



The Development of Smart Apps Creator Learning Media to Improve Narrative Writing Skills of Students

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Abstract This study aims to develop Smart Apps Creator (SAC)-based learning media to improve the narrative writing skills of grade IV students at Elementary School 1 Kertek. This research is motivated by the students' limited ability to write their narratives, which is caused by the lack of interactive and engaging learning media in the Indonesian learning process. The research employed the Research and Development (R&D) method, utilizing the ADDIE model, with 26 grade IV students serving as development subjects and 10 grade V students as evaluators. The results of the study showed that the learning media developed achieved a very good level of feasibility, with validation rates of 93% among material experts, 94% among media experts, and 100% among practitioners for practicality. Effectiveness tests, using both pre-tests and post-tests, showed a significant improvement in students' narrative writing skills, with an average N-Gain of 0.88. These findings demonstrate that SAC media is effective in enhancing narrative writing skills and can create a more interactive, engaging, and suitable learning environment tailored to the needs and characteristics of elementary school students.

Keywords: learning media, smart apps creator, narrative text

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Introduction

Education is the main pillar in the development of quality human resources, as mandated in Law Number 20 of 2003 concerning the National Education System. In this context, the Independent Curriculum serves as an answer to the challenge of improving the quality of national education by focusing on strengthening the Pancasila Student Profile, developing literacy and numeracy, and adopting a flexible learning approach (Yahrif & Supardi, 2023).

Learning the Indonesian language in elementary school is crucial for developing students' language skills optimally, both orally and in writing, as well as for understanding Indonesian literature. The goal is to equip students with the ability to communicate effectively and efficiently. The core skills developed include listening, speaking, reading, and writing skills required in all subjects (Linggasari & Rochaendi, 2022; Khair & Misnawati, 2022).

Writing is the last skill taught in Indonesian language learning, but it has an important role in communication and personal development of students. Engaging writing exercises can boost students' confidence and be beneficial in various academic fields. The goal of writing instruction is to train students to express their ideas indirectly through active and productive activities (Moses & Mohamad, 2019; Pidrawan et al., 2022).

A narrative is a type of text that outlines events sequentially and logically, encompassing plots, characters, and a series of events that correspond to the student's experience. Writing a narrative essay requires the use of appropriate sentences, vocabulary, logic, and effectiveness, in line with the Indonesian curriculum in elementary school (Rofi'i & Rafli, 2019; Astutik et al., 2024).

Smart Apps Creator (SAC) is an application used to create interesting multimedia-based learning media. With SAC, developers can integrate text, images, and videos into a single interactive multimedia

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platform. This ability inspired researchers to develop learning media using SAC to help students better understand the material (Rodafinos et al., 2024).

Indonesian plays an important role in formal education, so the success of students in communicating requires special attention. However, there are still challenges, such as low writing skills and students' ability to write narratives as well as negative perceptions of the course, which are considered boring and difficult (Magdalena et al., 2021; Prasrihamni, 2019; Deminda & Ahmad, 2022). Research conducted by Pammu (Suhartati, 2021) showed that the majority of students (60%) scored below 6.5 in narrative writing skills, while the remaining 40% scored above 6.5. This shows that the use of conventional learning media can have a negative impact on students' narrative writing skills. Furthermore, the research conducted revealed that students' writing skills have not been developed optimally, as teachers tend to focus more on assigning tasks without providing adequate explanations to students about the correct writing techniques. Several previous studies have investigated the development of learning media to enhance narrative writing skills. First, research by Suhartati (2021), Pranata et al. (2021), and Elise (2024) developed a mobile application-based learning medium to teach junior high school students how to write short stories, resulting in a 78% increase in writing skills. Second, the study by Hanan & Sukardi (2024), which utilized Adobe Flash-based interactive learning media to teach narrative texts to grade V students, yielded an 85% increase in learning outcomes. Third, the study by Yulianti et al. (2024) utilized animation video-based learning media to teach fairy tales to grade IV students, resulting in a 79% increase in learning motivation. Fourth, research by Ilyas & Pramono (2025) using digital series image-based learning media to write stories for elementary school students yielded significant results in storytelling skills. Fifth, Karseno et al. (2021) developed an Android-based writing learning app for elementary school students with an 88% user satisfaction rate. Based on previous research studies, this study presents a novelty in that it is the first to specifically utilize SAC as a learning media development platform to enhance the narrative writing skills of elementary school students. SAC offers the advantages of more comprehensive multimedia integration with ease of operation that suits the characteristics of elementary school students.

The primary issue in this study is the low narrative writing skills of fourth-grade students at Kretek 1 Elementary School, which is attributed to the limited use of innovative and interactive learning media in the Indonesian educational system. Based on the results of interviews with grade IV teachers at Kretek 1 Elementary School, it was found that students had difficulty expressing their ideas in writing, while narrative writing was considered complex. The conventional methods used by teachers also contribute to the weakening of students' motivation to learn. This finding aligns with Pammu's research (Suhartati, 2021), which indicates that the majority of students (60%) scored below 6.5 in narrative writing skills, while the remaining 40% scored above 6.5. Furthermore, research by Pranata, Kartika, and Zulherman (2021) revealed that students' writing skills have not developed optimally, with teachers tending to focus more on assigning assignments without providing adequate explanations to students about the right writing techniques.

