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EMANCIPATING THE LANDSCAPE OF RESEARCH IN LINGUISTIC, LANGUAGE AND LITERATURE

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ABBYFICATION: A GRAMMAR-BASED WORD GAME

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ABSTRACT:

Learning English grammar can be tricky and off-putting, especially for English as a second language (ESL). Due to the different rules to comprehend and apply, the learners' understanding depends greatly on their vocabulary size. Books have always been the main tool for teaching and learning but they are limited in usage and adaptability. Even supplementary resources such as educational videos may not be enough as the learners only learn to understand and not to apply. Therefore, game-based language learning is an alternative for ESL students because it holds their attention span for a good amount of time. It also fosters interactivity between learners during classes and builds better teamwork as the players need to work together to solve the game. Hence, 'Abbyfication', a grammar word game is developed to help improve ESL learners' vocabulary based on grammatical parts of speech, teach them how to identify vocabulary in an entertaining way, and provide an alternative way for students to revise. Players have five tries to guess the grammar word of the day according to parts of speech such as adjectives and nouns which can help them learn English vocabulary more easily. As there are over 100 words available, 'Abbyfication' can be used daily for a daily revision or teaching tool as it creates a fun environment for learning. Learners can work together in figuring out the grammar word of the day, which increases their participation in class, and improves critical and advanced thinking abilities with digital game-based language learning.

Keywords: Game-Based Learning, ESL, Word game, Grammar, Learning tool

1. INTRODUCTION

Over the last few decades, games are seen as not just a form of entertainment but also one that supports learning. Starting with the world's first educational video game called The Sumerian Game developed in 1968, games have evolved into different forms, taking advantage of technological advancement (The Patrick J. McGovern Foundation, 2021). In 1971, a game called 'Oregon Trail' was invented by American History teachers and in 1974, it was released by MECC (Minnesota Educational Computing Consortium). This game then rose to popularity in the 70's and 80's because it incorporated American history lessons. Since then, more developers made such games as it is now more accessible to youngsters everywhere. Programmers develop educational games and applications to help users or players around the globe in improving their language and learning skills in an entertaining way.

Game-based learning is beneficial in multiple ways whether it be to retain new information, develop fast strategic thinking skills or building new skills such as reading a map. It has shown to be advantageous for second or foreign language (L2) learners. Although attending language classes helps in learning a new language, it is treated more as a written assessment rather than communication. They are more focused on grammatical knowledge than the student's

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capability on interacting using the language learned and some learners may not get the chance to use their target language in their daily lives as nobody around them speaks the same language. As a result, some students fully understand the grammatical knowledge of the language but lack the confidence to use it to its fullest or certain contexts.

Therefore, nowadays lots of language apps or games are used to improve language skills such as reading, pronunciation, writing, and listening skills. Apps like 'HelloTalk' , allow users to interact with native Korean speakers and make friends through messages, voice chats and video calls or games similar to 'Influential, a video game where players explore an interactive 3D environment with hundreds of selectable, collected objects dispersed throughout is meant to encourage individuals all over the world to learn a new language by making vocabulary learning and proper pronunciation an enjoyable experience (Influent, 2020). This opens up a gateway for L2 learners to not only gain knowledge grammatically but also fix their pronunciation and can communicate in the targeted language more smoothly.

These days, educators use websites, which provide free access to any type of quiz from English to Biology, as a teaching method. By incorporating this teaching method into educators' daily teaching routine, it attracts students' attention and exercises their cognitive function after a whole session of studying and receiving new information. Next, this method motivates students to learn as it captures their attention and they unconsciously cooperate as games are viewed as something enjoyable to them. According to Plass et al. (2015), through a variety of game features that are motivational in nature, it has been demonstrated that games for entertainment can encourage learners to remain engaged over extended periods of time.

Given the potential of using games to support L2 learning, this digital word game 'Abbyfication' is created to help students improve their vocabulary and grammar mastery. This game is inspired by Wordle, created by The New York Times. Wordle became known world-wide due to its creative way of playing a word game. According to Hall (2022), since Wordle's release in Autumn 2021, it has experienced a parabolic rise: from 90 daily participants in November 2021, to 300,000 at the start of January 2021 then to 2 million in January 2022. The appeal behind Wordle is in the simple gameplay where players are given five tries to guess the word of the day. The colour of the tile will change based on how close their guess is to the right word. Green indicates the letter is correct and in the right position. Yellow shows that it is the right letter however in the wrong position and grey means that the letter does not exist in the word of the day.

This invention is unique in its own ways as a few features are added, that cannot be found in other similar word games. First, this word game is based on grammatical parts of speech where the word of the day could be a noun, an adjective or an adverb. Next, this word game has its own theme based on the holiday of the month. For example, in the month of October, the theme will be customised to Halloween. The colourful and interesting background would attract the players' attention especially for primary school children. Additionally, this word game offers unlimited rounds meaning that the players can continue playing after they completed the first round.

