Learning Achievement in English of the Students at A Private University in Pathum Thani Province Through the Use of the Padlet Application

Suwanna Yutthapirut[1], Sarinrat Sertpanya[2] and Pikun Ekwarangkoon[3]
Faculty of Liberal Arts, North Bangkok University, Thailand
[1] E-mail: suwanna.yu@northbkk.ac.th, ORCID ID: https://orcid.org/0009-0006-2874-3158
[2] E-mail: sarinrat.se@northbkk.ac.th, ORCID ID: https://orcid.org/0009-0000-8058-367X
[3] E-mail: pikun.ek@northbkk.ac.th, ORCID ID: https://orcid.org/0009-0003-0858-9294

Abstract

Background and Aims: Students who achieve high levels in English are better prepared for both academic success and global engagement. It builds self-assurance and provides access to a wide range of opportunities in various fields. Thus, the objectives of this study were 1) to examine the efficiency of teaching English through the use of the Padlet application the students at a Private university in Pathum Thani province, and 2) to compare the learning achievement in English of the students at a Private university in Pathum Thani Province through the use of the Padlet application.

Methodology: The participants in this study were 50 students from a private university in Pathum Thani Province who enrolled in Basic Writing in English in the third semester of the academic year 2023, selected through stratified random sampling and simple random sampling methods. The research instrument consisted of 10 sets of English achievement tests. The data was analyzed by Percentage, Mean, Standard Deviation, and t-test.

Results: The results found that 1) the efficiency of teaching English through the use of the Padlet application of the students at a private university in Pathum Thani Province (E_1/E_2) was 81.82/83.18. 2) The learning achievement in English of the students at a Private university in Pathum Thani province through the use of the Padlet application was significantly higher than before at the 0.01 level.

Conclusion: At a private university in Pathum Thani Province, the use of the Padlet application dramatically increased student learning achievement and significantly increased the efficiency of teaching English ($E1/E2$: 81.82/83.18). This shows a significant improvement in English proficiency after the intervention, proving the usefulness of Padlet.

Keywords: The Use of Padlet Application; Learning Achievement; English

Introduction

English is widely recognized as a global lingua franca for communication as the World English, with nearly 2 billion people worldwide speaking the language. Additionally, English is the official language in 88 countries and functions as the first language in several states worldwide (Crystal, 2008). English serves as the first language for over 373 million people and as the second language for over 750 million people worldwide. Being considered a universal language for communication among people from different countries, English provides a standardized form of communication that facilitates efficient information exchange on a global scale (Rao, 2019). With widespread understanding, English has become a global resource, encompassing academic research, scientific publications, and technological advancements. Language users can access a wealth of information and stay up-to-date with the latest developments across various fields in English like societies of medical science doctors, airplane pilot captains, bankers, and teaching English teachers.

In Thailand, English is predominantly used as a foreign language or second language, even though Thai remains the primary language for daily communication. English language skills are fundamental and highly significant for both learning and practical purposes. Universities include English language courses in the General Education curriculum, aiming to provide students from all fields with the opportunity to learn and acquire knowledge from various widely available English-language lessons, documentaries, books, articles, and research in various fields. The major goal of teaching language is to develop 4 basic fundamental language skills; reading, writing for literacy, listening, and speaking skills (Widdowson, 1990; Nunan, 2013). According to the National Education Act of 2002, educational reform emphasizes learner-centered teaching and learning, aiming to meet the needs of learners and society by facilitating learning processes for personal and societal flourishing. This involves knowledge transmission, training, cultural preservation, academic advancement, and the

