



EDUCATIONAL ONLINE GAME FOR STUDYING VOCABULARY: WORDWALL ON PUPILS' PERCEPTIONS

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Abstract

Wordwall is an educational online platform that can be applied to pupils' learning activities. Since it is a game-based application, Wordwall is known as media for building pupils' interest in learning sessions. This qualitative research targeted to elaborate on pupils' perception of Wordwall as an online game-learning application for gaining vocabulary mastery. It used questionnaires to collect the data from 36 pupils as participants. There were 3 topics of pupils' perception examined in this investigation. They were feeling, engagement, and effect. The data findings concluded that most of the students gave positive responses to the learning media. They gave a score of 80.5 % of positiveness to it. It was proven that Wordwall created motivation for pupils in the process of learning vocabulary. Also, the pupils stated that the learning tool had good effects and they always enjoyed it, waited, and did not want to skip playing the online game web. Nevertheless, there was a neutral result found in the pupils' focus on the context of the question given in Wordwall, which pointed to no significant effect appearing in pupils for this part.

Keywords: Wordwall, game, vocabulary, pupils' perception

INTRODUCTION

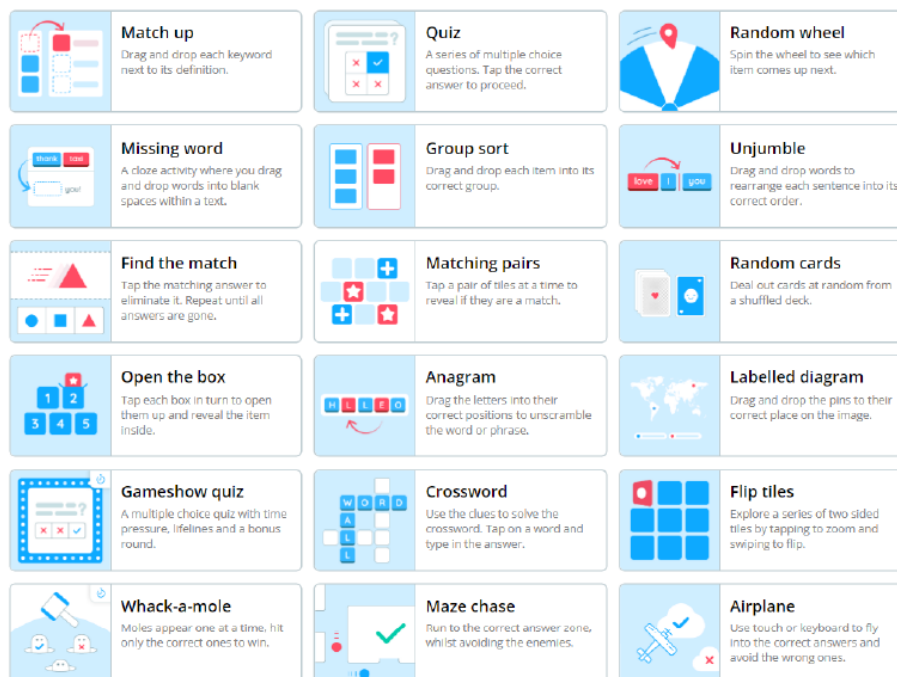
The basic element of learning English for pupils is mastering vocabulary (Jannah & Syafryadin, 2022; & Adnyayanti, 2022). This ability greatly influences pupils' ability to construct meaningful sentences for making essential communication (Zahra & Anwar, 2023). Having good skill in vocabulary mastery is vital for building smooth and effective communication (Magasvaran et al., 2022). As well, the quality of spoken and written English depends on vocabulary skill (Turdaliyevna & Berdiyrovna, 2023). This is the reason why when pupils want to communicate in English, first they must master vocabulary. Even so, there are still many teachers who still use traditional in teaching vocabulary to pupils, so the learning process is monotone. On the other hand, effective learning sessions can only be reached if the interaction between pupils and teachers is active (Nenohai et al., 2022). The traditional method which is applied in many schools is not effective, unmotivating, and less interesting for learning vocabulary (Mohamad et al., 2018 as cited in Hasram et al., 2021). Take an example like using a dictionary or taking notes and then memorizing it. Sometimes this method makes pupils feel bored and, in the end, their learning motivation is lost. Because teaching vocabulary is not a simple thing,

