

# The Use of an Educational Game to Improve Students' Understanding of Future Perfect and Future Perfect Continuous Tenses

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## Abstract

Mastering advanced English grammar can be particularly challenging for young learners, especially when it comes to complex tenses. These difficulties often lead to low engagement and limited retention when taught using traditional methods. This study aims to improve the understanding of the Future Perfect Tense and Future Perfect Continuous Tense among elementary school students through the use of an educational game titled "Future Time Travelers." The research was conducted at SD Negeri 064037, Medan Tembung. Given the abstract and complex nature of these grammatical structures, young learners often struggle to grasp them through conventional teaching methods. Therefore, this study introduced an interactive, game-based learning approach that integrates storytelling, time-travel missions, and visual aids to contextualize the use of these tenses in a fun and engaging way. Using a classroom action research method, data were gathered through pretests, posttests, teacher observations, and student reflections. The results showed a significant improvement in students' comprehension and ability to apply both tenses correctly in sentence construction. The educational game not only enhanced their grammatical skills but also increased their motivation and participation during English lessons. This research highlights the effectiveness of game-based learning in making advanced grammar more accessible and enjoyable for young learners.

**Keywords:** *Future Perfect Tense, Future Perfect Continuous Tense, educational game, grammar learning, elementary education*

## Introduction

English grammar is a fundamental aspect of language acquisition that underpins learners' ability to construct meaningful and accurate sentences. Mastery of grammar is essential not only for academic success but also for effective communication in real-life contexts. Among the more advanced grammatical structures, the Future Perfect Tense and Future Perfect Continuous Tense are particularly challenging for elementary school students due to their abstract, time-based nature. These tenses describe actions that will be completed or ongoing at a specific moment in the future, concepts which are often difficult for young learners to visualize and apply correctly.

According to Thornbury (1999), grammar instruction should be meaningful and contextual in order to promote longterm retention. He argues that when grammar is

taught in isolation from real-life usage, learners tend to memorize forms without understanding their functions. This is especially true for complex tenses like the Future Perfect and Future Perfect Continuous, which are rarely encountered in daily conversations among young learners.

Traditional grammar teaching methods, often characterized by textbook-based drills and rote memorization, tend to disengage students and fail to promote active learning. Harmer (2007) emphasizes the importance of student engagement and interaction, noting that young learners acquire language more effectively through activities that are fun, meaningful, and socially interactive. In light of this, educators are encouraged to implement creative and dynamic teaching strategies that align with the cognitive and emotional development of children.

One such approach is game-based learning. Educational games provide a learner-centered environment that encourages exploration, motivation, and problem solving. Prensky (2001) defines educational games as tools that combine learning objectives with gameplay elements, thus creating an immersive and enjoyable learning experience. These games can be particularly effective in language learning, as they help reduce anxiety, foster collaboration, and present grammar in a more engaging and relatable context. This study was conducted at SD Negeri 064037, Medan Tembung. The aim of the study is to investigate the effectiveness of an educational game titled "Future Time Travelers" in improving students' understanding of the Future Perfect Tense and Future Perfect Continuous Tense. The game involves narrative-based missions and interactive scenarios that simulate time travel, allowing students to encounter grammar in action. It is designed to support contextual learning, where grammar is not taught as isolated rules, but as part of meaningful communication.

By adopting a classroom action research approach, this study seeks to provide evidence that game-based learning can serve as an effective pedagogical tool in elementary English classrooms, particularly for introducing advanced grammatical structures. The findings are expected to offer valuable insights into how interactive and contextualized learning experiences can enhance grammar comprehension among young learners.

## Method

This study employed a Classroom Action Research (CAR) design using a mixed-methods approach, integrating both quantitative and qualitative data to comprehensively assess the impact of the educational game "Future Time Travelers" on students' mastery of the Future Perfect Tense and Future Perfect Continuous Tense. The research followed the cyclical framework proposed by Kemmis and McTaggart (1988), which consists of four stages: planning, acting, observing, and reflecting. This design was selected to allow for iterative improvements based on classroom observations and student responses.

The participants of this study were 30 fifth-grade students from SD Negeri 064037, located in the Medan Tembung district, Medan City, North Sumatra, Indonesia. These students had previously received basic English instruction and were considered cognitively and developmentally ready to engage in contextualized grammar learning through interactive methods.

