LEARN Journal: Language Education and Acquisition Research Network
(ISSN: 2630-0672 (Print) | ISSN: 2672-9431 (Online)
Volume: 15, No: 2, January – June 2022
Language Institute, Thammasat University
https://so04.tci-thaijo.org/index.php/LEARN/index

Effects of Gamification in English Language Learning: The Implementation of *Winner English* in Secondary Education in Thailand

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APA Citation:
Vathanalaoha, K. (2022) Effects of gamification in English language learning: The implementation of *Winner English* in secondary education in Thailand. *LEARN Journal: Language Education and Acquisition Research Network*, *15*(2), 830-857.

Received
02/05/2022

Received in revised form
14/06/2022

Accepted
01/07/2022
(Cambria, 9)

Keywords
Gamification; Thai secondary schools; English learning development; reward system; learning motivation

Abstract

Accessing quality resources for English learning is an urgent pedagogical issue due to the lack of English teachers in Thailand. To compromise, it has become necessary to apply technology in English classes in the 21st century, through which students can access high-quality materials provided globally. Teachers need to tackle new challenges where the trends of technology and gamification in English language learning seem more appealing. This study explores how gamification contributes to student performance and perceptions through the *Winner English* program. The program was designed primarily to be self-paced but has been adapted to be used as a part of compulsory classes at school. The experiment group comprised Grade 9 students from eight Thai secondary schools, while the controlled group from the other eight schools studied English classes traditionally. The posttest results indicate a vast improvement to English performance by the experiment group once the program was integrated into English classes. Individual feedback underlined how the program was supported through gamification, such as the reward system

	and leaderboards, and offered an excellent opportunity to practice English accurately. Gamification shows promising attributes for English learners whose learning behaviors have become ubiquitous, fun-loving, and autonomous. Understanding the benefits of gamification could spark cautious optimism in English education in Thailand.

Introduction

Learners in the 21st century are considered digital natives as they have been raised with digital technologies used in the learning environment. Therefore, educators may need to utilize technological advancement to serve learners' requirements and preferences. Based on the popularity of video and computer games, gamified applications have been implemented in education to improve learner engagement through the dynamics of competitive learning (Ašeriškis & Damaševičius, 2014). For instance, learners can interact with their peers simultaneously and emphasize the significance of collaborative learning as teamwork to accomplish the assigned quests. In Thailand, the English language is considered English as a foreign language since it has never been used as an official language for communication or commercial purposes.

The dearth of student motivation in English learning can be seen from Thai students who have fewer opportunities to use English, either when they are not at school, or when they reside away from the central district, where foreigners are more common. In fact, two immediate problems in Thai EFL classes appear to be the lack of student motivation in the classroom and an insufficient number of English teachers in rural areas (Oeamoum & Sriwichai, 2020). This research evaluates gamification to overcome the issues of student motivation and insufficient English teachers. Since gamification uses gaming elements that can be combined with the content, this could increase student motivation and engagement in English classes. In addition, it may replace the insufficient number of English teachers because students can learn directly from the certified digital materials provided by the program, while the teachers' role is transformed to become a facilitator. As English learning is through imitation and simulation, gamification eventually aims to enhance learners' English proficiency through its edutainment platform.

Literature Review

This section reviews salient concepts on gamification, the application of e-learning in English language teaching, and gamification in education before introducing the research questions

Gamification

Kapp's (2012) concept of gamification includes any game-based application can "engage people, motivate action, promote learning, and solve problems." Further, gamification integrates gaming activities to trigger critical thinking in education (Marczewski, 2017). Many features of games could be employed in gamification, such as users, challenges or tasks, points, levels, badges, and user ranking. Users, such as students or clients, are indispensable in edutainment as they need to participate in tasks. Challenging tasks can be assigned to the individual user to perform according to learning objectives. Points are used to accumulate each student's scores in any given task. *Levels* are the milestones that users need to pass based on the points received. Badges are used as rewards when completing assignments. Finally, user ranking is finalized according to user achievements.

Nonetheless, gamification is different from games that are mainly designed for entertainment or simulations which simulate authentic settings for training. Gamified learning only uses gaming elements to increase motivation and influence student engagement to learn new skills (Topîrceanu, 2017). A significant problem in English education is the lack of student motivation to actively participate. In Thailand, this problem has persisted due to the Thai people's collectivistic behavior and belief in Confucianism. In this context, students are required to be passive and respect their teachers without argumentative statements (Leung, 1998; Prasongsukarn, 2009, Shytov, 2018). As they have been groomed to be tolerant and respond selectively, they do not feel obliged to participate actively in the class. Such beliefs have obstructed students in English classes where they need to practice their skills in class, and they often are targeted and afraid of losing face, which demotivates their thirst for knowledge. To increase student motivation, gamification has been implemented in the classroom through multiple approaches. In the 21st century, alongside the popularity of digital gadgets, gamification has been

employed with the assistance of e-learning, so that the learners can use their gadgets to access their classes ubiquitously.