therefore, teachers must pay attention to the best media to be implemented in learning in this digitalization era. For helping learners improve their vocabulary, an interactive online educational game is needed (Magasvaran et al., 2022). Providing Good and creative learning design and appropriate facilities makes pupils easier to achieve the four of learning targets (Nauval, 2022), meanwhile the lack of innovative learning media influenced pupils' diminishing abilities (Hamidah et al., 2023). It indicates that pupils' positive attitudes are determined by teaching learning activities (Putri & Zulherman, 2022).

Advances in media and technology in this era affect many aspects of life, one of which is education (Swari, 2023). The role of information and communication technology in education is also gaining great attention (Hasin and Nasir, 2021). With this in mind, schools are starting to take advantage of this to be able to follow the flow of learning styles and adapt to the era of digitalization. One of the dominant technologies utilized in education today is gadgets. Gadgets or mobile phones are operated by teachers as learning tools that function to improve the quality of student learning, one of which is in language learning (Arsini et al., 2022). Apart from being flexible and easy to carry and use anywhere, the gadget has also been widely used by pupils as learning media (Rosydiyah et al., 2022). Nowadays, the combination between the internet and mobile phone as learning media also becomes so handy, and it creates several new methods to assist pupils (Govindasamy et al., 2019). This is the reason why gadgets are always integrated with the learning process in school activities.

Learning media is a component that helps in producing good learning results (Elhefni et al., 2023). Nowadays, there are so many learning media integrated with games, in order to gain pupils' interest. This is known as GBL (Games-Based Learning). Games are created to innovate the learning process (Pesántez & Naranjo, 2023). One of the popular online learning media of GBL is Wordwall Web. Wordwall is an interactive educational games-based application (Hidayati & Afifah, 2022). This online media is a learning platform that teachers can apply as digital games-based learning media for teaching pupils. WordWall is an online platform that teachers and pupils can use as digital-based learning media instantly (Rahmawati & Wijayanti, 2022). It can be applied easily not only on PC but also on gadgets (Rosdiansah & Hertiki, 2023). This educational web also offers lots of templates of games that teachers can create to develop a new game (Pimpuang & Yuttapongtada, 2023). According to Swari (2023) and Bueno et al. (2022), this digital website can produce interactive activities easily and quickly. In addition, the various types of game menus available in this application are suitable for many ages and school levels (Anisah, 2022). Apart from that, WordWall is also flexible for discussing or reviewing various kinds of material topics (Mazelin et al., 2022). With the presence of Wordwall as a learning medium, it is hoped that it will be able to help the teaching and learning process become more exciting and fun. In addition, a collaboration between efficient learning materials in this application can create a harmonious blend of learning and entertainment to create meaningful learning for pupils (Hasram et al., 2021). In agreement with observations by Yasri (2023) and Darmawan et al. (2023), this application is defined as a good tool for teachers to create assessments and deliver material. Shortly, Wordwall is worth trying in English class, especially for studying vocabulary.

Figure 1. Wordwall Templates



Several studies had been examined to explore how the Wordwall application was seen as learning media and how it affected the learning development process of pupils. The first journal by Arsini et al. (2022), observed pupils' perspectives regarding the use of WordWall for online learning. By using qualitative methods, 10 pupils were included as participants representing one class. After they filled out the 5 questionnaires given, the results of the analysis showed positive outcomes for this application. 9 out of 10 participants liked Wordwall as a vocabulary learning platform. By using Wordwall as a medium for learning new vocabulary, pupils could be more creative in expressing their ideas. Moreover, this digital learning website also made pupils focused on speeding up thought processes and creating active learning.

The second investigation conducted by Anisah (2022), had a focus on knowing student responses to using Wordwall as a learning assessment medium. This study employed questionnaires and interviews to find out in detail how pupils respond to this application. From the results of data processing, it showed that 87.5% of pupils were interested in using this digital game-based learning application. Its eye-catching appearance and varied game menus were the reasons why Wordwall was liked by pupils as a learning assessment medium. Most pupils also strongly agreed that this platform was good as a future tool for assessment.

