ENHANCING STUDENTS' WRITING ABILITIES THROUGH THE UTILIZATION OF *VISME* INFOGRAPHICS

Mufida Naima Sari[1], Luqman Al Hakim[2], Atik Astrini[3]
[1]Universitas Slamet Riyadi
[2]Universitas Slamet Riyadi
[3]SMA Negeri 6 Surakarta
[1]mufidaans@gmail.com

ABSTRACT

This study aims to improve students' ability in writing procedure texts through the use of Visme-based infographic media. The research is conducted using a Classroom Action Research (CAR) design involving 32 students of class XI F-11. The use of Visme resulted in a significant improvement in students' average writing score, with a gain score of 17.4 points. The results indicate that visual-supported writing through infographic media enhances structure, vocabulary use, and coherence.

Keywords: infographic, procedure text, writing abilities, Visme

A. Introduction

Writing is one of the main pillars in mastering English, especially at the upper secondary level, where productive skills are an important indicator of success in learning a foreign language. Among the various types of texts taught in the English curriculum, procedural texts are one of the competencies that students need to master because they require systematic and logical thinking skills, as well as the ability to convey information in a sequential and functional manner. Writing procedural texts requires an understanding of standard structures, such as objectives, materials, and steps, as well as the use of imperative verbs, sequence markers, and a concise but clear style of delivery. However, in practice, students often have difficulty organizing ideas, understanding text structure, and conveying information coherently.

Initial observations in class XI F-11 at a public high school in Surakarta show that the majority of students are not yet able to write procedural texts in a coherent and interesting manner. The texts produced by students tend to be monotonous, unstructured, and

lack the use of appropriate vocabulary. This reflects a weak mastery of genre structure and a lack of visual stimuli in the writing learning process. This reflects a weak mastery of genre structure and the lack of learning media that supports visual and systematic thinking processes.

This condition is exacerbated by a conventional teaching approach that emphasizes grammar rather than text structure development. In fact, writing learning requires strategies that integrate cognitive, linguistic, and visual aspects so that students can compose texts with a logical sequence and communicative style. To address this challenge, innovation in learning media is an urgent need. One alternative solution offered is the use of digital infographics through the Visme platform. Infographics enable students to understand procedural information in an attractive visual form, which plays an important role in clarifying the sequence of steps, mapping ideas, and strengthening understanding of text structure (Elaldı and Çifçi (2021); Ushbah Mubarok and Nurul Asri (2020)).

Several studies have shown the effectiveness of infographics in the context of learning to write English as a foreign language (EFL). Mariani, Lubis, and Hutagalung (2025) stated that infographics can improve writing performance and reduce students' anxiety levels when writing. Meanwhile, Manickam and Abdul Aziz (2020) found that the use of infographics in teaching grammar had a positive impact on EFL students' motivation to learn. Hamer, Hakim, and Laksono (2022) also revealed that high school students feel more assisted in structuring their ideas when using infographics. However, most existing studies are still limited to the context of descriptive writing or grammar, or are conducted at the higher education level.

This study offers a new contribution by integrating the use of Visme in teaching procedural texts at the high school level. The focus of this study lies on the influence of digital infographics on improving students' writing skills in terms of text structure, vocabulary use, and coherence. The research gap that this study aims to fill is the lack of studies that specifically examine the effectiveness of the Visme platform for procedural texts in the context of high school students in Indonesia. The novelty of this research lies in the use of Visme,

which has not been widely studied in the context of teaching specific genres at the high school level, with a classroom action design and a quantitative approach through gain score analysis between pre-tests and post-tests.

This study aims to determine the extent to which the use of Visme-based infographics can improve the procedural text writing skills of students in class XI F-11. Theoretically, this study is expected to enrich the study of visual-based English learning and genre-specific writing, while in practice, the results of this study can be a reference for teachers in choosing innovative learning media that are suitable for the characteristics of 21st-century students.