Application of E-learning

It poses an appealing point about how gamification and e-learning can be integrated. At the outset, the purpose of e-learning is to provide an equal opportunity for learners with limited resources in face-to-face classrooms. Previous studies highlight that e-learning allows learners to become autonomous as they can study asynchronously without spatial boundaries (Alimi et al., 2021; Jo'rayev, 2020; Zylfiu & Rasimi, 2020). For instance, Thai et al. (2019) compared traditional learning, e-learning, blended learning, and flipped classrooms to identify students' level of autonomous learning. They found that e-learning was helpful in independent learning and was compliant for students in general, except for tertiary level students who needed to travel and allocate time properly according to their circumstances. In addition, e-learning could be seen as positive from the study of Anwar et al. (2020) which proved that it increased student engagement in learning through its systematic platform organization.

Spatial flexibility is crucial to e-learning as students can learn anywhere asynchronously. For instance, Hue Dung (2020) demonstrated the advantages of virtual learning through data collection from lecturers and students. In terms of positive feedback, he revealed that e-learning provided more opportunities for self-study assignments and offered engaging elements for students through validated online resources. In addition, Jayara (2020) argued that virtual learning for medical education was cost-effective and provided direct access to interact with people around the globe. On the contrary, the drawbacks of e-learning have been raised, including that it can prevent the learner development through unstable internet or the lack of internet access in particular areas (Zylfiu & Rasimi, 2020).

Moreover, digital illiteracy has been found to impede learner willingness to participate in the virtual classroom (Hue dung, 2020). Teachers' delayed responses and students' lack of self-discipline can result in a stressful learning environment (Zylfiu & Rasimi, 2020). These studies

reflect that e-learning is not entirely flawless and requires careful diligence. In other words, teachers must play a vital role as facilitators to ensure that each learner can benefit the most despite potential unforeseen predicaments.

Technological advancement has proliferated, especially after the COVID-19 pandemic, during which teachers and learners were required to study and work from home. Therefore, teachers, as well as students, were challenged to become digitally literate. Digital literacy is compatible with effective e-learning and it inevitably affects the perceptions and satisfaction of educators and learners. Therefore, they need to adapt to non-conventional classroom settings by applying massive open online courses (MOOC), a learning management system (LMS), or online conference platforms that provide live interactions between educators and learners. These programs can be modified to suit student needs and require the educator to be technologically adaptable. Barber (2020) illustrated that technological adaptability can be successful depending on the schematic knowledge of the educator, the institution's readiness, and motivation for e-learning.

Motivation in e-learning has posed an essential question for educators since the use of Computer Assisted Language Learning (CALL). Because e-learning makes it difficult for teachers to monitor students directly, learners could be distracted by confounding factors during their classes (Rasmitadila et al., 2020). In addition, Aguilera-Hermida (2020) stated that learners' comprehension was disrupted and declined due to decreased cognitive engagement during and after the COVID-19 pandemic.

The decrease in cognitive engagement was significantly affected by time spent in front of a computer, tablet, or mobile phone, since learners were required to spend extended periods on-screen (Putri et al., 2020) and overburdened assignments (Alchamdani et al., 2020). Since learning assessment could not be established onsite during the pandemic, students had to adjust to the new testing trends, such as take-home examinations, essay writing, and online camera-ready testing. As opposed to conventional tests, this recent proclivity causes learners to have excessive cognitive load because it requires a great deal of memorization, preparedness, and technological adaptability to pass the tests.

Technological innovation facilitates convenience, yet it requires time and training to become technologically competent, including in the context of education.

Another negative attribute of e-learning was localized through limited communication between learners and teachers. Student socialization declined due to limited internet signal, the lack of self-discipline, and the shortage of e-learning facilities. These factors have been frequently detected and ostensibly excusable. On the contrary, classroom interaction and socialization could be fundamentally commenced and monitored by teachers in face-to-face classrooms where students hardly excuse themselves.

As with the pros and cons of e-learning, it has been used to promote educational equity for learners everywhere. Once implemented, e-learning may demotivate students' learning process and decrease social interaction, and cause learning distraction and learning anxiety. The problems addressed have also occurred in Thailand, especially in English classes. Therefore, gamification has come to play a vital role in making ends meet for the future of e-learning education, where learning could be more engaging and individualized.

Gamification in Education

Without technology, gamification has been combined with learning assessment to balance "good learning design and good game design" (Gee, 2008, p. 37). Sheldon (2012) renamed weekly and term assignments in a game-oriented manner: *completing quests, fighting monsters*, *crafting*, *gaining experience points*. To illustrate, *completing quests* could be measured by students' presentation skills, taking tests could be referred to as *fighting monsters*, and writing papers could be the production of *crafting*. These gaming terminologies were applied to simulate an environment of competitiveness in the classroom. The researcher highlighted that the students positively perceived pedagogic culture by renaming these assignments and that the gaming environment concentrated more on productivity than punishment. Students have the "freedom to fail" (Scott & Neustaedter, 2013) without fear of losing points. Deterding (2012) wrote that gamified learning could enrich educational

experiences in which students can recognize memorable activities they participate. Formative assessment could be seen as a means of "freedom to fail" since teachers would focus more on students' learning process than the summative assessment, such as midterm and final examinations or quizzes, which centralizes on final scores and appears to be irrevocable.