The next study is research conducted in one of the junior high schools in Malaysia by Mazelin et al. (2022). The purpose is to find out the impact of using Wordwall in ESL classes. This study chose a mixed method between quantitative and qualitative as a research design. 24 pupils participated in this study. The results of the study presented that after playing the quizzes on Wordwall in online learning, pupils began to be interested and motivated to do learning. Pupils considered that their learning became more enthusiastic and felt happy even though learning was done online. Furthermore, pupils experienced better understanding after playing games on this online learning media, since, Wordwall

allows pupils to play more than one time depending on the lives they have in the game. The data also described that pupils enjoyed a competitive activity when they were playing this online education game.

The topic of the educational online platform, Wordwall, was also elaborated by Hasram et al. (2021) for ESL pupils at an elementary school in Malaysia. The findings explained that the pupils' level of satisfaction, attention, and relevance motivation was high. Meanwhile, their confidence and volition were at a moderate level. This study provides important insights as a guide for elementary school English teachers in integrating online games as learning tools for learning English, especially in developing pupils' English vocabulary, since Wordwall is defined as an awaited learning platform by pupils.

Another research by Jannah & Syafryadin (2022), identified pupils' perspectives on Wordwall as media for learning new vocabulary. They asked 15 pupils to fill in some questions about their opinion toward this website. The summary was that most pupils gave positive responses to Wordwall. It confirmed that pupils liked teamwork and competition. Also, they agreed that this media was an exciting, motivating, and fun online education web.

Lastly, there was an observation about teachers' perceptions on Wordwall by Paksi et al. (2023). It pointed to determining the teachers' perception of using Wordwall as media for teaching vocabulary at an elementary school. The data was collected by applying questionnaires. The result of the data presented that the majority of teachers agreed that this online platform was easy to use, and helped their tasks in planning, implementing, and evaluating learning. They also gave positive responses that the appearance of this online media was attractive and enjoyable for teachers and pupils. Briefly, teachers were satisfied with Wordwall as a web for increasing pupils' vocabulary.

Previous studies also had observed the implication of Wordwall in seeing how it affected the learning process and students' motivation. These investigations were explored in different lessons. First research by Fatimah (2020), claimed that implementing Wordwall in the online learning process could significantly enhance pupils' vocabulary skills. It was clarified by the findings that highlighted the mean of the pre-test was 50 the post-test was 70 in cycle I. Then in cycle II, post-test improved in 93. The implication of this digital game website in the process of learning also built pupils' interest. In short, this online educational platform is effective in learning vocabulary.

Secondly, a study observed by Mertha & Mahfud (2022) in a senior high school, found out how far this application could be an effective evaluation instrument. It was observed based on assessment by material experts, design experts, and history teachers. According to this assessment, the evaluation of Wordwall Web as a learning evaluation instrument was categorized as a good evaluation instrument. It was suitable for applying this gamification web in learning Indonesian History on the Acculturation of Local Culture and Hindu-Buddhist lessons.

Thirdly, it comes from Safitri et al. (2023). The target of this investigation was to validate the effectiveness of Wordwall Web in boosting pupils' motivation in learning science. 98 pupils participated in this study as a sample which selected randomly 129 pupils. This observation applied an experimental research method and used pre-test and pos-test as the instrument. The result of the data presented was that this digital learning media had a good impact on increasing pupils' motivation. It happened because the menu, template, and appearance were attractive. The other aspect also confirmed that it was also important to

notice how the teacher designed an atmosphere in class session, as it affected pupils' motivation.

Research on the use of a game-based platform, Wordwall, in learning vocabulary seen from students' perception had been widely carried out, however it was in general perceptions, not in specific way. To fill this gap, this study was chosen to observe how pupils of vocational high school perceive the Wordwall platform in learning English vocabulary, specifically in observing students' perceived feeling, engagement, and effect.