creation of knowledge through environmental, social, learning, and supportive factors to ensure lifelong learning. Education is directed toward developing well-rounded individuals with physical, mental, intellectual, and moral qualities, enabling them to live harmoniously with others and pursue happiness. It is based on the principle that all learners can learn and develop themselves, with learners being considered of utmost importance. The educational process should promote learners' natural development and full potential. In the classroom, students can actively practice their English skills while acquiring valuable outside knowledge. Students with English skills will have a better chance of gaining knowledge worldwide. Moreover, English language proficiency creates opportunities for a better work life. For practical purposes, Thais with English language proficiency will have greater job opportunities and receive higher wages than those lacking English language skills. For instance, in international organizations or corporations, English language proficiency is often a high-ranked competitive requirement for screening job applicants, determined by standardized examinations conducted in reputable and trusted institutions. Certain professions, such as cabin crews, receptionists, front desk hotel staff, and customer service representatives, also demand English language proficiency scores as part of the job application process. These requirements present the necessity for global competence and effective communication skills with people from different countries, facilitating business expansion into various countries in the future. To progress and thrive in such roles, fluent English language skills are crucial. According to Promising (2017), English language skills are divided into four main categories: listening, speaking, reading, and writing. Among these skills, the most frequently used in daily life are listening skills, accounting for 40-50%, followed by speaking skills at 25-30%. Although reading and writing skills are ranked lower in terms of daily usage, they should not be overlooked because both skills are essential in various aspects of life. The ability to communicate effectively in writing is still crucial for educational and professional success. Writing serves the purpose of conveying ideas, underscoring the importance of encouraging students to share their completed work. This could involve facilitating discussions among students or pairing them up to review and provide feedback on each other's writing. Subsequently, they can convene to exchange thoughts or relay insights gained from their peers' texts with others. The use of technology offers the ability to completely change how we acquire knowledge. Technology can assist students in achieving their maximum capabilities by enhancing the engagement, accessibility, and effectiveness of the learning process.

Jirasak (2017) mentioned the theory of educational innovation in the classroom which includes the introduction of new ideas and procedures within the education system. This facilitates expedited and effective acquisition of knowledge for learners, enhances their inherent desire to engage in the acceleration of the learning process, and additionally contributes to time optimization in the learning effort. Educational innovation includes several developments such as computer-assisted learning, interactive movies, multimedia, and the internet.

Therefore, the researcher examines the efficiency of teaching English through the use of the Padlet application of the students at a private university in Pathum Thani Province, and compares students' learning achievement in English before and after the use of the Padlet application. The results will acknowledge the students' learning achievement in English through the use of technology in the language classroom to enhance the student's English language abilities. This serves as a crucial tool for communication, education, and pursuing professions. In addition, the research findings will show an alternative technological tool in English classrooms that can be used to improve the student's English skills in the future.

Objectives of the Study
1) to examine the efficiency of teaching English through the use of the Padlet application of the students at a Private university in Pathum Thani province.
2) to compare the learning achievement in English of the students at a Private university in Pathum Thani Province through the use of the Padlet application.

Literature review

The three main points of the literature review in this study are reading skills, writing skills, and technology and innovation in education. Reading skills are closely linked to writing skills, as good reading affects good writing.

Theoretical background of reading skills
Definitions of Reading Skills

Reading skills are essential for several reasons because language users can access the information they need, as English is widely used as the language of communication in various domains such as academics, science, technology, business, and the internet. Banditvilai (2020) indicated that reading is a lifelong skill for academic learning. Reading is one of the four essential English skills that must be practiced regularly and continuously. With age and experience, readers can improve their reading skills. Reading is an integral part of human life, and it is a powerful tool for acquiring knowledge, ideas, and entertainment. It can help to make life brighter and more fulfilling, as the British philosopher, Sir Francis Bacon (1876) had a famous quote that "Reading makes a full man; conference a ready man; and writing an exact man."

Proficient English reading skills allow individuals to access a vast amount of information, research, and literature available in English. In academic and professional advancement, English reading proficiency is crucial for academic success, especially in higher education. Many academic journals, textbooks, and reference materials are written in English. Additionally, in today's globalized world, English language proficiency is often a requirement for employment and career advancement in many industries and organizations. Moreover, for personal growth and lifelong learning, reading in English exposes individuals to different cultures, perspectives, and ideas, broadening their horizons and helping language users develop critical thinking skills. English reading provides opportunities for personal growth, intellectual stimulation, and lifelong learning. Furthermore, Yuthapirut (2016) stated reading skills are the abilities of communication that facilitate global connections. English is a common language used for communication between people from different linguistic backgrounds. It can be said that English reading allows language users to effectively communicate with people from diverse cultures and nationalities, expanding their social and professional networks. Additionally, people who have reading proficiency can enhance their cognitive skills.