However, it was revealed that focusing on a reward system, such as badges and experience points, could be considered surface elements, sacrificing the complexity or deep implementation of well-designed games (Scott & Neustaedter, 2013, p.1). Therefore, it was recommended that monitoring the difficulties of the reward system should be of importance because it is directly associated with learning objectives. An effective LMS is required to accumulate learning development and to monitor student progress. At this juncture, gaming elements can be included in the LMS to intensify competitiveness. Kiryakova et al. (2014) stated that badges and leaderboards are essential in gamification to determine student achievement of a certain level of competence. Badges can be shared among peers as milestone achievements similarly, leaderboards are visible to provide "social recognition" (p.4). It could be suggested that both function as a catalyst to undermine all forms of passivity in EFL classes.

The literature review demonstrates that the integration of gamification and e-learning can be plausible with the awareness of both benefits and shortcomings. Students can access the content equally with the help of gamification to increase the student engagement. The present study thus aims to investigate how gamification could affect the students' learning development and behavior in English classes in secondary education in Thailand.

Research Questions (RQs)

This study is experimental research and comprises two research questions related to gamification in education as follows:

2.4.1 To what extent does gamification affect students' learning development?

2.4.2 To what extent does gamification affect students' learning behavior?

To answer the first RQ, pretest and posttest scores were used to compare the students' learning development between the control and the experiment groups. Next, student feedback was compiled and coded for the second RQ as keywords. The keywords are then presented and interpreted qualitatively.

Methodology

Participants

The participants were Grade 9 students from 16 local schools in Thailand, subsequently divided into Group A and Group B, using a convenient sampling technique. The students' ages are between 14-16 years old, and they were studying English based on the textbooks the Ministry of Education certified and constructed upon BECC. In addition, they were Thai students from suburban parts of Thailand where English learning materials and exposure to the English language were limited. Group A comprised 1,022 students from eight local schools where they agreed to implement WEP as a part of conventional English classes. Group B included 534 students from eight schools that did not integrate WEP into English classes due to the limitation of internet access and digital devices. These participants were informed of the pretest and the posttest generated by WEP, and they consented that any materials relevant to WEP were used to evaluate their English proficiency. At this juncture, it was apparent that the number of participants from Group B was lower, approximately 50 percent, compared to Group A. The explanation for this was excusable inconveniences due to different schools' policies and participants' willingness to do both pretest and posttest at the expense of their leisure time. Another extraneous factor worth mentioning was that the students possibly have different levels of English proficiency, despite being in the same grade.

Research Instruments

Figure 1

Evolution of Winner English Program

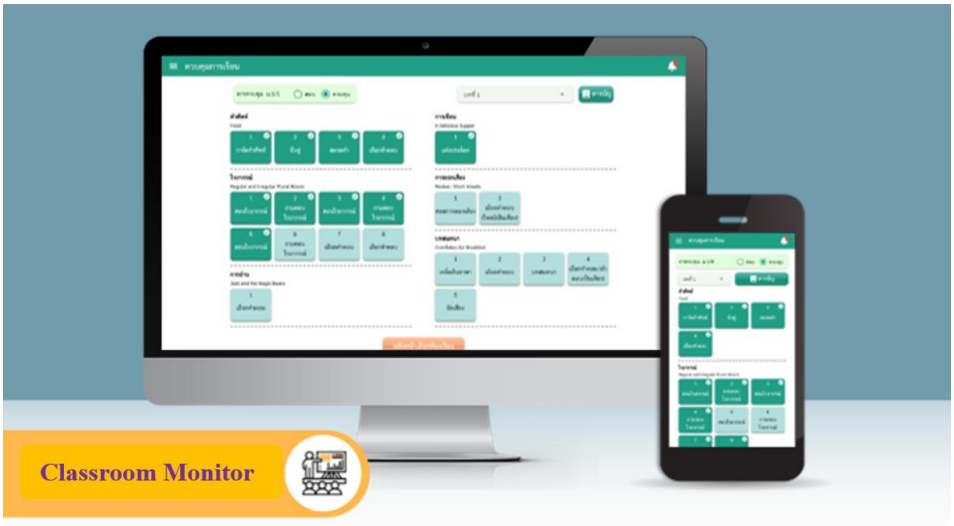
This study employs *the Winner English* program (WEP) as a catalyst in an experiment group. WEP is a gamification-based platform for students to learn English according to their English proficiency level. The program is designed based on the Common European Framework of Reference in Languages (CEFR) level (see Figure 5 below) and can be parallel with the Office of the Basic Education Commission (OBEC)'s (2008) Basic Education Core Curriculum (BECC) (pp. 260-279). Moreover, to ensure educational parallelism, the school principals of the experiment group were provided with the lesson plans of every unit and consented to the program curriculum before its implementation. This process was vital to achieving the same learning objectives as conventional group studies. The information on mapping the WEP curriculum to BECC can be requested at info.winnerenglish.com.

The program has been developed to scaffold individual autonomous and active learning through its facilitator-based learning management system (LMS). The program was launched as *Winner 4.0* in 2017, Winner *Discovery* in 2019, and *Winner Adventures* in 2020. While *Winner 4.0* started with asynchronous and self-learning, *Winner Discovery*

added rewards and teacher-assisted management systems to support face-to-face and virtual classrooms. The main difference between *Winner Discovery* and *Winner Adventures* is that the latter can trigger students' leadership during in-class activities where they need to know how to lead and cooperate to compete against each other. For the present study, *Winner Discovery* was used to evaluate student performance and English proficiency.