METHOD

A qualitative approach was chosen for analyzing the data of the study. 36 participants joined this research. They are 10th-grade pupils from a vocational school in Indonesia, ages ranged 16-17 years old. The research was investigated in the 2022/2023 academic year. It applied descriptive analysis to observe the data. The data was collected by seeing pupils' perceived feelings towards Wordwall after this tool was applied for four meetings in pupils' study sessions. It was used an online questionnaire as the instrument. The kind of game in Wordwall chosen for seeing pupils' points of view in this investigation is Maze Chase. The way students play this game is that they have to run to the correct answer zone, whilst avoiding the enemies.



The questionnaire was adapted from a related investigation by Jannah & Syafradin (2022) who also examined pupils' perspectives toward Wordwall. It was chosen since the questionnaire is suitable and related to the purpose of this study which can explore how pupils' point of view toward Wordwall. The questionnaire was modified to be simpler and to make pupils easily understand the context of it. It was divided into three categories: pupils' perceived feeling, pupils' perceived effect, and pupils' perceived engagement. Each participant should choose whether it is 'Strongly Disagree,' 'Disagree,' 'Neutral,' 'Agree,' or 'Strongly Agree.' in 12 questionnaires given. It was a closed-ended questionnaire, and it applied a Likert scale for counting the result. This kind of questionnaire is applied since it increases the consistency of the responses and makes the tabulation easier and faster to collect (Jannah & Syafradin, 2022).

For examining the outcome, the data was scored and gained from the questionnaire result. Each statement of the Likert questionnaire scale has a different point as follows.

- Strongly Disagree (SD) : 1
- Disagree (D) : 2
- Neutral (N) : 3
- Agree (A) : 4
- Strongly Agree (SA) : 5

Here are the calculated score as the data analysis

Maximum Score = 12 x 36 x 5 = 2160

Minimum Score = 12 x 36 x 1 = 432

36 : The number of participants

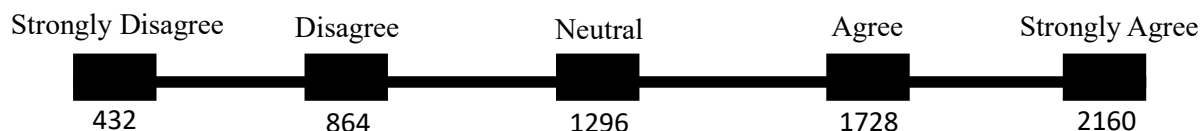
12 : the number of questionnaires

After grading the score, it was determined the criteria for score interpretation of each questionnaire set. Finally, the result of the data is explained in narrative form. If the total score of degree of agreement is around 432-864, it can be determined that pupils' interpretation of Wordwall is negative or bad. If the score is 865-1296, it is inferred as a neutral position. The last, Wordwall will be stated as a positive media based on pupils' perception if the cumulative score is around 1297-2160. More detail on total score interpretation can be shown in the following table.

Table 1. Total Score Interpretation

Score	Degree of Agreement	Interpretation
1729 - 2160	Strongly Agree	Positive
1297 - 1728	Agree	Positive
865 - 1296	Neutral	Neutral
433 - 864	Disagree	Negative
432	Strongly Disagree	Negative

Figure 3. Continuum diagram of the score interpretation



RESULTS AND DISCUSSIONS

This section elaborated on the finding of the result of the data gathered. Then, it was discussed to see how pupils' perception regarding the use of Wordwall in vocabulary learning. There were three parts of pupils' perception discussed. Firstly, it analyzed what pupils feel when they were using Wordwall. Secondly, it was about pupils' perceived effects after playing a game in Wordwall. Lastly, pupils' reactions to their engagement in the Wordwall game were also discussed.