Reading in any language, including English, improves cognitive abilities such as vocabulary expansion, comprehension, analytical thinking, and problem-solving. It also enhances memory, concentration, and overall linguistic abilities. Reading is a way to gain cultural enrichment. English literature is rich and diverse, featuring renowned authors and literary works from various periods and genres. Reading English literature exposes individuals to different literary styles, themes, and cultural perspectives, fostering cultural appreciation and understanding. Reading literature provides insight into the authors' perspectives during specific periods.

Trueplookpunya, (2012) indicated the roles of reading as follows:

1. Reading skills are essential for academic success. Students need to be able to read and understand their textbooks, assignments, and tests. They also need to be able to read and apply reading strategies to participate in class discussions and complete research projects. Students who read regularly have an advantage over students who do not. They are exposed to more information and ideas, which helps them develop their knowledge base and critical thinking skills. Additionally, good readers can choose appropriate reading materials for their needs and apply what they read to their own lives. Furthermore, reading regularly helps students develop critical thinking skills. They can analyze and distinguish between different types of information and identify biases and fallacies. In conclusion, students who can read effectively are more likely to be successful in their studies and careers.

2. Reading is essential for career success because it allows professionals to stay up-to-date on the latest trends and developments in their field, learn new skills, and communicate effectively with colleagues and clients.

3. Reading can help to improve mental health and well-being by reducing stress, anxiety, and depression. It can also help people develop empathy and understanding for others by exposing them to different perspectives and experiences.

4. Reading is a great way to relax and de-stress, as well as to learn new things and be entertained. It is a versatile activity that can be enjoyed by people of all ages and backgrounds.

5. Reading is a key skill that enables people to develop the knowledge and skills they need to contribute to their communities and country.

The above definitions indicate that reading skills are concerned with communicative language use, which can benefit learners in many ways.

Theoretical background of writing skills

Definitions of Writing Skills

Writing, as stated by Nina (2015), is a productive skill and a creative process for articulating ideas. It aids students in delving into their thoughts and emotions. Productive skills empower learners to convey language through written words or sentences, facilitating communication and expression of ideas through text. Writing plays a crucial role in cognitive advancement, reflecting one's mental growth. It serves as a means of self-expression and critical analysis, with written pieces displaying creativity and the process illustrating comprehension (Atasoy, 2021).

Proficiency in English writing is essential for academic and career success, as is the ability to read in English. Writing serves as a primary form of communication and is commonly employed as a global written language. Proficient English writing skills facilitate effective communication of ideas, thoughts, and information to a broad audience. Within academia, a strong command of English is essential for producing research papers, essays, reports, emails, and various written assignments. Writing accurately and comprehensively empowers learners to confidently articulate their thoughts, perform critical analysis effectively, and cultivate analytical thinking, data interpretation, and the articulation of structured ideas. Mastering English writing skills helps students effectively communicate and interact in professional settings, leading to their overall success.

Proficiency in English is crucial for effective communication in business. It is the primary language used for business correspondence, including emails, reports, proposals, and other official documents. Employers appreciate clear and effective written communication skills in English, as it enhances career opportunities and advancement prospects (Rao, 2019). Writing in English enables language users to showcase their creativity, imagination, and emotions. It acts as a platform for storytelling, poetry, literature, and personal introspection.

