Teaching English Tenses in EFL Environment Through Jeopardy Game: A Game-Based Learning Approach to Second Language Acquisition

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Abstract
Educational methodologies have continually evolved to accommodate the diverse needs of learners. One such evolution has seen the rise of game-based learning, aiming to make education more interactive and engaging. This research focused on determining the efficacy of the Jeopardy game in enhancing the understanding of the simple present tense among seventh-grade students at SMP Negeri 7 Sungai Ambawang during the Academic Year 2022/2023. Using a pre-experimental research design, this study delved into the potential advantages of game-based learning over traditional teaching methods. A sample size of 25 students from class VII A was meticulously chosen to ensure the results' consistency and accuracy. To measure the students' grasp of the simple present tense both before and after the Jeopardy game intervention, a multiple-choice test, consisting of 20 items, was administered. Each item in the test offered four options (a, b, c, and d) for students to choose from. Statistical analysis of the gathered data resulted in compelling outcomes. The null hypothesis (H0), which posited that the Jeopardy game would have no significant impact on the students' understanding of the simple present tense, was soundly rejected. In contrast, the alternative hypothesis (Ha), suggesting the game's effectiveness, was accepted. This conclusion was bolstered by a notable t-value of 9.62, surpassing the critical t-value of 2.064 at 24 degrees of freedom with a 5% significance level. Furthermore, the study highlighted a strong effect size of 1.9, indicating the game's substantial impact on learning.

Keywords: Game-based learning, Jeopardy Game, ELT, English Tenses
INTRODUCTION

As the primary language, grammar is one of the components that need to be mastered by students. Therefore, learning English grammar is crucial for the mastery of English. According to Yurko and Vorobel (2022), grammar can be defined as the foundation for effective communication both orally and to write. With grammar, the students will know how to construct a clause, a phrase, a sentence, as well as help to communicate well. However, grammar can be challenging for students since many rules must be adequately considered, mainly when using the present tense to describe events that occurred at a specific time. One of the tenses that the students learn is the simple present tense.

The seventh-grade students are instructed on the usage of the simple present tense as part of the curriculum established in 2013. The curricula include a basic competency point, specifically 3.6, which focuses on the identification of the social function, text structure, and linguistic features of oral and written transactional interaction texts. These texts involve the exchange of information related to the behavior, actions, and functions of individuals, animals, and objects. It is important to consider the contextual use of these texts and pay attention to the linguistic features of declarative, interrogative, and simple present tense sentences. The fundamental proficiency of understanding the simple present tense is indicative of the significance for students.

Based on the conducted interview with the English instructor at SMP Negeri 7 Sungai Ambawang, it was revealed that a significant number of seventh-grade students encounter difficulties in comprehending grammar, namely the simple present tense. The instructor emphasized the importance of acquiring the ability to form simple present tenses by adhering to the appropriate patterns of verbal and nominal construction. The students had difficulty in formulating verbal phrases in the third person singular that require the addition of (-s/es) to the verb. Additionally, they encountered challenges in constructing nominal sentences that involve the use of the verb "to be." Moreover, the pupils exhibited a passive approach towards the learning process and refrained from voicing their ideas or raising concerns. Up to this point, the instructor has employed several educational resources, including textbooks, worksheets completed by students, and dictionaries, in order to elucidate the concept of simple present tenses. Therefore, it is postulated by the authors that there is a need for improvement in the students' utilization of the simple present tense within this particular class, with the aim of making the learning process more engaging.

