicating that students who recognized the benefits of learning tended to perceive fewer learning obstacles.

Research Implication

The present study on developing Business English writing abilities using e-portfolios among the Faculty of Arts students at Silpakorn University demonstrates that teaching strategies play a crucial role in English writing instruction. The emerging research implications are as follows:

1. Using user-friendly platforms such as Google Sites enables students to focus on writing content rather than technical obstacles.
2. Supporting collaborative learning through platforms like Google Classroom allows students to receive feedback from instructors and peers, share knowledge, and learn from one another.
3. Finding solutions to issues of access to learning resources ensures all students can access instructional content and platform.
4. Providing support for time management helps students organize their time and balance workloads.
5. Encouraging a culture of positive response helps students learn from mistakes and eventually improve their work.

CONCLUSION

The present study on enhancing Business English writing skills among Faculty of Arts students of Silpakorn University through the use of e-portfolios emphasizes the importance of effective teaching strategies in the digital age. Key findings suggest using accessible platforms such as Google Sites to minimize technical challenges, enabling students to concentrate on content creation and promote autonomous learning. Furthermore, this can encourage collaborative learning, facilitate peer and teacher feedback, and share knowledge among students. Additionally, ensuring equal access to learning resources promotes inclusivity, while supporting time management helps students balance their workloads effectively. Lastly, creating an environment where students feel comfortable sharing and receiving thoughtful critiques helps them grow as writers by addressing weaknesses and refining their craft over time. These strategies collectively contribute to the successful development of students' Business English writing abilities.

Future Research

From this study, some recommendations for future research are indicated as follows:

1. This study is a survey on the use of e-portfolios in English Writing for Business Purposes. Future research could explore different sample groups, compare experimental and control groups, or use alternative platforms for e-portfolio creation.
2. Further research could examine factors affecting student satisfaction with e-portfolios, as understanding these factors could help instructors adjust their teaching methods to enhance student engagement and satisfaction.
3. Clear and standardized evaluation guidelines for e-portfolios should be developed, with transparent scoring criteria covering content, format, design, and creation processes. Developing and distributing an evaluation manual would greatly benefit portfolio-based teaching to both the teacher and the students.

REFERENCES

- Aygün, S. & Aydın, S. (2016). The Use of E-Portfolios in EFL Writing: A Review of Literature. *ELT Research Journal*, 5(3), 213 – 214.
- Bhatia, A.T. (1979). ESP for students of science. *English Teaching Forum*, 17(2), 32-36.
- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). Addison Wesley Longman.
- Chiaranai, C. (2013). *Electronic Learning Portfolio for Studying Basic Concepts in Nursing Science* [Research Paper]. Suranaree University of Technology. Retrieved from <http://sutir.sut.ac.th:8080/jspui/handle/123456789/4663> (In Thai)
- Corcoran, J., & Nicholson, C. (2004). Learning Portfolios-evidence of learning: An examination of students' perspectives. *Nursing in Critical care*. 9(5): 230-237.
- Doig, B., Illsley, B., McLuckie, J., & Parsons, R. (2006). Using ePortfolios to enhance reflective learning and development. In A. Jafari & C. Kaufman (Eds.), *Handbook of Research on e-Portfolios* (pp. 158-167). Hershey, USA: Idea Group.
- Gottlieb, M. (1995). Nurturing student learning through portfolios. *TESOL Journal*, 5(1), 12-14.
- Klaprapsuek, A. (2005). *Development of Business English Curriculum based on the Communicative Approach: A Case Study of the Business Administration Faculty Dhurakij Pundit University* [Research Paper]. Dhurakij Pundit University. Retrieved from <https://libdoc.dpu.ac.th/research/131006.pdf> (In Thai)

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- Koraneekij, P., & Khlaisang, J. (2019). Students' beliefs regarding the use of e-portfolio to enhance cognitive skills in a blended learning environment. *International Journal of Emerging Technologies in Learning (iJET)*, 14(2), 85.
- Lankes, A. D. (1995). *Electronic portfolios: A new idea in assessment* (ERIC Digest No. ED 390 377). ERIC Clearinghouse on Information & Technology.
- Mertler, C.A. (2001). Designing scoring rubrics for your classroom. *Practical Assessment, Research & Evaluation*, 7(25). Retrieved from <http://PAREonline.net/getvn.asp?v=7&n=25>
- Norton, P. & Wiburg, K. (1998). *Teaching with technology*. Orlando, FL: Harcourt Brace College Publishers.
- Robinson, P. (1980). *ESP: English for Specific Purposes*. London: The Pitman Company.
- Thongmark, S., Keawkong, P., & Udom, P. (2012). A study of motivation in learning English among Thaksin University students. *Thaksin University Library Journal*, 1, 37-49. Retrieved from <https://so14.tci-thaijo.org/index.php/TSULJ/article/view/338/224>
- Wanchid, R. (2011). The use of electronic portfolios in EFL writing classes: Effects and student attitudes. *Suthiparithat Journal*, 25(76), 168.
- Wonglekha, F. (2015). *Teaching and learning management in the digital world*. Dailynews. Retrieved from <https://d.dailynews.co.th/education/358284/> (In Thai)