Proficiency in English writing empowers people to express thoughts and ideas effectively, enhancing personal development and self-expression. Writing also encourages critical thinking, information analysis, and logical organization of thoughts. Practicing English writing helps individuals improve analytical skills, coherence in presenting arguments and ideas, and problem-solving abilities. It also fosters research and information gathering, enriching knowledge and understanding. Furthermore, English writing is crucial for connecting people from diverse cultures, allowing the sharing of ideas and perspectives, and facilitating communication between individuals who speak different languages. It offers a platform for individuals to actively participate in global discussions and engage in meaningful intercultural dialogues. Mastering English writing is essential for effective communication, academic and professional success, business opportunities, creative expression, critical thinking, and cultural exchange. It enables individuals to express their ideas with precision, clarity, and impact, opening up a world of diverse possibilities and prospects.

In summary, reading and writing skills are interconnected. This means that they all support each other. For example, students who do not read well may have difficulty writing well, because they may not have enough knowledge to write about. Writing is based on knowledge, which is acquired through reading. A student with good reading skills can easily transfer the knowledge and ideas they learn from reading to their writing. This allows them to share their ideas effectively.

Theoretical background of technology and innovation in education

Definitions of technology and innovation in education

The definitions of technology and innovation in education encompass a wide range of interpretations among various researchers. In general, technology may be characterized as the utilization of scientific knowledge for pragmatic objectives, whereas innovation can be described as the introduction of new things, particularly enhanced products or methodologies. Within the field of

education, the utilization of technology and innovation has the potential to enhance the process of learning through several means. These include the establishment of targeted learning experiences, granting students access to a wide range of materials, and making the act of learning more interesting and interactive.

According to Chipaco, Gujamo & Andrade (2018), technology and innovation in education refers to the use of technology to support pedagogical instructional practices. Technology and innovation in education are how concepts, theories, techniques, methodologies, and instruments can be applied in the classroom to increase efficiency and productivity. Innovation in education is the application of novel ideas and techniques in the classroom. These methods will be beneficial to the students and will quickly improve their knowledge efficacy. The following are examples of educational applications of technology or innovation: Computer-assisted instruction (CAI) is the use of computers to provide instruction, practice, and assessment to students. Inter Interactive video combines video with other elements such as audio, visuals, and activities to create a more engaging learning environment for students. Multimedia uses various media, including images, audio, videos, and text, to create an immersive and interactive experience. Technology possesses the capability to actively engage students both within and beyond the classroom setting. Using technology in education can enhance the learning experience by fostering a more active and student-centered environment. Students show a preference for incorporating educational technology into their classroom activities. Gagne et al. (2007) mentioned that technology and innovation education are the systematic application of scientific knowledge and research to the design, implementation, and evaluation of learning and teaching processes, intending to improve student learning outcomes.

Hancock, Bray & Nason (2002) expressed that educational technology involves combining concepts and comprehension in the interaction between people and various tools and resources, with the deliberate goal of enhancing the effectiveness of the teaching and learning procedures while keeping specific objectives in focus.

Good (1973) defined educational technology as the application of scientific knowledge about learning and teaching to the design, implementation, and evaluation of educational systems and processes. This definition is broad and encompasses a wide range of activities, including developing and implementing new instructional methods and materials; Using technology to support learning and teaching; evaluating the effectiveness of educational programs and interventions; and conducting research on learning and teaching