Figure 2

Teacher Assistant System (TAS)



Before the experiment, the facilitators were trained to familiarize themselves with the *Winner Discovery* program. The program could monitor how each student used the program like a SMART (Showing, Manageable, Accessible, Real-time interactive, testing) classroom. Students were individually provided with laptops in class with the program installed. At the beginning of each class, the teachers could show content with a brief explanation to the classroom (15 minutes). Then they allowed students to do tasks by themselves through various forms of practice (40 minutes). At this point, the teachers could check if any students had any technological or pedagogical issues during the exercises via Teacher Assistant System (see Figure 2). After the class, the program generated individual assignments based on artificial intelligence (AI) technology to

encapsulate the gist of the lesson by a self-paced reiteration of what students primarily need to know (see Figure 3 for the executive summary of the facilitator's role). For the summative assessment, the program can automatically randomize all the practices used throughout the semester for the posttest. As previously mentioned, it is evident that WEP represents a full circle of a SMART classroom where collaboration between teachers and students through active classroom management is significant (See Figure 4 below).

Figure 3

The Facilitator's Role

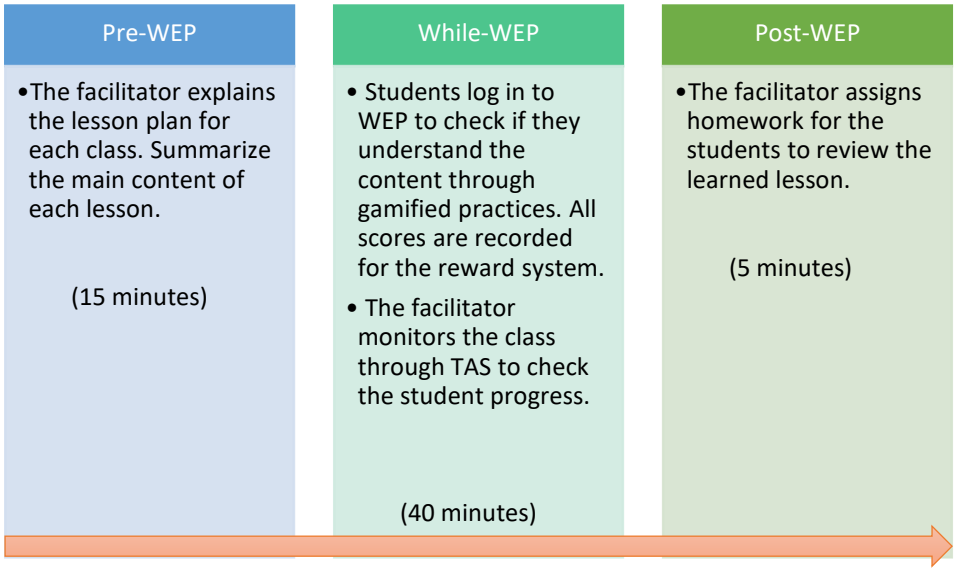


Figure 4

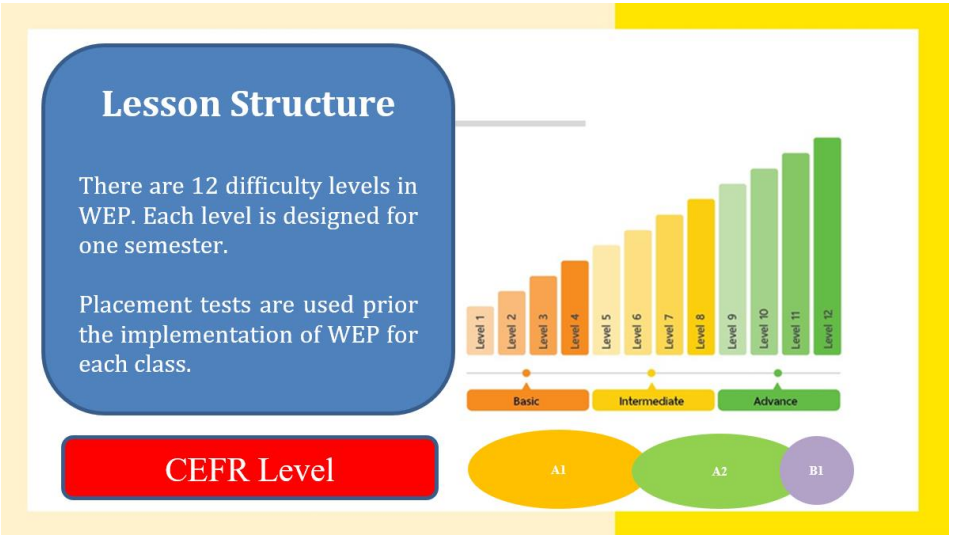
Program Features

Quantitative Data

Pretests and posttests were generated by the WEP program according to the participants' English proficiency level. As they were Grade 9 students, who were confirmed by the placement test, WEP at the third and the fourth levels were integrated into English classes. Each level comprised four skills of English: speaking, listening, writing, and reading. For speaking and listening skills, students learned through repetition of words and sentences recognized from animated cartoons and media. For reading skills, students read various types of passages designed in parallel with the level of readability scores and the CEFR. It was found that WEP at the third and fourth levels could be compared to the A1 level, which reflects the participants' actual English language performance (see Figure 5). For writing skills, WEP provided practices where students could construct a complete sentence from jumbled words or translate English from Thai sentences. Although drilling through writing and speaking skills in WEP was deemed an indirect assessment, it was still effective (Heidary, 2021; Nguyen, 2022). Data from the pretest and posttest were then collected from both groups and reported as the students' learning development percentage.

