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The Effectiveness Teaching Simple Past Tense Through Tiktok Cartoon Clips And Gemini

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abstract – Grammar teaching methods, particularly the *simple past tense*, remains a persistent challenge for senior high school students, often due to conventional, monotonous instructional methods. To address this, the integration of TikTok cartoon clips paired with Gemini AI is proposed as an innovative approach to heighten student engagement and deepen comprehension. This study endeavors to assess the efficacy of utilizing TikTok cartoon, augmented by Gemini AI, in instructing the *simple past tense*. Employing a quantitative methodology with a quasi-experimental design, the research examined one experimental class and one control class, with subjects drawn from tenth-grade students at SMAN 1 Kedungadem. Data collection was systematically executed, spanning from pre-test to post-test assessments. Subsequently, a series of parametric analyses were conducted, including normality, homogeneity, and hypothesis testing, to discern significant variances in student learning outcomes prior to and following the intervention. The empirical findings demonstrate that collaborating TikTok cartoon clips with Gemini AI serves as a highly effective, revolutionary pedagogical tool for teaching the *simple past tense* at the senior high school level.

Keywords – Cartoon, TikTok, Gemini AI, Simple past tense

Abstrak – Metode pengajaran tata bahasa, terutama materi *simple past tense*, masih menjadi tantangan bagi beberapa siswa SMA karena cara pembelajaran yang klasikal dan menjenuhkan. Oleh karena itu, pemanfaatan klip kartun TikTok yang dipadukan dengan Gemini AI diharapkan mampu meningkatkan keterlibatan siswa dalam memahami materi tersebut. Kajian ini beritensi untuk mengeksplorasi efektivitas penggunaan media klip kartun TikTok yang didukung oleh Gemini AI dalam pengajaran materi grammar, yakni *simple past tense*. Penelitian ini menerapkan metode kuantitatif dengan desain quasi-eksperimental yang melibatkan satu kelompok eksperimen dan satu kelompok tanpa perlakuan. Partisipan penelitian ini diambil dari siswa kelas sepuluh SMAN 1 Kedungadem. Tahapan pengambilan data dilaksanakan secara terstruktur dari mulai pre-test sampai post-test. Langkah selanjutnya dilakukannya analisis beberapa uji parametrik, berupa uji normalitas, homogenitas, dan yang terakhir dilakukannya uji hipotesis. Kegunaannya untuk mengetahui apakah ada disimilaritas dari hasil score siswa sebelum dan sesudah diimplementasikan nya treatment tersebut. Dengan hasil tersebut, penggunaan klip cartoon TikTok yang kemudian dikolaborasi Gemini terbukti efektif direalisasikan sebagai bentuk pembelajaran yang revosioner dalam mengajarkan *simple past tense* di tingkat SMA.

Kata Kunci – Kartun, TikTok, Gemini AI, Simple past tense

INTRODUCTION

Technological advancements have produced numerous contributions and had a profound impact on each part of our daily lives in the current globalized era, such as incorporating education. By using technology, it allows every individual to obtain information quickly and also to learn everything autodidact (Rizqi, 2023). Not only that, social media also takes part in human life. Every individual certainly has an account on social media. Young people occupy the first position in this matter. In this context, social media can become one of the supports for teachers in becoming a fairly innovative learning medium in the classroom. This teaching can later function as a very communicative, cognitive, and pedagogical objective in the classroom (Matin & Rozak, 2026).

Tiktok is a platform that is highly popular among young people nowadays. As a platform, Tiktok offers various short and also interesting videos for every user. With many interesting features, the Tiktok platform is very possible to be used by teachers as a learning medium in the classroom because it can present material briefly, easily accessed, and attractively (Rosyidah & Ahnaf, 2025). One of the interesting contents on the Tiktok platform is cartoon videos. Cartoons are a form of learning media that is very possible because they contain interesting images with audio so that later learning feels alive (Yulianti et al., 2025). Students can also easily understand every learning concept explained by the teacher (Rozak & Parmawati, 2024). With the assistance of cartoon videos, students can understand abstract concepts from cartoon visualizations. Thus, the use of the Tiktok platform in learning can increase the engagement and also attention of every student in the classroom.

In addition, technological developments are growing rapidly in artificial intelligence, internet connections, cloud services, and many other smart devices (Fitri Nurdianingsih, 2026). One of them is artificial intelligence or what we more often know as AI. One of the products of AI is Gemini AI. Gemini can be used as a supporting tool in learning because Gemini can help in searching or finding information more broadly (Salmi Addin & Nelisa, 2025). With the assistance of Gemini, students will later obtain corrections, explanations, and also examples that are easy to understand. However, in English learning, especially in grammar, many

obstacles are still found in the field. Many students have difficulty understanding how to use tense and grammar in the appropriate context. One of the materials that is difficult for students to understand is the simple past tense. Students often make mistakes in distinguishing how to use past forms. In this condition, most teachers often use conventional learning methods, so students become less understanding and also less active in learning. Teachers also require learning media that function as a means to support student activities in the classroom to achieve learning objectives (Rochmadhoni et al., 2022). Therefore, the combination of these three media has great potential to develop the requirements of academic instruction in the classroom. Many teachers utilize technology as a helping tool to enhance competencies and develop students' knowledge (Widyaningrum et al., 2022). This integration will later allow students to obtain a real illustration through visuals while also obtaining direct feedback from artificial intelligence.