These definitions covered a broad spectrum of activities related to the use of technology in education and continue to be relevant in the field of educational technology today. It highlights the importance of applying scientific knowledge to enhance the design, implementation, and evaluation of educational systems and processes, which can lead to more effective and efficient teaching and learning experiences. This study employed the Padlet application in the classroom to improve English writing proficiency. The Padlet application offered a virtual wall where students could submit their summary writings, exchange comments, and provide peer feedback. This teaching approach followed a cyclical pattern of learning, fostering an environment where students felt comfortable sharing their ideas positively. Simultaneously, it allowed the teacher to identify students' writing challenges and provide necessary assistance in resolving them. Salwa (2022) mentioned that Padlet can be used to create a virtual wall and has some important advantages. Padlet is a free platform that is enabled on all kinds of devices such as smartphones, PCs, laptops, or tablets. In addition, no need to install software. It is user-friendly and simply used by anyone with internet access. Haris et al. (2017) stated that Padlet is a very convenient web tool that promotes collaborative learning among learners. The Padlet wall can add text, pictures, videos, or links to clarify the writing. The wall can be exported into a poster, PDF file, or embedded into a class blog.
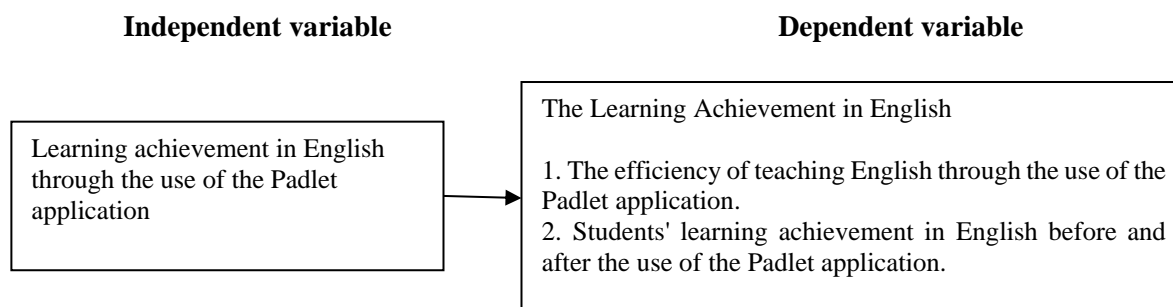
Theoretical Framework

Independent variable		Dependent variable

Figure 1 Theoretical Framework

Hypotheses

1. The efficiency of teaching English through the use of the Padlet application of the students at a private university in Pathum Thani Province was higher than criteria 80/80.

2. The students' learning achievement in English after the use of the Padlet application was higher than before the use of the Padlet application for the students at a private university in Pathum Thani Province.

Methodology

Population and sample group: The research design of this study took the form of a quantitative approach. This research applied 50 sampling to determine the population samples. This study applied a quasi-experimental method which involved one group pretest posttest design. The participants in this study used the Padlet application to enhance their English writing skills. The writing in this study was focused on summary writing skills.

Participants: The stratified random sampling and simple random sampling methods were used to recruit participants in this study. The private universities in Pathum Thani Province offer courses in English Foundation. These courses are a requirement for Bachelor's degrees. North Bangkok University was selected as a sample because this university is in Prathumthani and offers the same courses as other universities in Pathum Thani Province. This sampling can be generalized to other universities. Then, the researcher used a simple random sampling method, selecting class as the sampling frame. Fifty Thai students enrolled in the English writing part of the course were selected.

Instrument: There were 10 sets of IELTS reading passages for summary writing in pretests and posttests, and 10 sets of exercises in this study. The rubric for the assessment and evaluation of both pretests and posttests was adapted from Heaton (1990). The objective of this rubric was to assess and evaluate students' writing skills across four criteria: (1) Fluency; (2) Grammar; (3) Vocabulary; and (4) Spelling. Each criterion was scored on a scale of 1 to 5, with 5 being the highest score. The rubric for the 5 sets of exercises in the classroom was scored on a scale of 1 to 5, with 5 being the highest score.

Data Collection: The data collection for this study involved gathering scores from 50 students, encompassing both pretest and posttest assessments of the English writing test. Before the test, the students studied the theory of summary writing and writing techniques followed by the lesson plan. Then the students read the IELT passage and did the pretest (assignment) by writing the summary writing on their notebooks. Writing in the notebook is the traditional method. The students got the assignment score and comments only from the teacher. The students spent 60 minutes on the pretest. After that, the students read the same passage again and rewrote the summary writing by using the Padlet application as a posttest. The students spent 60 minutes using the Padlet application to learn English and do the posttest. In the post-test, the students wrote the summary writing from the reading passage on the Padlet wall. The students can share what they have summarized. Not only a teacher could review and give comments, but also their peers. The students got the post-test score and reviews from peers and teachers. These assessments were conducted weekly to evaluate the students' English writing proficiency at the commencement and conclusion of each English class.