1.1 Project Objective/Purpose

The main objective of this invention is to help improve vocabulary of the players and teach students or English as a second language (ESL) learners to identify grammar vocabularies in an entertaining way. Most ESL learners struggle with learning a new language as they tend to get bored of the traditional way of learning. By using educational games, it would help motivate the learners and improve their focus. According to Tirén (2021), many learners claimed that the entertainment factor of games boosted their desire to learn and the enhanced their drive to study

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English. This is frequently highlighted by the learners which emphasizes the advantage of using games in classroom activities.

Next, ESL learners may not have the proper material to learn. Since technology devices are available in most households, it would be easier for them to gain access to helpful materials or exercises like educational games. According to new research, due to the growing use of smartphones, everyone can have access to Game-based Learning (GBL) at anytime, anywhere. The "mobile-phone" addiction afflicting the new generation of students may even prove to be a better and more honourable substitute (Game-Based Learning (GBL): The Oldest Tool of Education, n.d.).

Lastly, this is also to provide an alternative way for students to revise as this word game requires players to think outside of the box by thinking of nouns, adverbs or adjectives that contain multiple vowels. The purpose of this project is to encourage players to incorporate an educational game into their daily basis to refresh their memory regarding grammar after spending their time studying or to exercise their brain even after playing other games.

1.2 Entrepreneurial Opportunities

This word game is profitable by featuring advertisements. The advertisement owners would pay according to how their advertisement would be displayed in the word game. According to Khan (2022), the app owner gets compensated depending on the type of ads they are providing, the amount of impressions or clicks they receive, and their performance. This word game is unique on its own as there are no other similar word games and because it is inspired by the globally known game, 'Wordle'. It could receive a large amount of attention as the marketed targets of both word games are similar although this project focuses more on grammar which attracts English beginners or anyone who would like to improve their grammar.

However, this word game is only available on Androids as it is a newly developed game. This could limit the marketed targets as iPhone users will not be able to download this game. Once the game has gained lots of active users, it would be available on other devices as well such as iPhone, Huawei and other platforms. Since the game is accessible on phones, this would allow users to play it easily whenever they are bored or trying to pass time. Such convenience would attract ESL learners because instead of scrolling through social media, this word game allows them to improve their grammar at any time and place.

2. METHODOLOGY

There are several stages involved in completing this project. Before the game app was developed, a needs analysis was made through a survey. A Google Form was created and distributed to collect information on the general perspective of Digital Game-Based Learning. Apart from that, market research was conducted by comparing similar word games, to identify the similarities and uniqueness of each app in order to create one that is distinguishable from the other competitors. Next, research was done to identify the best platform to develop the app, and lastly, materials are compiled in order to create the game content.

The app 'Android Studio' was used to create the word game in the form of programming. After the base of the word game was created, the design of the game was completed. Based on the information collected from the survey, several unique features were added such as a theme, background music, and others. The programming was then escalated to creating unlimited rounds for the game before the word game was completed.

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3. RESULTS AND DISCUSSION

3.1. Results from the survey

Before working on the project, a survey was conducted using Google Form where a total of 50 respondents were received. The aim is to identify whether the target users are familiar with word games and their point-of-view on the effectiveness of digital game-based learning. This is to ensure that the survey reaches the targeted market and their view on this project. There were three sections in the survey which include demographics, opinions, and suggestions. Table 1 presents the demographics of the respondents.

Table 1. Demographic Profile of Respondents (n=50)

Items	N	%
Occupation		
Student	30	60
Worker	8	16
Teacher	7	14
Parent	4	8
Unemployed	1	2

Table 2 presents the results based on three questions about people's perspectives of the word game 'Wordle'. For the first question, 74% or 37 respondents are aware of the game, 'Wordle' while 16% of them do not recognize it. When asked whether they enjoyed playing 'Wordle', 42% of the respondents reported having mixed feelings while another 34% found it enjoyable. However, when they were asked whether they would be interested in a game that is similar to Wordle, a majority of 84% are interested in it.

Table 2. Perspectives about the game 'Wordle' (N=50)

No.	Item	Agree		Somewhat Agree		Disagree	
		N	%	N	%	N	%
1	Do you know the word game 'Wordle'?	37	74%	5	10%	8	16%
2	Do you enjoy playing Wordle?	17	34%	21	42%	12	24%
3	If a word game similar to Wordle was created, would you play it?	42	84%	8	16%	-	-

Before establishing this word game, it is important to know whether the public will be interested in a word game similar to 'Wordle'. Therefore, given that many respondents did not really enjoy Wordle, this could be a factor in creating the game as it would not be convenient if the majority is not curious about the word game.