In order to address the aforementioned issues, the teacher sought to identify an alternative approach to facilitate their students' acquisition of the simple present tense. One pedagogical approach that can be employed to instruct seventh-grade students, who are typically classified as young learners, is the utilization of educational games. According to O'Shea (2020), the category of young learners encompasses children in the age range of 2 to 10 years old, who are often enrolled in preschool, kindergarten, and elementary school. Additionally, this category also includes students in middle school, namely those between the ages of 11 and 13. Furthermore, according to Nunan (2010), young learners can be classified as individuals who fall between the age bracket of 3 to 15 years old. According to this notion, seventh-grade kids might be classified as young learners due to their age bracket spanning from 12 to 14 years. In the realm of education, it is evident that young learners possess distinctive characteristics that set them apart from adults. Young learners exhibit a higher susceptibility to distractions and a tendency to become bored more rapidly, whereas adult learners demonstrate a greater capacity to maintain concentrate throughout the duration of a class. Young learner teachers should be prepared for this phenomenon. Educators
must consider strategic methods for capturing students' attention, one of which is incorporating or employing game-based approaches inside the instructional process.

According to Ibrahim (2016), games are considered appropriate for young learners due to their ability to enhance the enjoyment and appeal of the learning process. Games serve as a means of simulating real-life situations, so facilitating the development of language skills in children. The engagement of young learners in game-based activities can facilitate a more efficient and expeditious acquisition of a foreign language. Therefore, the incorporation of games in language instruction serves to engage pupils who may have previously demonstrated passivity resulting from a lack of interest.

Currently, there is a wide range of English language learning games available. Nevertheless, educators ought to exercise discernment when selecting the game for their pupils. The Jeopardy Game is a viable option for educators seeking to engage young learners. The Jeopardy Game is a question-based game in which participants select questions to either gain or lose points. This game exhibits distinct attributes, wherein several categories are accompanied by diverse sets of questions. The questions with lower point values are often more approachable, whilst those with higher point values tend to be more challenging. Jeopardy possesses a fundamental framework of rules. The participants adhere to the regulations pertaining to the rotation of turns, allocation of scores, and determination of the victor.

According to Rusdiyana et al. (2021), Jeopardy Game allows students to restore their memories of earlier taught English materials. When their class fellow correctly answer questions in the Jeopardy Game, it implies that they can remember the English lessons. Mufidah (2020) found that using the Jeopardy Game effectively increases students’ motivation, improves their confidence, and readily accepts material in their way. This finding shows that Jeopardy Game positively affects students’ vocabulary and grammar. Concerning this, the authors were inspired to find out whether the Jeopardy Game also has a positive effect on students’ simple present tense mastery to the seventh grade.

There are two similar studies about Jeopardy Game conducted by other authors. The first study was research conducted by Sari (2015) from IAIN Tulungagung. The study investigates the effect of Jeopardy Game on students’ achievement in simple present tense. In creating Jeopardy Game, she used classroom properties such as paper, tip, broad marker, etc. The result showed that there was a significant improvement in students’ scores after using Jeopardy Game with those classroom properties for learning simple present tense. The second study was research conducted by Saputri (2020) from Universitas Muhammadiyah Purwokerto. The study examines the effect of Jeopardy Game to teach simple present tense in Junior High School. In creating Jeopardy Game, she used PowerPoint. The result revealed two findings which mentioned that there was a significant difference in students’ motivation and students’ simple present tense achievement after using Jeopardy Game in learning simple present tense.

Previous research has demonstrated a positive impact on students' proficiency in the simple present tense. However, the authors developed the Jeopardy Game using manual means, without including any technological elements. Indeed, a plethora of online Jeopardy templates existed that offered greater simplicity and ease of modification compared to traditional methods. The authors want to address this gap. The authors conducted an investigation to assess the efficacy of a specific online Jeopardy template provided by Jeopardy Labs. The software generated a Jeopardy template that does not rely on PowerPoint and can be accessed through a web-based platform. The authors utilized a pre-experimental study design as the chosen methodology. This study was conducted to address the research inquiry, "Does the Jeopardy Game serve as an effective medium
for teaching English tenses particularly the simple present tense?” Furthermore, in the event that it proves to be efficacious, one must inquire about the magnitude of the effect.