Data analysis: The data was analyzed and interpreted using quantitative analysis. The quantitative data included scores from the pretest and posttest of the English writing test. Percentage, Mean, Standard deviation, and t-test were used in this study. The t-test (Independent Sample Test) was used to compare the mean ($\overline{x}$) scores of writing competency between the pretest and the post-test. To determine statistical significance in all the tests, Standard Deviation (S.D.) .05 was established, to indicate if relationships were statistically significant for all statistical tests.

Results

Table 1 The Mean scores of the efficiency of teaching English through the use of the Padlet application

Lesson Plan	Assignment Score (E_1)	Posttest (E_2)
1	83.60	84.00
2	80.80	82.80
3	82.40	83.80
4	82.00	84.00
5	82.00	84.20
6	80.40	82.20
7	80.80	82.20
8	80.60	82.20
9	80.80	82.40
10	84.00	84.00
Mean	81.82	83.18

Table 1 shows the efficiency of teaching English through the use of the Padlet application. The mean score of the students during teaching English through the use of the Padlet application, the assignment score (E_1) was 81.82 while the mean score of the students after teaching English through the use of the Padlet application, the post-test score (E_2) was 83.18. According to the criteria E1/E2= 80/80, when compared with the criteria the findings found that assignment scores during teaching English through the use of the Padlet application and posttest have the higher score than criteria E1/E2 = 81.82/83.18.

Table 2 Mean score of students' learning achievement in English before and after the use of the Padlet application

Test Results	n	$\overline{x}$	S.D.	t	p-value
Pretest	50	2.89	.341	-83.813	.000
Posttest	50	8.26	.259		

Table 2 found students' learning achievement in English before the use of the Padlet application was ($\overline{x}$ = 2.89, S.D.=.341), and after the use of the Padlet application was ($\overline{x}$ = 8.26, S.D. =.259). The students' learning achievement in the posttest was higher than the pretest at a statistical significance level of .01.

Discussion

The research results examined the efficiency of teaching English through the use of the Padlet application of the students at a Private university in Pathum Thani province, including the mean scores of the pretest and posttest, and the average score of the tests in the classroom. Positive results were found after integrating technology in the classroom. According to the criteria E_1/E_2= 80/80, the efficiency of teaching English through the use of the Padlet application in this study was higher than the criteria E_1/E_2 = 81.82/83.18. The results related to the hypothesis. It can be said that the use of technology makes the classroom more interactive, and raises the students' motivation. As proposed by Thamteerasit, Phonjit & Thamteerasit (2021) studied on the development of game applications for

[517]

enhancing the vocabulary knowledge of primary students. The results found that the efficiency of the application (E1/E2) is 82.96/85.00, which is higher than the assigned standard creation of 80/80. In addition, Summart (2018) studied on development of digital media based on the Gagne concept by teaching Padlet in the Calculation program (2204-2103) course for 2nd year Diploma Degree in Business Computer students. The finding found that the Development of digital media is based on Gagne's concept of teaching on Padlet. Calculation Program (2204-2103) the efficiency of the standard 80/80 = 83.53 / 88.78.2). According to the related studies, the efficiency of the use of the Padlet application for improving the students' learning achievement was positive. When compared with the criteria 80/80, the efficiency of the use of the Padlet application was higher than the criteria. Awaludin, Abd Karim & Mohd Saad (2017) mentioned that the use of technological learning tools in the teaching and learning process has made significant changes in teaching pedagogies from teacher-centered to student-centered. Using technology helps students enhance their skills. The use of the Padlet facilitates communication and cooperation among students to students. In addition, using technology in the classroom enables students to 1) learn, 2) memorize, 3) understand, 4) develop knowledge, 5) review, and 6) engage in hands-on activities independently to enhance their English language skills. The methods of learning by using the technological tool in the classroom are related to Bloom et al. (1956), study on Taxonomy of Education Objectives. Bloom's Taxonomy categorized educational objectives into six levels. The cognitive domains are 1) remembering, 2) understanding, 3) applying, 4) analyzing, 5) evaluating, and creating. The taxonomy provides a structured approach to developing educational objectives and assessing students' cognitive skills at different levels.