Figure 5

Lesson Structure of WEP



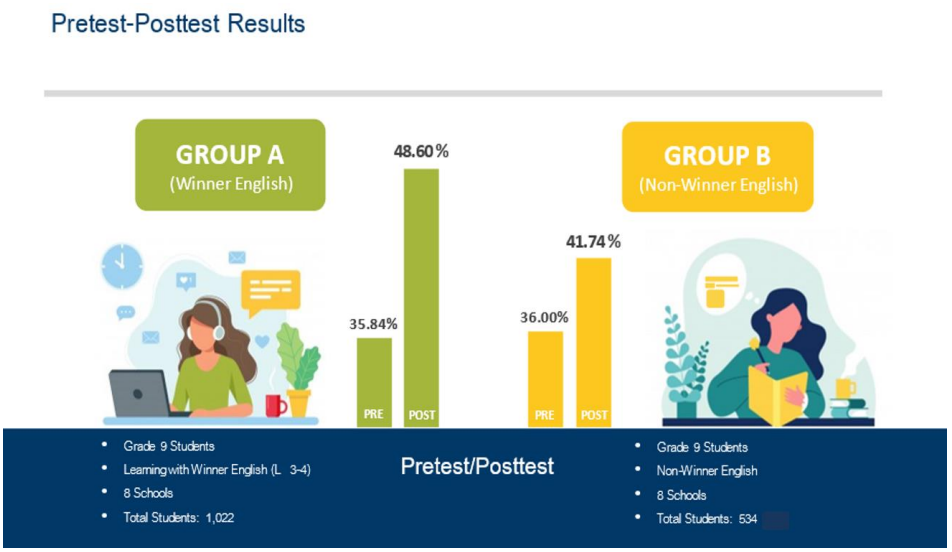
Qualitative Data

Since the intervention of WEP was implemented, only participant feedback from Group A was individually collected through *the Winner English* Facebook page (https://www.facebook.com/WinnerEng). The questions were open-ended as "any comment"; therefore, all identify the advantages and disadvantages of WEP integration in the classroom.

Results and Discussion

Figure 6

Pretest-Posttest Results

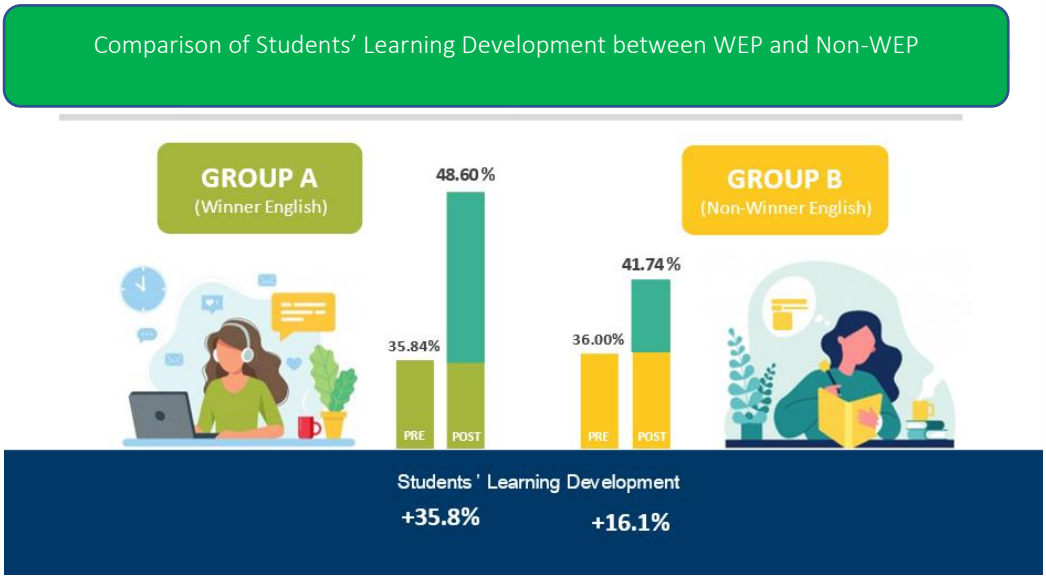


Pretest-posttest Results

Figure 6 shows that Group A and Group B had no significant difference in their pretest results (35.84% and 36.00%, respectively). Participants from Group A had a slightly lower English proficiency when compared to Group B at the beginning of the experiment. Despite the noticeable difference in sample size, these premises affirmed that they were at a comparable level before WEP implementation. For the posttest results, Group A had higher scores on average when compared to Group B (48.60% and 41.74%, respectively). The findings confirm that implementing WEP increased Group A's English proficiency despite the number of participants.

Figure 7

Students' Learning Development



Students' learning development was calculated from the percentage difference between Group A and Group B (6.86%) times the percentage difference proportioned by the initiated number of participants from each group (5.21% for Group A and 2.34% for Group B). Regarding students' learning development, Figure 7 shows that Group A had a higher learning development than Group B (+35.8 and +16.1%, respectively). In other words, a higher number of students from Group A demonstrated how WEP increased the learning development of English acquisition two-fold. Since the sample sizes are different between the two groups, it can be confirmed by referential statistics when the z-test for the two-sample mean test was measured. The z-tabular value was at 4.937 and was greater than the z-tabular value of 2.575 at the .01 level (see Table 1). This confirms that the students' learning development significantly differed between the two groups.