B. Research Method

This research is a Classroom Action Research (CAR) with a descriptive quantitative approach. The main objective of this research is to improve students' procedural text writing skills by using Visme infographics. The research was conducted in two cycles with the following stages: planning, implementation of actions, observation, and reflection.

The research was conducted in class XI F-11 at a public high school in Surakarta in the even semester of the 2024/2025 academic year. The object of the research was students' writing skills in procedural text material. The activities were carried out in the classroom, using the teacher's laptop and projector to display the material, as well as students' smartphones to access and create infographics through the Visme website.

The materials used were teaching materials on procedural texts in accordance with the curriculum. The main tools were the teacher's laptop, classroom projector, and students' smartphones connected to the internet. Visme is an online platform for creating interactive infographics used in the learning process.

Data were collected through two types of instruments: written tests and documentation. Tests were given before and after the action (pre-test and post-test) to measure students' writing skills. Documentation in the form of student test archives was used as supporting evidence.

There were two variables in this study: (1) procedural text writing skills,

namely the ability to arrange steps in a sequence with the appropriate structure, vocabulary, and coherence; (2) Visme infographics media, namely web-based visual aids used to compile procedural information in the form of infographics.

The data were analyzed descriptively and quantitatively by calculating the average pre-test and post-test scores, as well as the gain score (the difference between the post-test and pre-test scores) to assess the improvement in students' writing skills after learning using Visme.

The learning activities in this study began with the planning stage, which involved developing a lesson plan (Teaching Module) that included scenarios for using Visme infographics in teaching procedural texts. At this stage, the researcher also prepared teaching materials, assessment instruments (writing assessment rubrics), and digital learning media. The selection of topics in procedural texts was tailored to students' interests, such as “how to make simple foods” or “steps for using certain applications,” to increase relevance and motivation to learn. The researcher also ensured the readiness of technological facilities, including internet connection, teacher laptops and projectors, and student smartphones.

The implementation stage was carried out in two cycles. In the first cycle, the teacher reintroduced the structure and linguistic characteristics of procedural texts, followed by a demonstration of how to create infographics using the Visme platform. Students were then asked to write procedural texts based on their chosen topics and visualize them in the form of infographics. This process was carried out individually with the teacher's assistance. After the lesson, a post-test was conducted to measure the improvement in writing skills. The results of the first cycle were analyzed and used as a basis for improvements in the second cycle, such as simplifying instructions and providing additional visual examples. In the second cycle, the emphasis was on refining the text structure, selecting more appropriate vocabulary, and improving visual coherence in the infographic design.

The observation stage was carried out during the learning process to record student engagement, media effectiveness, and general classroom

dynamics. Meanwhile, the reflection stage was carried out after each cycle to assess the success of the actions based on test results and observations. This reflection was used as a reference to determine whether the learning activities needed to be continued, modified, or discontinued. Student learning outcomes were assessed by comparing pre-test and post-test scores, which were analyzed quantitatively to see the increase in average scores and changes in minimum and maximum scores. By using a quantitative descriptive approach, the researcher not only looked at overall success but also paid attention to individual improvement, so that the results of this study were more accurate in describing the impact of using Visme media on students' writing skills.

C. Result and Discussion

This study aims to determine the effect of using Visme infographics on improving the procedural writing skills of students in class XI F-11. The main focus of this study is to see the extent to which Visme infographics can encourage students to write in a more structured, logical, and communicative manner after being given treatment through learning activities designed in two action cycles. The research was conducted in the form of classroom action research, which began with a pre-test to measure the students' initial abilities, followed by a series of learning activities using Visme infographics, and ended with a post-test to see the progress of learning outcomes.

Quantitative data in the form of pre-test and post-test scores were collected from all 32 students. The data were analyzed descriptively and quantitatively by calculating the mean, highest score, lowest score, and gain score to determine the improvement that occurred after the action was taken. The analysis was conducted to obtain a comprehensive picture of the effectiveness of the media used in helping students understand text structure, organize content, and develop their ideas more systematically.