Table 2. Students' Interpretation Scale

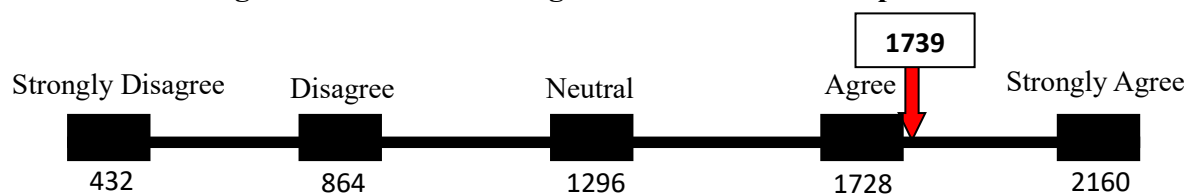
Item	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	I
Pupils' Perceived Feeling						

1. The games I played at the time are fun, interesting, and motivate me to learn	2	-	9	13	12	P
2. I like the competitiveness when playing the game	1	-	5	19	11	P
3. Learning with the game creates an active and energetic classroom atmosphere	1	-	5	17	13	P
4. I feel a positivity and a good atmosphere when playing the game	1	1	11	13	10	P
Pupils' Perceived Effects						
1. I prepared myself better to be able to win the game	1	2	10	13	10	P
2. The game must be used in every class learning	3	4	10	13	16	P
3. I look forward to be able to play the game again	2	3	10	15	6	P
4. I don't want to miss for playing the game	2	2	13	15	4	P
Pupils' Perceived Engagement						
1. I focused on paying attention to the discussion of the material from the teacher so that I could win in the game that would be played later	-	-	10	18	8	P
2. I focused more on the questions asked rather trying to avoid enemies in the game	1	13	8	7	7	Ne
3. I tried my best to answer all the questions in the game	2	1	5	12	16	P
4. I tried as quickly and accurately as possible to answer the questions in the game	2	1	5	15	13	P
Total Score	18	54	101	170	126	
Total Score x Option Value	18	108	303	680	630	
Total Score of Wordwall						1739
Note:						
I = Item Score Interpretation P = Positive N = Negatif Ne = Neutral						

The first part of the questionnaire is about pupils' perceived feelings. There were four questionnaires delivered and had a positive result. It can be seen from Table 1 that most pupils chose to agree and strongly agree with all questions given. From questionnaire number one, it was conveyed that 69.4 % of pupils felt that the game they played was fun. They were also interested and motivated to learn vocabulary toward Wordwall. The next two questions also described positiveness. 83,4 % of pupils liked the competition from the game, and 83.3 % of them stated that the game on this platform created an active and energetic learning session. There was only one pupil who strongly disagreed with this. The last questions in this part also clarified that 63.9 % of pupils felt positivity and a good atmosphere while playing this fun education web. All in all, it implies that they felt positivity when they were playing this fun education game.

The second questionnaire states students' perceived effect towards Wordwall. This part also provided four questionnaires delivered to all participants. All questionnaires answered showed optimistic results for Wordwall's effect. 23 or 63.8 % of pupils clarified that they prepared themselves better for joining a game in Wordwall. Furthermore, 19 of 36 pupils, 58.4 % of participants, also wanted this educational online game to be implemented in daily classes. Not only that, they did not want to skip and miss the game. The same good response also exposed that 21 pupils give positive replies. They looked forward to being able to play the game again during class lessons. It signifies that the data from pupils' perception displays that they tend to feel a positive effect for Wordwall rather than a negative one. Accordingly, this second part questionnaire about students' perceived effect sums up positiveness.

The last part of the questionnaire discusses pupils' perceived engagement while and after playing Wordwall. It can be seen from Table.1 that 26 pupils focused on paying attention to the material the teacher gave. So that, they could win in the game that would be played later. 10 students chose neutral, and no one perceived a negative perception of this statement. Two questions also confirmed that pupils truly engaged in a game in Wordwall. It is proven by 28 pupils stating that they tried their best to answer all questions delivered in the game. Additionally, they as quickly and accurately as possible to answer the questions given. Differing from other questions that concluded positive responses, there was the same amount from pupils who selected positive and negative perceptions towards engagement in Wordwall. This approved a neutral interpretation. Both negative and positive responses toward pupils perceive engagement by 14 pupils. On the other hand, 8 pupils gave a neutral answer to this statement. Thus, this last part of the questionnaires doesn't have a positive result. However, mostly it has.