METHOD

This research was conducted through a pre-experimental study. A quantitative approach used to analyze the static data in the form of students’ pre-test and post-test scores. By that score, the authors analyzed whether Jeopardy Game was significant in teaching the simple present tense or not. Specifically, the design was in the form of one-group pre-test and post-test design. In pre-test and post-test group, the observation was made twice, before giving treatment called pre-test and after giving treatment called post-test. According to Creswell (2014), the design of this research can be illustrated as follows:

| O₁ | X | O₂ |

Where:

O₁ = Pre-test
X = Treatment
O₂ = Post-test

The flow of the research that the authors applied is described below.

1. The authors distributed pre-test to the sample of research. The test was done to gather initial data related to the students’ competence in simple present tense before the treatments were given.
2. The authors implemented Jeopardy game as the treatment for thrice to the sample of research.
3. The authors distributed post-test to the sample of research. The test was done to gather the data related to the students’ competence in simple present tense after the treatments were given.
4. Lastly, the authors calculated the data, did hypothesis testing, and communicate the results.

A sample can be defined as a process of selecting a representative group from the population. In this study, the authors used cluster sampling. Cluster sampling is the selection of a group rather than an individual as the research objects (Mackey & Gass, 2021, p. 227). The authors used this sampling technique because the population was homogeny and had the same opportunity to be selected as the sample. From the sampling technique, it was obtained that Class VII A of SMPN 7 Sungai Ambawang was the sample of this research consisting of 25 students (12 male, and 13 female).

The authors used tests as the instrument of this study (for pre- and post-test). The test was constructed by the authors modified from the student’s text book. It consisted of 20 multiple-choice items with four alternatives a, b, c, and d. The items of the test about verbal and nominal sentences of simple present tense. The pre-test and post-test items were the same. The specification of test items could be seen on Table 1 below:

<table>
<thead>
<tr>
<th>Present Tense Form</th>
<th>Indicators</th>
<th>Assessment</th>
<th>Item Number</th>
</tr>
</thead>
</table>

Table 1. Specification of the Pre-test and Post-test Items
### Simple Present Tense with Verb.

| Students should be able to understand the use of $V_1$ and $V_1$ $s/es$ *(Positive Sentence of Simple Present Tense with Verb)* | Multiple Choice | 1,2 |
| Students should be able to understand the use of do not/ does not followed by base verb. *(Negative Sentence of Simple Present Tense with Verb)* | Multiple Choice | 3,4 |
| Students should be able to understand the form of *positive verbal questions* in Simple Present Tense with Verb. | Multiple Choice | 5,6 |
| Students should be able to understand the form of *negative verbal questions* in Simple Present Tense with Verb. | Multiple Choice | 7, 8 |
| Students should be able to understand the form of *Interrogative sentence with question word* in Simple Present Tense with Verb. | Multiple Choice | 9, 10 |

### Simple Present Tense with Be followed by Complement

| Students should be able to understand the use of be (*am, is, are*). *(Positive Sentence of Simple Present Tense with Auxiliary Be)* | Multiple Choice | 11,12 |
| Students should be able to understand the use of be + not (*am not, is not, are not*). *(Negative Sentence of Simple Present Tense with Auxiliary Be)* | Multiple Choice | 13, 14 |
| Students should be able to understand the form of *negative questions* in Simple Present Tense with Auxiliary Be. | Multiple Choice | 15,16 |
| Students should be able to understand the form of *positive questions* in Simple Present Tense with Auxiliary Be. | Multiple Choice | 17, 18 |
| Students should be able to understand the form of *Interrogative sentence with question word* in Simple Present Tense with Auxiliary Be. | Multiple Choice | 19,20 |