The improvement that occurred when comparing the pre-test and post-test results not only reflected individual progress but also illustrated the success of the learning strategy applied collectively in the classroom. The results of data processing show a significant increase in scores for most

students, both in terms of class average and the range of individual scores. A summary of the data processing results is presented in Table 1 to clarify the changes that occurred as a result of the application of Visme infographic media in the learning process.

Table 1. Summary of pre-test, post-test, and gain score values

Score	Average	Highest Score	Lowest Score
Pre-Test	62,91	85	40
Post-Test	80,31	95	65
Gain Score	17,40	–	–

From the table, it can be seen that the average pre-test score of students was 62.91, while the average post-test score increased to 80.31. The difference in average scores resulted in a gain score of 17.4 points, which indicates an improvement in students' writing skills after using Visme infographics. The highest score on the pre-test was 85, which increased to 95 on the post-test. Meanwhile, the lowest score increased from 40 to 65. This shows that not only students with high abilities experienced improvement, but students with low writing abilities also experienced significant progress.

The distribution of pre-test and post-test scores is illustrated in Figure 1. This figure clarifies that during the pre-test, the distribution of scores tended to be lower and more spread out, while in the post-test, students' scores were more concentrated above 75.

This change in distribution reflects an increase in the homogeneity of student achievement after learning activities were carried out with the help of Visme infographics. This means that the differences in ability between students have become smaller, indicating that this medium can reach all levels of learning ability in the classroom. Students with low abilities are helped through systematic visual presentation, while students with high abilities can maximize their creativity and depth of content in their writing. The increase in the lowest scores also indicates the success of the intervention in improving the abilities of students who previously had difficulty writing. In addition, the more even distribution of scores on the post-test indicates that the learning

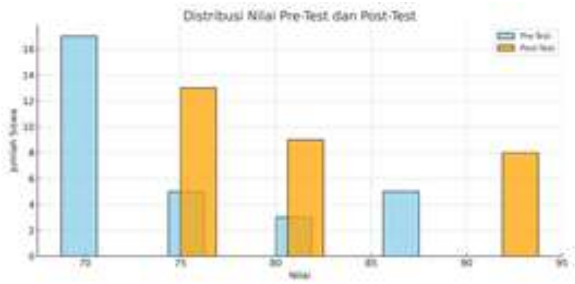
activities carried out were effective and inclusive.

When viewed from the aspect of writing skills, this improvement shows that students not only made progress in terms of writing mechanisms such as grammar and spelling, but also in terms of discourse structure, coherence between sentences, and the ability to convey procedural steps clearly and sequentially. Visme infographics helped students identify important parts of procedural texts, such as objectives, materials, and work steps, while linking them visually to facilitate systematic thinking. The visualizations provided by Visme enabled students to organize their ideas gradually and logically, which had previously been a major obstacle for many of them.

In addition to improvements in cognitive aspects, the use of Visme also contributes to students' affective aspects. Based on reflections and questionnaire results, students showed greater enthusiasm when writing with the help of infographics. They felt more interested because the writing process was no longer monotonous or limited to narrative text alone, but also involved attractive design and visual elements. This has an impact on increasing students' intrinsic motivation and fostering confidence in expressing their ideas in writing. The combination of text and visual elements has been proven to help students who have a tendency towards visual and kinesthetic learning styles.

Furthermore, from an outcome-oriented learning perspective, the increase in post-test scores and their distribution provides evidence that digital media-based approaches such as Visme are highly relevant for application in upper secondary classrooms. With limited face-to-face time and the need to deliver material efficiently, this media supports the optimal achievement of learning objectives. Moreover, this approach reinforces the role of teachers as facilitators, where students are given space to be more active in the learning process, including in exploring ideas, designing texts, and collaborating when presenting their work. These findings confirm that the integration of technology in writing instruction is not merely a trend but a pedagogical necessity that can drive the transformation of education quality in the digital age.