Moreover, the English learning achievement of the students in the posttest score after the use of the Padlet application was higher than the pretest score at a statistical significance level of .01. Furthermore, the average score of the test showed 100 percent of the students had an improvement in the student's learning achievement. The result aligned with Taufikuroman's (2018) study on the effectiveness of using Padlet in teaching writing descriptive text. The results found a significant difference in teaching descriptive text to EFL students in one of the Senior High Schools in Ciamis between those who are taught by using Padlet and those who are taught by traditional style. Moreover, it can be seen that Padlet can develop students" descriptive text writing ability. This study was in line with the study from Mulyadi et al. (2021) on the application of Padlet in teaching and learning writing recount text at a senior high school in Palu City. The finding showed that the application of Padlet had a positive effect on the student's learning performance. 85 percent of the students can do the task collaboratively and cooperatively. Moreover, students were motivated and participated actively in class activities. Furthermore, this study mentioned that the use of Padlet can be implemented at other schools in Palu City. On the other hand, the use of Padlet can be used as a tool for learning L2 grammar. Halim and Shapi (2023) studied Padlet as a tool for learning L2 in Malaysian education. The findings showed that when students use learning software such as Padlet, they achieve a better understanding of L2 Grammar because Padlet highly motivates them to connect the use of technology with the contents of the lesson. Moreover, they can trace their grammar acquisition by doing their self-assessment from the activities and material provided by the teacher during every lesson. As can be seen in the studies mentioned before, the Padlet application not only has the benefit in the language field but also can be used as a tool in the Calculation program. Summart (2018) studied on development of digital media based on the Gagne concept by teaching Padlet in the Calculation program (2204-2103) course for 2nd year Diploma Degree in Business Computer students. The finding of learning achievement before and after class the statistical significance was 0.01. Using Padlet in the classroom has proven to be efficient and has led to positive learning outcomes. Studies have shown that integrating Padlet into educational settings enhances students' engagement, collaboration, and understanding of various subjects. With its user-friendly interface and interactive features, Padlet motivates students to participate in lessons. Additionally, Padlet was used for communication and collaboration among students to students or teachers, allowing them to share ideas, collaborate on projects, and provide feedback to their peers. This collaborative environment fosters a sense of community and encourages students to take ownership of their learning. Furthermore, Padlet enables educators to create dynamic and interactive learning

experiences on students' needs and preferences. The students will gain knowledge and enjoy their learning.

Recommendations

According to the conclusion and discussion, this study suggested as follows:

1. Teachers should use new teaching methods such as new technology or innovation to improve the student's learning achievement.

2. English teachers should create more exercises that allow students to share their ideas. This method can improve the student's learning achievement.

References

Atasoy, A. (2021). The Relationship Between Writing Self-Efficacy and Writing Skill: A Meta-Analysis Study. *TED EĞİTİM VE BİLİM*. 46 (208), 213-236. Doi: 10.15390/EB.2021.10024.

Awaludin, F.A., Abd Karim, R., Mohd Saad, N.H. (2017). Padlet: A Digital Collaborative Tool for Academic Writing. *J Educ Sci.* 8(1), 179-184.

Banditvilai, C. (2020). The Effectiveness of Reading Strategies on Reading Comprehension. *International Journal of Social Science and Humanity. 10 (2), 46-50.* DOI:10.18178/ijssh.2020.V10.1012.

Bloom, B.S., & Krathwohl, D.R. (1956). *Taxonomy of educational objectives; the classification of educational goals by a committee of college and university examiners. Handbook I: Cognitive Domain.* New York, NY; Longmans, Green.

Chipaco, E., Gujamo, L., & Andrade, A. (2018). Technology and Innovation in Education: Interfaces for Digital Skills. Journal Revista Electrónica de Investigação e Desenvolvimento. 2(9), 25-35. http://hdl.handle.net/10400.14/28298

Crystal, D. (2008). *English as a Global Language.* 2nd edition. Cambridge University Press, New York.