Table 1

Z-tabular Value for the Two-Sample Mean Test

Z-test	Level of significance	
	.01	z-tabular value
Two-tailed	±2.575	4.937*

Participant Feedback

Participant feedback was collected and analyzed through content analysis, and repetitive keywords were highlighted. There were 229 response messages in total. Some examples, P1-P5, were translated and shown below. Italics have been used to mark as keywords.

> P1: What I love most about WEP is that it made me understand and *enjoy* the English language compared to what I had learned ages ago. I could understand more English and speak more accurately. I could learn more vocabulary from fascinating classes *without any stress* and study whenever I had free time. Other activities include *collecting coins* used for trading beautiful e-outfits so that we could brag about our stylish character. In addition, our room and school *ranks* were shown.

The keywords from P1 are *enjoy*, *without any stress, collecting coins* and *ranks*. P1 appeared to enjoy how WEP was implemented in the classroom, and he mentioned the reward system through coin collection, which was used later to trade for new e-outfits. However, gaining coins depends on what they succeeded with during practices and in-class materials. The WEP ranking system could contribute to the hype of learning competition through active learners. Therefore, it was apparent that learning through gamification could help P1 be more concerned with ranking and be aware of the final results. Above all this, of the most concern was the word "brag," which was connotatively negative in terms of social segregation. That may be distorted from the main objective of gamification in education.

> P2: What I got from WEP was that I like it. I gained knowledge that did not make me bored with it, which would be the foundation of practicing English. There was good content which was *memorable*. I could *dress* my characters as we liked, and there were *coins* to be collected. Furthermore, I can *learn anywhere*.

The keywords from P2 are *memorable, dress, coins,* and *learn anywhere.* P2 feedback was not entirely different from that of P1; however, *memorable* and *learn anywhere* points to beneficial aspects of gamification designed by WEP. As the program applies AI technology to repeat what students should encapsulate main content from each lesson, WEP could detect individuals' strengths and weaknesses by giving adaptive practices based on the number of students' attempts to find the correct answers. Besides, students could *learn anywhere* with no boundaries if they were able to connect to the internet. Since ubiquitous learning is crucial for digital natives, studying does not need to occur only at school but must be taught anywhere.

> P3: I really liked Winner English because it was *convenient* as I could learn *anywhere*, *anytime*. Moreover, I could *dress* my character, which did not make me uninterested. I also could *collect* coins to buy *new e-outfits* to customize my character. I practiced English through many types of exercises and on various topics. It was good indeed. I gained more general knowledge too. Other activities were *speaking exercises* in which I could practice my *fluency* and *accuracy*.

The keywords from P3 are *anywhere, anytime, dress, collect, new e-outfits, speaking exercises, fluency,* and *accuracy.* The exact keywords, such as *anywhere, anytime, dress,* and *collect,* reappear as they are the features of gamification and e-learning. The highlighted keywords are *fluency* and *accuracy* because P3 highlighted speaking skills. As English fluency and accuracy require sufficient exposure to authentic use, WEP could establish a platform for students to emulate and enunciate English vocabulary and conversation accurately and phonetically. By listening to and imitating sounds from reliable sources, students can learn to pronounce naturally and speak with confidence in due course (Nguyen, 2022).

> P4: From my own experience, I liked studying with Winner English because I could dress and name my character. There were coins to be collected, and I could learn from any place. There were exciting words to know. I want to invite everyone to study in the program with me. I ensure that you will get lots of knowledge and not be disappointed. I think learning is not complex if we have a thirst for knowledge.

The keywords from P4 were *dress, coins, any place, exciting words, lots of knowledge, not be disappointed,* and *thirst for knowledge*. These words elaborate on how gamification should include edutaining elements and reward systems to stimulate students' autonomy, ubiquity, and lifelong learning skills. WEP inserts Anglo-American cultural elements in vocabulary sessions where students can learn, for example, about *Halloween, Christmas, or Easter*. These words contain contextual and religious differences, which can be used in the classroom for cultural comparison. It allows teachers to discuss such events and raise cultural awareness among the students. By doing so, students know that they adhere to global citizenship and that learning is a perpetual action.

> P5: I liked Winner English because it made English classes *far from boring*. It was a system that made English class more *enjoyable*. My friends and I were joyful and more knowledgeable every time we *participated* in the classroom. It also made me *speak English* more *accurately*. Furthermore, it gave some time for our *teacher to rest* when she had to use too much energy on teaching pronunciation to *negligent students*. I want more of this for our English teaching.

The keywords from P5 were *far from boring, enjoyable, participated, speak English, accurately, teacher to rest,* and *negligent students.* Likewise, these words affirm the WEP's attributes of gamification. It is noted that P5 was with *negligent students* who may interrupt the class environment. Also, the participant empathized with the teacher who needed to facilitate the class otherwise. Teaching English pronunciation may have been a challenging task for both teachers and students; however, WEP transforms the role of spoon-feeding teachers into facilitators in English classes. In addition, the program incorporates rewarding and ranking systems to increase student engagement and it also

ensures that what they practice both inside and out of the class is genuinely simulated. For speaking and listening practices, WEP uses the International Phonetic Alphabet (IPA) for phonetic transcription so students can distinguish one word from another. WEP uses text-to-speech, or *read aloud* technology, invented based on the native sounds, to ensure intelligible sounds perceived by students and avoid potential mispronunciations on the part of the teacher.