Picture 1



Distribution of Pre-Test and Post-Test Scores

The improvement in students' writing skills after using Visme infographics is in line with the findings of Ushbah Mubarok and Nurul Asri (2020), who stated that infographics help students organize the structure of procedural texts in a more systematic and interesting way. This finding is reinforced by Shaman (2023), who mentions that infographics not only improve the quality of writing but also contribute to increased motivation and reduced anxiety among students in writing activities. In the context of this study, students directly stated that the use of Visme helped them understand the sequence of steps in procedural texts, expand their vocabulary, and improve the clarity of their ideas.

Theoretically, these results are relevant to the views Elaldı and Çifçi (2021), who emphasize the importance of integrating cognitive, linguistic, and visual elements in writing instruction. Infographics provide a visual representation that makes it easier for students to map the structure of the text, organize information logically, and convey ideas more communicatively. Visme, as a digital infographic presentation platform, allows for the creation of interactive and engaging procedural steps, thereby bridging the gap between abstract understanding and concrete representation of the text content.

These findings also reinforce the study by Mariani et al. (2025), which shows that infographics can reduce anxiety levels in writing and improve the writing performance of EFL students, as well as supporting the opinion of Manickam and Abdul Aziz (2020) that infographics have a positive impact on learning motivation in the context of grammar learning. Thus, this study makes a broader contribution to the visual approach in teaching procedural texts, which has been studied more in the context of descriptive texts and at the higher education level.

With empirical evidence and reinforcement from previous theories and studies, it can be concluded that Visme infographics have proven to be

an innovative and effective learning solution in improving high school students' procedural writing skills. In addition to improving the quality of the structure and content of writing, this media also encourages active engagement, develops visual thinking, and enriches the overall learning experience of students.

The use of Visme-based infographics directly addresses the needs of writing learning, which has been dominated by conventional approaches that focus on grammar but lack space for exploring ideas and visualizing information. This platform allows teachers to present material in a more interactive and contextual form, and gives students the opportunity to actively participate in compiling their own visual content. This is in line with the findings of Hamer et al. (2022) that the use of infographics helps students organize their ideas in a more structured and interesting way.

Pedagogically, Visme's contribution to writing instruction shows that technology-based approaches have great potential for application in modern curricula that demand creativity, digital literacy, and critical thinking. This study makes an important contribution to expanding writing instruction practices in the classroom, particularly in the genre of procedural texts, which have tended to receive less attention than other types of texts. Thus, the use of Visme infographics is not only a visual aid, but also a pedagogical strategy that can revolutionize writing learning to be more interactive, participatory, and in line with the characteristics of 21st-century learners.

Moreover, the success of this medium in bridging the gap between low- and high-ability students also shows that Visme supports the principle of inclusivity in learning. Not only did students with high comprehension abilities experience progress, but students who previously struggled were also able to show significant improvement in their writing skills. This indicates that a visual-based approach is not only engaging but also accessible to all students with varying ability levels.

Finally, in terms of implementation, using Visme does not require complex technological infrastructure, as it can be accessed through simple devices such as smartphones and laptops. This makes it a viable solution for implementation

in various school contexts, whether with limited facilities or those already oriented towards learning digitalization. With its flexibility, effectiveness, and visual appeal, Visme infographics are worth considering as the primary learning medium in the development of writing skills at the high school level.

In addition to its pedagogical advantages, the use of Visme also has an impact on learning time efficiency. The process of explaining text structure, which usually takes time due to students' limited understanding, can be conveyed more quickly and understood visually. Teachers do not need to repeat verbal explanations over and over again because students can directly observe and analyze the text structure presented in visual form. This provides more space for writing practice and independent reflection, which are central to the development of writing skills.

Another advantage of using Visme is its flexibility in supporting a project-based learning approach. In the process of writing procedural texts, students are not only asked to write on worksheets, but are also allowed to design their own infographics using Visme. This activity allows them to experience the design thinking process, where they must determine objectives, organize steps, select icons and visual layouts, and consider text readability. This integrates aspects of visual literacy with language skills that enrich each other.