Next, the respondents were asked to give suggestions regarding the features they would like to see in the word game or features that would make the game more interesting. This is to accommodate the game to the target users' preferences as it would be more helpful for them to enjoy the game while practising English. As shown in Figure 1, there are several recommendations on the word game, Majority of them suggested a word game with unlimited

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rounds with a colourful background and background music to keep them from getting bored. This was then able to be incorporated into the word game 'Abbyfication'.
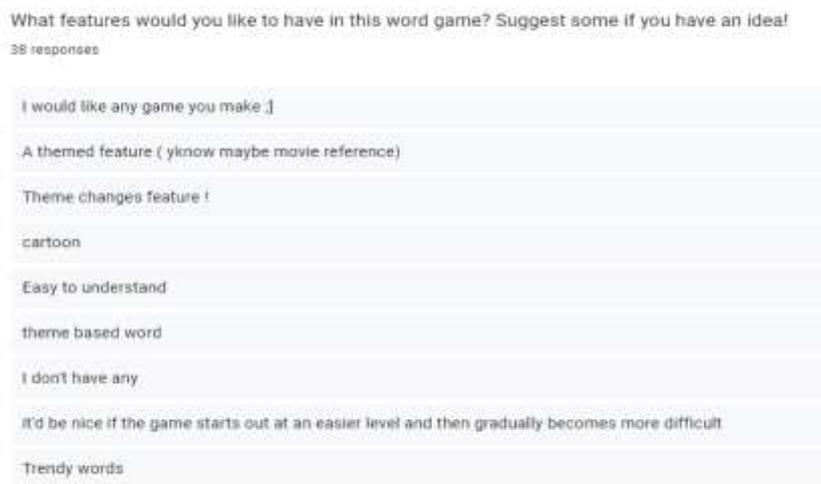

Figure 1. Respondents' suggestions

Furthermore, three questions were asked in the opinion section of the survey and the results are presented in Table 3. First, a majority of 96% agreed that educational games are a great way to help in learning something new, especially in learning a new language. According to Ravenscraft (2021), Duolingo, a famous language app, provides a skill tree of lessons that drills users on new words, phrases, and sentences via listening activities, flashcards, and multiple-choice questions. For the next item, 88% of the respondents found educational games to be beneficial for learning. According to Nguyen (2021), playing virtual games can aid dyslexic and ADHD children with their spatial and temporal attention, which can lead to better reading, as well as students with ADHD's focus and attention.

Lastly, since the targeted users are ESL learners, it is important to know their opinion on educational games and if it would be better to incorporate it in classes or as a teaching tool. A majority of 96% answered "Yes" while 4% said "Maybe". According to research, the educational video game "Variant: Limits," which was created by visualization students at Texas A&M University, significantly raises students' test scores in introductory calculus. Of the students who played the game, 79 percent said it improved their understanding of limits, and 83 percent said they could apply what they learned in the game in the classroom (Peshek, 2022).

Table 3. Opinions on Digital Game-Based Learning (N=50)

No.	Item	Agree		Somewhat Agree		Disagree	
		N	%	N	%	N	%
1	Do you think educational games like Wordle can help improve grammar?	48	96%	1	2%	1	2%
2	In your opinion, are educational games like Wordle, effective for learning?	44	88%	6	12%	-	-
3	Would you like games to be more incorporated in education/classes?	48	96%	2	4%	-	-

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4. CONCLUSION

In conclusion, most people, especially students, have a good impression on digital game-based learning since it is a great way for them to revise or learn something new without getting bored. Most people are aware of digital game-based learning since it is more incorporated into their classes or tuition session these days. However, not everyone sees the bright side of game-based learning as older generations could view these types of games to be inefficient and not as superior as the traditional way of learning. This project emphasises on helping ESL learners and anyone who would love to improve their grammar. Grammar can be difficult at times even for someone who has English as their mother tongue. This would help them pass time while learning and become a handy learning tool for them. As stated before, this would attract students' attention and maintain their focus without wavering while studying. This word game encourages students to build more knowledge and fix their grammar whilst having fun. Besides that, some students might face a problem with insufficient materials. The exercises they received, or examinations held are too stressful and worrisome. Thus, students give up or fail in learning a second language. This word game helps students to gain access to materials that could help them daily since technology could be found everywhere in this generation. This word game can be easily found in phones, resulting in easy access every time.

In order to create a word game that helps every ESL learner and fulfil criteria that are missing in other word games, many suggestions were taken into consideration based on the survey conducted earlier. Many had suggested ways to make 'Abbyfication' more interesting and different from others. From inserting themes, background music, and others have been implied into the word game due to the recommendations. Hopefully, 'Abbyfication' is beneficial to ESL learners to improve their grammar and find this word game helping them enjoy learning grammar in a more fun way, also using it to compete with friends and family to strengthen their bond. Overall, this word game benefits not only ESL learners but English speakers too.

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