In order to ensure the quality of the test, the authors conducted validity and reliability testing. The English teacher of SMPN 7 Ambawang was the validator. The aspects of validation referred to the syllabus relevance, text book relevance, and language clarity and appropriateness. The result shows that the English teacher agreed that the test items were relevant with the aspects. Therefore, the pre-test and post-test were considered valid. Furthermore, in terms of the reliability, the test items were considered reliable with the category of “moderate”. The authors used KR-20 formula for calculating the reliability. The reliability calculate can be seen below:

\[
s^2 = \frac{\sum x^2 - (\sum X)^2}{N}
\]

\[
s^2 = 6.85
\]
(KR − 20)r_{11} = \left( \frac{n}{n-1} \right) \left( \frac{s^2 - \Sigma p.q}{s^2} \right)

r_{11} = 0.42

The reliability score above indicates that based on reliability coefficient suggested by (Cohen et al., 2017, p. 774), the test items were on the range of “moderate” (r_{11} = 0.42 > 0.40 – 0.59).

In conclusion, referring to the results of validity and reliability that has been obtained, the test items could be used as the instrument for the data collection.

These were some formulas, which were going to be used by the authors to analyze the data that has been collected after conducting the experiment.

1. Scoring students’ test

   The students’ individual score = \frac{\text{The total correct answer}}{\text{The total number of items}} \times 100

2. Calculating the students’ mean score of (pre-and post-test)

   \begin{align*}
   M_2 &= \frac{\Sigma X}{n} \\
   M_1 &= \frac{\Sigma X}{n}
   \end{align*}

   \begin{tabular}{|l|}
   \hline
   \text{MD} = M_2 - M_1 & \text{MD = mean of difference} \\
   \text{M}_2 &= \text{students’ mean score of Post-test} \\
   \text{M}_1 &= \text{students’ mean score of Pre-tests} \\
   \text{\bar{x}} &= \text{average score of (pre- and post-test)} \\
   \Sigma x &= \text{sum of learners’ individual score} \\
   n &= \text{number of students} \\
   \hline
   \end{tabular}

   (Van Blerkom, 2017, p. 245)

3. Calculating the students’ different score of (pre- and post-test)

4. Calculating t-test

   t = \frac{MD}{\sqrt{\frac{\Sigma D^2 - (\Sigma D)^2}{n}} \div \frac{n (n - 1)}}

   \begin{tabular}{|l|}
   \hline
   \text{t} &= \text{t-ratio} \\
   \Sigma D &= \text{the sum of difference between learners’ pre- and post-test score} \\
   MD &= \text{the mean of difference} \\
   n &= \text{number of students} \\
   \hline
   \end{tabular}

   (Ary et al., 2010, p. 177)

5. Hypothesis testing
This step aims to test the hypothesis of this research. To complete the calculation, the authors use statistical analysis at the level significance $\alpha = 0.05$ with degrees of freedom $(df) = n - 1$. For the result, if $t$-test $> t$-table, $H_a$ is accepted and $H_0$ is rejected. It means that Jeopardy Game is effective to improve students’ simple present tense mastery. While, if $t$-test $< t$-table, $H_0$ is accepted and $H_a$ is rejected. It means that Jeopardy Game is not effective to improve simple present tense mastery.

6. Effect Size

$$ES = t \frac{1}{\sqrt{n}}$$

$t$ = t-ratio
$\sum D$ = the sum of difference between students (pre- and post-test score)
$MD$ = the mean of difference
$n$ = number of students

Table 2. Effect Size Classification

<table>
<thead>
<tr>
<th>Effect Size</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-0.1</td>
<td>Week</td>
</tr>
<tr>
<td>0.1-0.3</td>
<td>Modest</td>
</tr>
<tr>
<td>0.3-0.5</td>
<td>Moderate</td>
</tr>
<tr>
<td>$\geq$ 0.5</td>
<td>Strong</td>
</tr>
</tbody>
</table>

(Muijs, 2022, p. 162)

**FINDINGS AND DISCUSSIONS**

**Findings**

In order to examine whether or not the use of Jeopardy game is effective in teaching simple present tense, and also to investigate how effective the use of Jeopardy Game is in teaching simple present tense, the authors analysed the data based on the research questions that had been formulated. To answer the first research question, the authors analysed it by using $t$-test formula. Meanwhile, to answer the second question, the authors used the effect size formula. The formula required the value of the $t$-test from the first research question of this study. Thus, the order of computation is performed from the mean scores of pre-test and post-test, the mean different score of the pre-test and post-test, calculating $t$-test, hypothesis testing, and effect size.