The experience of creating infographics also adds value in strengthening 21st-century competencies, such as collaboration and communication. In some cases, students are encouraged to work in small groups while exploring Visme, discussing the sequence of steps, and dividing roles in creating the design. This activity not only improves their social skills but also strengthens their understanding of the text content due to their active involvement in the content creation process. Thus, learning becomes more meaningful and contextual.

Finally, the successful use of Visme in this study opens up opportunities for the application of similar media in other text genres, such as explanatory, descriptive, and expository texts. If further developed, Visme can become an integral part of digital literacy learning strategies that focus not only on information

consumption but also on the production of visual-informative content by students. In other words, Visme not only helps students understand texts but also serves as a means to build multimodal communication skills that are highly relevant to the challenges of the times.

E. Conclusion

This classroom action research empirically proves that the use of Visme-based infographic media has a positive and significant impact on improving the procedural writing skills of students in class XI F-11 at a public high school in Surakarta. This is reflected in a substantial increase in the students' average scores, from 62.91 on the pre-test to 80.31 on the post-test, with a gain score of 17.40 points. Not only that, the increase in the minimum score from 40 to 65 shows that this intervention is effective in reaching the entire spectrum of student abilities, including those who previously showed difficulties in writing.

These findings confirm that the integration of Visme as an interactive and digital-based visual medium contributes significantly to developing the structural, linguistic, and coherence aspects of procedural text writing. Its ease of access, intuitive interface, and attractive visual elements make Visme not only a technical tool but also a pedagogical bridge that supports active student engagement and enriches their learning experience.

The unique contribution of this study lies in the use of Visme as an infographic platform, which has not been widely discussed in the context of procedural text learning at the high school level. While most previous studies have focused more on descriptive or grammar learning, this study highlights the effectiveness of the visual approach in helping students compose procedural steps logically and communicatively. Thus, the results of this study broaden our understanding of the use of visual technology in teaching English as a foreign language (EFL) and offer a teaching model that is more contextual, creative, and relevant to 21st-century learning needs.

Practically, this study has direct implications for teachers and educators to integrate visual-based digital media into the learning process, especially in writing instruction. The use of Visme infographics can be an

alternative strategy that not only supports the achievement of writing competencies but also builds confidence, learning appeal, and a deeper structural understanding among students. These findings are expected to encourage further development of innovative technology-based learning approaches at the secondary education level.

REFERENCES

Elaldı, Şenel, and Taner Çifçi. 2021. "The Effectiveness of Using Infographics on Academic Achievement: A Meta-Analysis and a Meta-Thematic Analysis." *Journal of Pedagogical Research* 5(4):92–118. doi:10.33902/JPR.2021473498.

Hamer, Welliam, Rahman Hakim, and Agung Laksono. 2022. "The Perceptions of Students on the Application of Infographics as Instructional Media in Promoting Their Writing Abilities." *International Journal of Research in Education* 2(2):187–95. doi:10.26877/ijre.v2i2.12073.

Manickam, Revathy, and Azlina Abdul Aziz. 2020. "The Effectiveness of Using Infographics as an Aid for Reading Comprehension." *Asia Proceedings of Social Sciences* 6(3):226–29. doi:10.31580/apss.v6i3.1224.

Mariani, Titin, M. Joharis Lubis, and Surya Masniari Hutagalung. 2025. "Utilization of Canva Infographics to Improve Learning Outcomes of Procedure Texts." *International Journal of Multidisciplinary Approach Research and Science* 3(01):27–34. doi:10.59653/ijmars.v3i01.1177.

Shaman, Suda Nasser Hamad. 2023. "The Impact of Using Infographics on Developing EFL Learners' Writing Skills and Reducing Writing Anxiety." 1):2(31 □□□□□□□□ □□□□□□–26. doi:10.21608/ssj.2023.309135.

Ushbah Mubarok, Faiz, and Atiqah Nurul Asri. 2020. "Infographics: Media for Improving Students' Writing Abilities." *KnE Social Sciences*. doi:10.18502/kss.v4i4.6469.