Based on the problems mentioned above, it is evident that this study will examine the effectiveness of using cartoon videos assisted by Gemini AI as a learning medium, specifically for the simple past tense. Unlike previous studies that only focused on a single medium, such as TikTok as a learning medium (Asgar et al., 2025) cartoon innovation in learning (Hukubun et al., 2025) or Gemini AI on the learning process (Ahmad & Nasution, 2025). Through this gap, it is expected to provide an effective and efficient contribution for teachers in determining good and engaging media in the teaching process that aligns with with the traits of students enrolled in the digital age.

METHOD

This experiment integrates a quasi-experimental research design especially a technique based on quantitative research which aims to test the effectiveness of using cartoon media on the Tiktok platform assisted by Gemini AI in teaching simple past tense. This quantitative research entails two clusters, namely the experimental group and the control group. The population in this experiment is high school students, with samples selected using purposive sampling with the number of classes each consisting of approximately 25 students.

FINDINGS AND DISCUSSION

Findings

The purpose of this study is to evaluate the efficacy of teaching simple past tense at the senior high school level utilizing Tiktok cartoon clip media combined with Gemini AI. A control class and an experimental class, each with 25 students chosen by the researcher, were used in this study. The experimental class received treatment later, whereas the control group received instruction using classical methods of instruction.

1. Descriptive Statistics

The table below displays the findings of the descriptive statistical test between the pre-test and post-test scores of the experimental class and the control class.

Table 4.3 Standard Deviation

Group	Test	Standard Deviation	Mean
Control class	Pre-test	4,090	48,32
	Post-test	6,158	75,00
Experimental class	Pre-test	3,664	52,52
	Post-test	5,607	83,88

It is clear from the above table's data that both classes improved from the pre-test to the post-test. In contrast to the experimental class, the control class's improvement was less significant. The control group went from 48.32 to 75.00, while the experimental group went from 52.52 to 83.88.

These score findings show that students were positively impacted by the media utilized in the experimental class.

2. Normality test

The results of the normality test can be seen in the table below:

Table 4.4 normality test

Class	Test	Sig.value
Control	Pre-test	0,917
	Post-test	0,992

Experimental	Pre-test	0,698
	Post-test	0,847

The two classes' pre-test and post-test scores were both higher than 0.05.

As a result, the study's data were dispersed normally.

3. Homogeneity test

The homogeneity test yielded a significance value of 0.595. Given that this value surpassed the predetermined significance level of 0.05, the null hypothesis concerning the homogeneity of variances was retained. In light of these findings, it may be inferred that the dataset demonstrated homogeneous variance and fulfilled the underlying assumptions required for further statistical analysis.

4. T-test

A two-tailed significance value (Sig. 2-tailed) of 0.000 was seen in the t-test findings. The null hypothesis (H_0) was rejected given the calculated p-value was significantly below the traditional threshold of 0.05, providing empirical support for the acceptance of the alternative hypothesis (H_1).

Discussion

The study's findings demonstrated that using Tiktok cartoon clip media integrated with Gemini AI as a teaching tool for the simple past tense at the senior high school level had a major impact. This is shown from the progress made in the test results for the experimental class and the control class, where the experimental class performed progressively greater achievements than the control group. The experimental class received an average score of 83.88, in contrast to the 75.00 of the control group. Even more importantly, outcomes of the independent sample t-test determined a value of (sig. 2-tailed) of 0.000, indicating a significant difference between the class taught past tense using Tiktok cartoon clip media integrated with Gemini AI and students who were only taught simple past tense using conventional methods.

The use of cartoon clips on the Tiktok platform can help students understand the material more easily during learning. According to Wijaya et al. (2026) using visual media can later stimulate students and make learning more interesting. This statement is also strengthened by Maharani et al. (2024) who stated such using audio-visual media can present information that is easier to understand and more interesting

compared to conventional learning. Furthermore, the integration of Gemini AI also gave a good contribution. With Gemini AI, students obtained explanations, feedback, examples, and sentence corrections briefly, clearly, and quickly. Therefore, learning during class became more effective. Fajriati et al. (2024) explained that the use of AI technology in teaching can improve learning effectiveness and can support students to learn independently. The findings of this research can also be said to be in line with previous research conducted by (Nuraeni & Undayasari, 2025), that Tiktok can create an interactive and interesting learning atmosphere when used as a learning medium. In addition, the use of cartoons also makes the learning atmosphere more enjoyable (Jusniani & Monariska, 2025). Grammar is often considered difficult and also boring learning material. Assisted by cartoon visualization, concepts that are considered abstract by students will later be easier to digest and understood by students (Hasibuan et al., 2025).

It is obvious compared with the research results and discussion above that the usage of Tiktok cartoon media in combination with Gemini AI works well for teaching basic past tense for seniors in high school.

CONCLUSION

Considering the research's outcomes, it can be said that senior high school students may effectively learn the simple past tense by using Tiktok cartoon media combined with Gemini AI. This was demonstrated by the results showing that the experimental class's student learning outcomes improved more than those of the control group. More importantly, a significant value (sig. 2-tailed) of 0.000, which was less than 0.05, was determined by utilizing the t-test. As a result, H_0 could have rejected whereas H_1 might be accepted, potentially indicating that the integration of Gemini AI and Tiktok cartoon material had a major impact on students' comprehension of basic past tense content. Tiktok cartoons were used to make it learning fun and engaging, and Gemini AI could help students get feedback fast, which would make it easier for them to comprehend basic past tense content. In order to teach simple past tense at the senior high school level, Tiktok cartoon media

combined with Gemini AI can be utilized as a different, creative, and successful medium.

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