The research was conducted on-site at SD Negeri 064037, with all learning activities carried out during regular English class hours. Data collection involved a variety of instruments and techniques to ensure a thorough evaluation of the learning intervention. Pre-tests and post-tests were used to quantitatively measure students'

understanding of the two target tenses before and after the game-based learning sessions. In addition, teacher observations were carried out throughout the implementation process to qualitatively document student participation, engagement, collaboration, and grammatical application during gameplay. Student reflections were gathered at the end of each session through short written feedback forms, providing insights into students' experiences, motivations, and perceptions of the learning activities.

The instruments used in this research included pre-test and post-test worksheets designed to assess grammatical accuracy in context, observation checklists used by the teacher to monitor classroom interactions, student reflection forms, and lesson plans that incorporated the educational game in a structured and purposeful manner.

Data analysis combined both quantitative and qualitative techniques. The pre-test and post-test scores were analyzed using descriptive comparative analysis to calculate mean scores, score differences, and percentage improvements. Meanwhile, qualitative data from observations and reflections were analyzed using thematic analysis, allowing the researchers to identify patterns related to student engagement, emotional responses, and instructional effectiveness during the game-based learning process.

The approach followed the framework proposed by Kemmis and McTaggart (1988), which includes cyclical stages of planning, acting, observing, and reflecting.

### **1. Planning Phase**

The initial planning stage involved the formulation of learning objectives, lesson planning, and the preparation of learning materials. The main objective was to enable students to construct grammatically correct sentences using the Future Perfect and Future Perfect Continuous Tenses in a meaningful and enjoyable context. The instructional tool used was a custom designed educational game titled "Future Time Travelers", which was developed to simulate engaging scenarios that required the use of future tenses in realistic and time bound activities.

Game materials included:

1. Time cards (e.g., by tomorrow, in five years, by next week).
2. Activity cards (e.g., finish homework, play football, study English).
3. Duration cards (e.g., for two hours, for three years).
4. "Time Traveler" hats or markers for players taking turns.
5. Whiteboard or poster paper for writing sentence outcomes.

The learning goals for the game were aligned with the Indonesian elementary English curriculum, targeting both productive skills (speaking and writing) and grammar accuracy. Design and Implementation of the Game The game "Future Time Travelers" was designed to be played in small groups of 3-4 students to encourage collaboration, peer learning, and participation. The game mechanics were as follows:

1. Turn 1 (Future Perfect Focus): A student draws one time card and one activity card. They must construct a sentence using the Future Perfect Tense (e.g., By next week, I will have finished my homework).
2. Turn 2 (Future Perfect Continuous Focus): The next student draws a time card, an activity card, and a duration card. They construct a sentence using the Future Perfect Continuous Tense (e.g., By next week, I will have been studying English for two hours).
3. Writing and Feedback: Each sentence is written on the board or on large paper for group discussion and correction. Peers evaluate accuracy, and the teacher guides as needed.

4. 4. Scoring and Motivation:

Points or small rewards (e.g., stickers, stars) are given for creative or grammatically accurate sentences. A minichallenge round called “Fastest Time Traveler” encourages quick thinking and fluency.

This design ensured that grammar practice was both structured and communicative, giving students a chance to internalize complex tenses through repetition and peer feedback in a lowstress environment.

2. Data Collection and Analysis

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data to assess the effectiveness of the educational game “Future Time Travelers” in enhancing students’ understanding of the Future Perfect Tense and Future Perfect Continuous Tense. Data were collected through the following four key sources:

1. Pre-test and Post-test Pre-tests and post-tests were administered to measure students’ initial understanding and their progress after participating in the game-based learning intervention. The tests focused on students’ ability to construct sentences using the target tenses accurately and in context. The quantitative data collected from these tests were analyzed using descriptive statistics, including mean scores and percentage gains, to determine learning improvements.
2. Observation Sheets Teacher observations were conducted throughout the implementation to document student engagement and interaction. The observation sheets focused on aspects such as active participation, collaboration, grammatical accuracy, and self-confidence during the gameplay sessions. These observations provided valuable qualitative insights to support the statistical data and helped evaluate classroom dynamics and behavioral changes.
3. Student Reflections At the end of each session, students completed short reflection forms to express their thoughts on the learning experience. These reflections addressed the difficulty level, enjoyment, and usefulness of the game in supporting grammar learning. The qualitative data obtained were analyzed thematically to identify emerging patterns related to changes in motivation, engagement, and conceptual understanding among the students.
4. Effectiveness of the Game Design The “Future Time Travelers” game was designed based on task-based language teaching principles and active learning approaches, placing students at the center of the learning process. As supported by Prensky (2001), educational games are effective in promoting engagement and cognitive development, especially when they require learners to use language meaningfully within contextual scenarios. The game integrated grammar instruction into narrative-based missions and time-travel adventures, transforming abstract grammar concepts into concrete and enjoyable experiences. Instead of teaching grammar as isolated rules, the game encouraged students to use the tenses in purposeful communication. This approach aligns with the constructivist learning paradigm, allowing learners to construct knowledge actively through direct involvement and meaningful interaction with content and peers.