1. Mean Score of Pre-test and Post-test
Figure 1. The Students’ Mean Score of Pre-test and Post-test

Figure 1 demonstrates that the student's post-test score was greater than the student's pre-test score. With a mean score of 62.4 and 75.2, respectively, the pre-test score was 1560 and the post-test score was 1880. The maximum pre-test score was 80, and the minimum pre-test score was 45. Meanwhile, the highest post-test score was 95 and the lowest was 65. The data showed that the student's pre-test scores were classed as "poor to good," and the post-test mean score was characterized as "fair to very good" based on the classification of the mean score. This data indicated that the scores increased from pre-test to post-test.

2. Mean Difference Between of Pre-test and Post-test

To determine the mean difference between the pre-test and post-test scores, the authors used Ary et al. (2010) formula. The calculation results show that the mean difference between the pre-test and post-test was 12.8.

3. T-test

The analysis of the t-test on the students’ scores was obtained using the t-test formula suggested by Ary et al. (2010). The t-test computation found that the t-test of the treatment was 9.62 with the degree of freedom (df) = 2.064 (significant at the level 0.05 (5%)). The t-test was higher than the t-table (9.62 > 2.064). Hence, it can be concluded that the Jeopardy Game effectively teaches simple present tense.

4. Hypothesis Testing

Based on the computation of the above results, the test has indicated a significant difference. The t-test or t-value indicates 9.62, at the degree of freedom 24. The critical value of the t-table is 2.064 at 0.05 level. The result shows that the t-test was higher than the t-table (9.62 > 2.064). It indicates that the null hypothesis (Ho), “The implementation of the Jeopardy Game does not affect the student’s mastery in learning simple present tense”, was rejected. In contrast, the alternative hypothesis (Ha), “The implementation of the Jeopardy Game affects the students’ mastery in learning simple present tense,” was accepted”. Hence, it can be concluded that using the Jeopardy Game for seventh-grade students of SMPN 7 Sungai Ambawang affected the students’ simple present mastery.

5. The Effect Size
From the calculation of the effect size formula, the effect size of the treatment obtained was 1.9. Referring to Mujis (2022, p. 162) criteria, the result obtained is more than 0.5 (ES ≥ 0.5), considered as very strong effect size. Hence, it can be concluded that Jeopardy Game very strongly affected students’ ability to learn simple present tense.

**Discussion**

The research findings indicate that the utilization of the Jeopardy Game has a significant impact on students' proficiency in acquiring knowledge of the simple present tense. The mean score of the students on the post-test was found to be greater than their mean score on the pre-test. The efficacy of the treatment was notable, as indicated by a discernible improvement in the mastery of simple present tense subsequent to the implementation of the treatment. Moreover, the impact size that was found was categorized as a strong effect. Based on the results of a study, it was seen that the utilization of the Jeopardy Game as a teaching and learning tool had a noteworthy influence on the academic performance of students. This facilitated the comprehension of the basic present tense for the student.

This study involved conducting two sessions to administer the interventions, which centered on instructing participants on the usage of the simple present tense through the implementation of the Jeopardy Game. The first treatment involved the provision of materials pertaining to verbal sentences in the fundamental present tense, as provided by the authors. Subsequently, the students engaged in a group activity wherein they participated in the Jeopardy Game, with each group consisting of five individuals. Every group engages in competition with the other groups in order to determine which group can achieve the highest score. The primary emphasis of the content of the second therapy revolved around a concise sentence expressed in the present simple tense. The second treatment shown a comparable level of efficacy to the first treatment.