Figure 8

Keyword Frequency

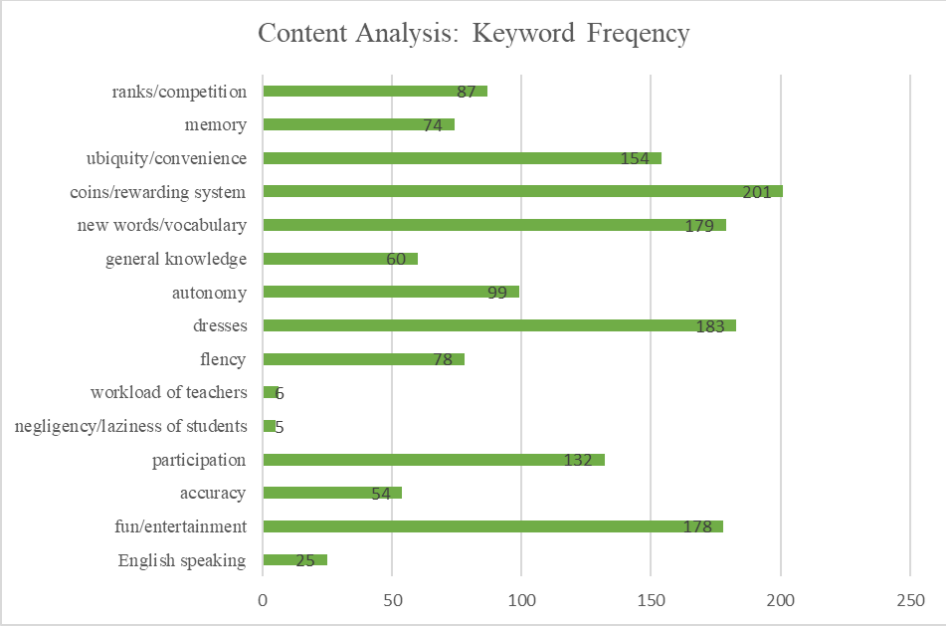


Figure 8 illustrates that the frequent keywords are *coins/reward system*, *dresses (outfits)*, *new words/vocabulary*, and *fun/entertainment*. The reward system demonstrates that students may be influenced by goal-oriented lessons where they can get checkpoint rewards based on their performance through coin collection (as *piggy coins* in Figure 9). They can use collected coins to exchange for new *outfits* to customize their characters. Since there are many outfits to choose from and each has its value, students can aim to attain more coins to purchase more fancy outfits. For *new words/vocabulary*, since the first task of each lesson

begins with vocabulary learning through pictures and sound recognition, students could have the first impression of the curriculum outlook. Vocabulary learning can integrate with *the fun/entertainment* theme found by the study that students thought WEP was considered edutainment and that it can simultaneously redesign education with gaming elements.

Figure 9

Coin Collection

The participants also vocalized *participation* and *autonomy* in the keywords. This shows that WEP increased the student engagement in the classroom through gaming elements where student collaboration is necessary. As for *autonomy*, students are provided with materials that can be retrieved asynchronously. Most importantly, they can study through any digital device and through any internet-connected location.

Although *the participants mention fluency and accuracy*, these keywords had lower frequencies. While WEP is a computer-assisted program that does not focus on face-to-face interactions between teachers and students, WEP transforms teachers into facilitators, and their primary responsibility is to manage and monitor students to use the program effectively. The lack of interaction with teachers, if not

particularly the native speakers, could raise awareness that the best practice to achieve high fluency and accuracy could not be solely successful with the program.

Despite its positive keywords, a few comments note the negative attributes of WEP. For example, the program requires a digital tool to participate in the program effectively. Two students were unable to access the internet from their homes, making ubiquitous learning impossible. One student evaluated that the reward system does not change how they learn English. Four students criticized that they could not tell whether their pronunciation was accurate or intelligible since there were no concrete scores validated for the speaking practices. However, these problems are remarked by the program administrators and will be developed in the next phase. In particular, according to Yu and Deng (2016), the automated speech recognition showed promising quality that it will soon be able to evaluate the speaking practices.

Several cases of negative feedback were found from the teachers as well. One noticed that WEP was only made for a techno-savvy person and required more training sessions before the implementation. Although most teachers liked the idea of the automated scores, collected, monitored, and reported by the TAS, six teachers preferred paper-based collection to the digital archive. They were concerned about the possible loss of information if the system was hacked or damaged.

Discussion and Pedagogical Implications

Findings gained from the quantitative and qualitative analysis are used to establish promising implications in English language teaching in Thai secondary schools. To a large extent, the participants showed improvement in the summative assessment and had positive attitudes through WEP implementation.

Improved Scores and Reliable Sources

A significant percentage difference is observed between the pretest and posttest scores showing the participants' learning development. The participants from the experiment group had two times higher learning development than the control group. This can be explained that WEP uses gaming technology to serve digital-native participants.