Figure 4. Continuum Diagram of The Score Interpretation

Discussion

The result of the data implies that Wordwall gives positive learning experiences to pupils in learning vocabulary. It can be conveyed by seeing the total score of the questionnaire result that it is 1739 and interpreted as strongly agreeing. Briefly, based on pupils' point of view, it states that 80.5 % of positiveness comes from the use of this online learning tool. This research reports that Wordwall is a suitable education online game seen from pupils' perceived feelings, effects, and engagement with the learning media. The discussion of pupils' perceived feelings, effects, and engagement are delivered more specifically in the next paragraphs.

The result of the data proves that pupils' perceived feeling towards Wordwall claims positivity. The findings confirm that pupils felt motivated, fun, and showed high enthusiasm while they were playing Wordwall as an education game platform which is also similar to Anisah (2022), Pradini, & Adnyayanti (2022), Hartiki (2021), and Yazid (2022). It is also corresponding with Mazelin et al. (2022) that pupils enjoyed competitiveness in answering questions asked. Furthermore, matching with Arsini et al. (2022), this investigation of students' perception also states that Wordwall creates active learning. Not only an active study session, but Wordwall also builds an energetic classroom. Confirming to Hamidah et al. (2023) that this web was also defined as a new thing for pupils to generate enthusiasm in the learning process. However, a previous journal reported by Jannah & Syafryadin (2022) signified that most participants chose to disagree that Wordwall could build energetic learning.

The positive result is also signified by the data from pupils' perceptions of how Wordwall affects them. Because of Wordwall, pupils prepared themselves to join the game. Most of them also looked forward to playing and didn't want to miss the game. It indicates that Wordwall is a platform waited by Pupils in study sessions. It is also interpreted that this application effectively lightened boredom since it gives a good impression to pupils, same like what Millatina et al. (2022) confirmed in their research. This is similar to Hasram et al. (2021). Moreover, pupils also stated that playing games by using Wordwall should be implemented in everyday class learning. In accordance with a previous study by Rahmi & Angraina (2021) which also explained that this application helped teachers and students to access learning assessments anywhere and anytime easier. Supported by Anisah (2022), Wordwall is a good future media for assessment that most pupils are interested in. This all concludes that the fun learning media, Wordwall, is an interesting tool for creating better lessons. All of the data questions from pupils' perceived engagement highlight a positive response. It can be defined that pupils become focused on the material the teacher gives. They hoped that they could be a winner in the game they played later. Besides, pupils also stated that they tried their best quickly and accurately to play it. It confirms that pupils are excited when they join a game from the learning platform which is consistent with a previous study conducted by Jannah & Syafryadin (2022). However, there is a lack of getting a better understanding of the material discussed. It is proven by the findings that many students were interpreted to be neutral in stating that they focused on the quizzes

rather than the enemies in the game. It represents that there is no dominant tendency of the participants to agree or disagree with the questions or statements posed. The topic does not have a significant impact on the majority of participants, and it was a lack. In addition, another deficiency also found that this media does not provide a place for students to explain their correct and incorrect answers. This is a disadvantage of Wordwall as learning media (Sa'diyah, 2022). Because of this, pupils did not know the explanation of their wrong answers.

CONCLUSION

This observation focuses on seeing pupils' perceptions of using Wordwall as an online education platform for learning Vocabulary. The data infers that most pupils give positive responses on this fun learning web. Pupils' feeling while they were playing Wordwall was nice. They enjoyed the competitiveness and were motivated to learn the material about vocabulary. As well, pupils' perceived effect also concludes an optimistic result. It is stated that most pupils agreed that Wordwall is an awaited platform to play in the classroom. Furthermore, Wordwall also affects pupils' engagement. Pupils experienced a good focus to pay attention to the topic the teacher discussed. To sum up, Wordwall has positive outcomes on pupils' feelings, effects, and engagement. Nevertheless, there is a lack found in the pupils' focus on the context of the question given in Wordwall. The data findings interpreted a neutral answer which implies this online educational game did not give significant effect for making pupils focus on the quizzes given.

This study is limited to the participants that are in English Vocational High School. Additionally, this observation only studied pupils' perception of Wordwall for learning vocabulary. Accordingly, pupils' views cannot be generalized to other vocabulary online games. It is better to explore other educational online games to get wider resources.

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