## Results

This study employed a mixed-methods design that combined descriptive qualitative and quantitative data to explore the effectiveness of the educational game Future Time

Travelers. The findings are presented in three parts: classroom observations, student interviews, and the results of pre- and post-tests.

### 1. Observation Results

Classroom observations revealed a noticeable increase in student engagement, participation, and enthusiasm during the use of the game. At the beginning of the intervention, many students appeared hesitant and unsure when attempting to construct sentences using the Future Perfect and Future Perfect Continuous Tenses. However, as the sessions progressed, students showed greater confidence and willingness to interact in English.

The game-based activities encouraged active collaboration among students, particularly during time-travel missions where teamwork was necessary to complete tasks. Observers noted that students were more attentive and focused compared to traditional grammar lessons. Furthermore, the visual aids and story-based structure helped students visualize abstract grammar concepts more concretely, making them more eager to participate and less anxious about making mistakes.

### 2. Interview Results

Interviews were conducted with selected students and the English teacher after the intervention. The responses indicated a positive perception of the game's learning experience. Most students expressed that the game made learning grammar more enjoyable and easier to understand. They appreciated the storyline, colorful visuals, and interactive tasks, which they described as "fun" and "exciting."

One student mentioned, "I never understood Future Perfect before, but now I can use it because of the missions in the game." Another added, "It was like going on an adventure, and I didn't feel like I was learning grammar. It just happened while playing."

The teacher also confirmed an increase in classroom energy and noted that even the less confident students became more involved during game sessions. According to the teacher, the integration of grammar into a meaningful context helped shift the focus from memorization to communication.

### 3. Pre-test and Post-test Results

The pre- and post-tests were used to assess students' improvement in applying the Future Perfect and Future Perfect Continuous Tenses. The average score on the pre-test was 53.4, indicating limited understanding and frequent errors in sentence construction. After the intervention, the post-test results showed a significant improvement, with the average score rising to 81.2.

The percentage gain from pre- to post-test was approximately 52%, demonstrating a substantial increase in grammatical accuracy and contextual usage. Additionally, a greater number of students were able to correctly identify the function of each tense and apply them appropriately in written and oral tasks.

## Discussion

The implementation of the educational game "Future Time Travelers" at SD Negeri 064037, Medan Tembung, revealed a notable improvement in the students' understanding and application of Future Perfect Tense and Future Perfect Continuous Tense. Before introducing the game, many students faced difficulties in constructing correct future tense sentences. They were unfamiliar with sentence patterns and often

confused the function of time expressions used in future forms. Their answers were often incomplete or grammatically incorrect, and participation was generally low.

After the educational game was applied in the classroom, students began to demonstrate better comprehension and practical usage of the target grammar. They were able to construct complete and more accurate sentences using the time, activity, and duration cards. Students also appeared more confident in expressing their ideas verbally and in writing.

During the sessions, students actively engaged with the material, responded enthusiastically to the group activities, and enjoyed the creative aspects of the game. Some students even began helping their peers understand the sentence structures and time-related functions without being prompted by the teacher.

Teacher observations and group reflections showed that the majority of students became more motivated, collaborative, and enthusiastic about grammar lessons. They appreciated the hands-on nature of the game and found that the visual cues from the cards made it easier to remember how to form Future Perfect and Future Perfect Continuous sentences.

## Conclusion

The implementation of the educational game “Future Time Travelers” proved to be an effective and engaging method to enhance elementary school students’ understanding of the Future Perfect Tense and Future Perfect Continuous Tense. The game created an interactive and joyful learning environment where students were encouraged to speak, write, and collaborate actively. Through this activity, students who previously struggled with complex grammatical structures were able to construct accurate and meaningful sentences using the target tenses. The use of visual aids (cards) and the element of play contributed significantly to increased motivation, comprehension, and retention. Furthermore, the game promoted teamwork, critical thinking, and peer learning, aligning with modern language teaching approaches such as Communicative Language Teaching and constructivist learning theory. In summary, the “Future Time Travelers” game is not only a tool for grammar practice but also a powerful strategy to foster student-centered learning, especially for abstract language topics that are often difficult to teach in a traditional classroom setting.

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