Learning in class without technology may appear tedious and too procedural. In other words, to get better learning results, English classes need to employ technology as a part of learning options for 21st-century skills. Students need to acquire digital literacy, especially gaming literacy, and WEP integrates this using technology and gamification. Most of all, WEP provides online materials through animated cartoons and videos with native English speakers. Especially for listening and speaking practices, WEP provides reliable sources for students to practice through sound repetition, stress, and intonation. Once implemented at the local schools, the students were able to speak more accurately and fluently because they were confident in learning from trustworthy materials (Nguyen, 2022).

Moreover, WEP can assist any classroom where limited English language teachers are a concern. Some teachers at many local primary schools need to teach more than one subject, and English may not be their specialty. English classes therefore appear more effective as teachers only need to act as mediators. Without worrying about the content, teachers can focus on students' learning development which is rather implicit and requires close scrutiny.

Learner Engagement and Gamification

It is apparent from the content analysis that the participants frequently addressed the reward system through coin collection. It creates goal-oriented lessons because rewards are only received if they complete each task. However, this is not too surprising for students nowadays. As online games have become more popular, students are now familiar with item collecting from numerous role-playing games (RPG) or strategy games, such as *Final Fantasy*, *Resident Evil*, and *Defense of the Ancients (DOTA)*, to name a few. We can see the resemblance of these games as players can collect rare items or collectible coins throughout the games to exchange for more occasional items or useful devices when replayed. They can also use them to purchase memento cards at available online stores. WEP applies the trend of gamification in education so that recognizable gaming patterns can be used by students.

Nevertheless, WEP is not a *serious* game (Kiryakova et al., 2014) and it instead focuses explicitly more on predetermined training. After completing each assignment, the reward system can function as a *graded* milestone for students. It assists teachers in monitoring the students'

learning progress and evaluating the learning pace for each student. Teachers can send a message to warn each student to wrap up the lesson in a given period. Therefore, teachers are required at this point to ensure that students are learning at the same pace and to see if they need any technical and academic support through the teacher's assistant system.

Ubiquitous Learning and AI Technology

For content analysis, the most intriguing is ubiquitous learning. As technology permeates worldwide, education should not be limited to one classroom. Knowledge must be accessible anywhere without boundaries. WEP initiates a wireless platform in which they can study wherever there is internet access through both synchronous and asynchronous learning for students. Synchronous learning can be achieved through a teacher-facilitator in the classroom. Asynchronous learning is considered another vital part of success in the EFL classroom as it develops students' life-long learning skills. They need to be responsible for any assigned tasks given in each class. The lessons are uniquely designed and deadline-driven. AI technology comes into play to prepare individual assignments based on their strengths and weaknesses from the correct responses in the classroom. Since learning pace is different from one to another, AI technology can make students feel that learning is more individualistic and self-paced. AI technology can function as a diagnostic assessor that helps students grow through the awareness of their ability and paves the way for their self-actualization and personal growth.

Limitation of the Study and Further Thoughts

As previously discussed, this study has limitations, yet it yields satisfactory results regarding gamification in EFL settings. This study predominantly uses pretest and posttest results as empirical data to compare the participants' English proficiency. For comparable data, the number of participants between the control and the experiment groups could not be equated, resulting from the research's confounding factors. However, z-test has been conducted to demonstrate the students' learning development.

However, the number of participants from both groups, derived from totally different schools, is more than 500. In the similar fashion, the

study can compare these local schools with schools from Bangkok to identify whether gamification would affect students' learning development across the country.

Other computer-assisted language learning (CALL) might apply gamification in Thailand's asynchronous and synchronous learning. Therefore, comparing such programs to whether they would result in similar instances or to what extent they differ from implementing WEP in EFL classes is intriguing. Another possibility is investigating the level of student engagement between WEP and other programs. Since this study does not focus on the level of student empowerment in terms of Likert scales, delving into this quantitative analysis may provide insightful information for EFL educators to plan and proceed accordingly. Lastly, gamification may not be well-received by parents and some educators as they may confuse them with online games. Therefore, it may be possible to research the perception of gamified learning from rural and urban areas to see how well they understand it in EFL contexts.

Conclusion

This study demonstrates some pedagogical implications of gamification by showcasing WEP as a platform for EFL classes in secondary education in Thailand. The program underlines the importance of facilitators in the classroom, where they let students become active learners once they click the button and enter the realm of edutainment. The program can transform the classroom spoon-feeding pedagogy into active learning pedagogy instructed by the program. Acting as facilitators, teachers can monitor the student progress on their computer screen and can focus more on the student performance. Moreover, the reward and ranking system can draw the best ability of the students as they can see that the outcome would impact the number of coins that can be used for new items. Learning development is proven to be significantly higher compared to the control group, indicating the potential of WEP implementation in EFL classes. Gamification could play a vital role in English education where the following issues are of concern, including the inadequate number of English teachers, the lack of access to reliable English materials, and the passivity of the local students in Thailand. Since English has become a lingua franca, Thai students should be well-equipped with an international mindset and capable of using intelligible English. As

can be seen from the findings, the students become more participatory and developed better attitudes towards English lessons, which would be the essence of edutainment.

Acknowledgements

This research has been sponsored by Yuvabadhana Foundation, which aims to create opportunities and improve education for underprivileged adolescents in Thailand. The researcher would like to express the deepest gratitude to all the academic and supporting staff who wholeheartedly contributed to this research.

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