Francis, B. (1876). *The Advancement of Learning.* Claredon Press.

Gagne, R.M. et al. (2007). *Principle of Instruction Design.* 5th Edition. Performance Improvement. 44-46.

Good, C. (1973). *Dictionary of Education. Education*. New York: McGraw-Hill Book Company, Inc.

Halim, N.A., & Shapii, A. (2023). Padlet as a Tool in Learning L2 Grammar. *Language, Education and Culture Research*, 3(1), 40-50.

Hancock, D.R., Bray, M., & Nason, S.A. (2002). Influencing university students' achievement and motivation in a technology course. *The Journal of Educational Research,* 95(6), 365–372. https://doi.org/10.1080/00220670209596611

Haris, M., Yunus, M., Badusah, J. (2017). The Effectiveness of Using Padlet in ESL Classroom. *International Journal of Advanced Research,* 5(2), 783-788.

Heaton, B. (1990). *Classroom Testing.* London: Longman Inc.

Jirasak, L. (2017). *An Analysis of Problems in Learning Management Arising from the Use of Innovation and Technology*. Retrieved on October 8, 2017, from https://jirasak2017.wordpress.com/2017/10/08/การวิเคราะห์ปัญหาการจั/

Mulyadi, E., Naniwarsih, A., Omolu, F.A., Manangkari, I., & Amiati, A.R. (2021). The Application of Padlet in Teaching and Learning of Writing Recount Text at Senior High School in Palu City. *The 6th Asia-Pacific Education and Science Conference, AECon 2020, 19-20 December 2020, Purwokerto, Indonesia.*

National Education Act. (2002). *Second National Education Act B.E. 2002. Office of the National Education Commission Office of the Prime Minister, Kingdom of Thailand*. Retrieved June 20, 2023, from https://www.onesqa.or.th/upload/download/file_697c80087cce7f0f83ce0e2a98205aa3.pdf

Nina, I. (2015). English Language Teachers' Use of Social Media Technology in Indonesian Higher Education Context. *Asian EFL Research Articles.* 17 (4), 6-36.

Nunan, D. (2013). *Learner-centered English Language Education: The Selected Works of David Nunan.* Routledge Taylor& Francis Group: New York and London.

Promsing, W. (2017). *The Effectiveness of Using English Movie Clips to Enhance the Listening Ability of Thai University Students*. Master's thesis: Srinakharinwirot University.

Rao, P.S. (2019). The Importance of English in the Modern Era. *Asian Journal of Multidimensional Research,* 8(1), 7. DOI:10.5958/2278-4853.2019.00001.6

Salwa, R.A. (2022). *Using the Padlet Application to Improve EFL Writing Skills of Secondary Stage Students and their Attitudes towards Writing.* Retrieved from: https://www.researchgate.net/publication/362697286.

Summart, S. (2018). Development of digital media based on the Gagne concept by teaching on Padlet In Calculation Program (2204-2103) Course for 2ndyear Diploma Degree in Business Computer Students. *Vocational Education Innovation and Research Journal,* 2(1), 31-38.

Taufikuroman, I.L. (2018). The Effect of Using Padlet in Teaching Writing Descriptive Text. *Journal of Applied Linguistics and Literacy*, 2(2), 71-88. Retrieved June 25, 2024 from https://jurnal.unigal.ac.id/index.php/jall/index.

Thamteerasit, S., Phongjit, W., & Thamteerasit, A. (2021). The Development of a Game Application for Enhancing the Vocabulary Knowledge of Primary Students. Journal of Social Science for Local Rajabhat Mahasarakham University. 6 (1), 194-202.

Trueplookpunya, (2012). *Roles of reading.* Retrieved on January 18. 2022. http://www.trueplookpanya.com/learning/detail/8123

Widdowson, H.G. (1990). *Teaching English Language as communication*. London: Oxford University.

Yutthapirut, S. (2016). *The Use of English Language by The Hotel Receptionist in Bangkok*. North Bangkok University.