The study observed significant improvement among the students in their understanding of the basic present tense following exposure to the treatment activities. Throughout the course of the game, participants were able to respond to the posed inquiries and provide justifications for their chosen replies. Additionally, the students exhibited higher levels of engagement throughout the course of the therapy procedure. The individuals had a strong sense of self-assurance and were motivated to respond to the inquiry and vie for the most exemplary outcome. Moreover, the collaborative nature of playing in groups enhanced the enjoyment of the learning experience. This finding aligns with the results reported by Putri and Fitrawati (2018), who assert that the implementation of the Jeopardy Game has yielded enhanced student motivation. This can be attributed to the game's competitive nature, which necessitates students to vie with their peers in answering questions. Consequently, students have exhibited increased engagement in classroom activities and derived enjoyment from participating in the game. In a previous study conducted by Mufidah (2020), it was shown that the implementation of the Jeopardy Game had a positive impact on students' motivation, confidence, and ability to comprehend knowledge efficiently. Consequently, it was found to be adequate in establishing that utilizing Jeopardy as an instructional tool had an impact on students' educational outcomes.

Game-based learning is a pedagogical approach that integrates the use of educational games into the learning process. The motivation behind game-based learning is grounded in the principle that students, especially in the digital age, tend to engage more actively and retain information better when learning activities are interactive, challenging, and enjoyable. The effectiveness of the Jeopardy game in this study adds to the growing body of evidence supporting the use of games in educational settings. The notion that 'learning can be fun' seems to be more than just a cliché; it's
an evolving paradigm in contemporary education. While the results are promising, it's crucial to address potential challenges. Not all games may be suitable for all educational contexts. Teachers need to ensure that the games align with the curriculum and that they don't overshadow the primary learning objectives. There's also the concern of ensuring every student has an equitable opportunity to participate and benefit, given the competitive nature of games like Jeopardy.

CONCLUSION

The study conducted demonstrated that the use of the Jeopardy Game exhibited significant efficacy in augmenting the proficiency of Year-7 students at SMP Negeri 7 Sungai Ambawang in the Academic Year 2022/2023 in their comprehension and application of the basic present tense. The utilisation of Jeopardy Game as a pedagogical instrument for instructing the simple present tense was found to be highly effective, as evidenced by a substantial rise in students' test scores and a notably strong effect size. This conclusion was supported by the results of a t-test, which indicated a much higher value (9.62) compared to the critical value (2.064) obtained from the t-table. Hence, the integration of game-based learning inside language instruction can serve as a helpful strategy for enhancing students' language learning outcomes. In summary, this research introduces a novel methodology for instructing seventh-grade students at SMP Negeri 7 Sungai Ambawang in the use of the simple present tense. This technique involves the integration of the Jeopardy Game as a teaching tool, and its efficacy is evaluated through the implementation of pretest and post-test procedures.

The novelty of game-based learning, such as using Jeopardy in a classroom setting, provides more than just a break from traditional teaching. It introduces students to an immersive learning environment where they can actively engage with the content, making the learning process more memorable. The interactive nature of the game fosters competition, immediate feedback, and excitement, elements often missing from traditional rote learning. Furthermore, the substantial effect size obtained in this study isn't just statistically significant; it's an indication of the transformative potential of incorporating novel pedagogical tools. Such an approach might not only boost comprehension and retention but also rekindle students' intrinsic motivation to learn, especially in subjects they might initially find challenging or mundane. Overall, the positive impact of the Jeopardy game on teaching the simple present tense underscores the importance and potential of incorporating novelty in educational strategies. As educators, the challenge and opportunity lie in continuously seeking and experimenting with innovative approaches, ensuring that learning remains a dynamic, engaging, and ever-evolving journey for students.

REFERENCES