Findings from previous research are relevant to the focus of this study. Interviews with grade IV teachers of Kretek 1 Elementary School revealed that students' narrative writing skills are still low. Students struggle to express their ideas in written form, as writing a narrative is often considered a complex task. Conventional methods used by teachers also contribute to the weakening of students' motivation to learn. This highlights the need for innovative approaches to systematically and engagingly improve students' narrative writing competencies.

To overcome the low ability to write narratives, innovation is needed through the use of learning media. The media plays a crucial role in enhancing the effectiveness of material delivery, fostering learning interests, and promoting students' understanding, particularly at the elementary school level. Interesting and interactive media have been proven to increase student motivation and concentration, thereby supporting the optimal achievement of learning goals. The use of learning media needs to be adjusted to the characteristics of elementary school students. One type of media that suits these needs is audio-visual learning media, which combines visual and auditory elements in the context of the teaching and learning process at school, supported by technology (Sukmadewi & Suniasih, 2022; Deminda & Ahmad, 2022; Pulungan, 2021; Abbas et al., 2020; Puspitarini & Hanif, 2019).

From the description of the problem above, it can be concluded that there is a need for improvement in the learning process for students. Based on the facts and data obtained from the results of observations conducted by researchers at Kretek 1 Elementary School, research on the development

of SAC learning media to improve narrative essay writing skills has never been carried out at Kretek 1 Elementary School. Therefore, research on narrative text writing is important. This research was conducted because, in learning Indonesian, the biggest challenge for students lies in the aspect of writing, particularly writing narrative texts.

This research makes a significant contribution to education in Indonesia in several aspects. First, theoretically, this research enriches the scientific knowledge on the development of technology-based learning media to enhance narrative writing skills in elementary schools, particularly in the context of using SAC as a platform that has not been widely explored in Indonesian education. Second, practically, this research produces innovative learning media products that elementary school teachers throughout Indonesia can use to enhance the quality of Indonesian education, particularly in the area of narrative writing. Third, methodologically, this study provides a model for developing learning media that can be adapted for use in other subjects and educational levels. Fourth, in terms of policy, the results of this research can serve as a reference for the Ministry of Education, Culture, Research, and Technology in developing guidelines for the use of technology in Indonesian elementary school learning. Fifth, this research supports the implementation of the Independent Curriculum, which emphasizes technology-based learning and holistic student literacy development.

Methods

This research used the Research and Development (R&D) method. The R&D method was a research approach applied to create a product and test its effectiveness. This study followed a scientific process to research, design, develop, test, and evaluate the validity of the product. The product developed was not always a physical object; it could also be software, such as a computer program for data management, classroom learning, or an educational and learning model (Scott, 2017, as quoted in Nasrullah et al., 2022).

Through this method, the researchers aimed to discover and test various innovative products that not only had a positive impact on individuals but also contributed significantly to institutions and society at large. The research approach used in this study was quantitative, involving the collection of numerical data that was then processed through detailed statistical analysis. This method allowed the researchers to produce objective and measurable findings, thus providing a strong foundation for decision-making based on valid and accurate empirical evidence. One of the models used in the learning process was the ADDIE learning model (Branch, 2010, as cited in Elviana, 2022).

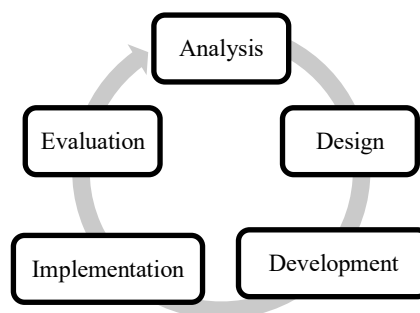


Figure 1. Steps in the ADDIE Development Model

In this study, data were collected regarding the need for the development of SAC learning media, with students serving as the primary source of information. Specifically, 26 fourth-grade students from Kretek 1 Elementary School were involved to provide in-depth insights into the needs and challenges they faced during the learning process. The data collected from them was invaluable, as they reflected first-hand experiences as users of the learning media. In addition to evaluating the effectiveness and quality of the developed learning media, this study also involved students as evaluators. A total of 10 fifth-grade students from Kretek 1 Elementary School were selected to provide critical evaluations of the use of SAC. Experts also played a crucial role in this study as supervisors in the development of SAC learning media for fourth-grade students. This was carried out through four stages of testing:

feasibility testing, validity testing, reliability testing, and usability testing. The data collection techniques used in this study included observation, interviews, questionnaires, and documentation. The data analysis techniques used were the normality test, t-test, and N-Gain (average gain) test.

Results and Discussion

Results

Adequate data must support the results obtained from the research. The research findings should provide answers to the research questions or hypotheses raised in the introduction. The results of the research are presented in three discussions, namely the analysis of learning media needs, the feasibility of learning media, and the effectiveness of SAC learning media in improving narrative writing skills. The following are the results obtained in this study.

Analysis of Learning Media Needs

The purpose of this media needs analysis is to gather information about the need for developing SAC media to enhance the narrative writing skills of fourth-grade students at Kretek 1 Elementary School. This analysis was conducted through student observation, teacher interviews, and the distribution of questionnaires. The results of the needs analysis indicate that teachers have been utilizing conventional learning media, including textbooks and picture books. In addition, teachers have not utilized or operated digital-based media such as SAC.

The narrative writing skills of fourth-grade students at Kretek 1 Elementary School are still not optimal and need improvement. Students often struggle with choosing a topic or understanding how to write a narrative text correctly and effectively. This happens because students tend to get bored if they only read books. Therefore, both teachers and students need the development of learning media that can support the improvement of narrative writing skills of fourth-grade students of Kretek 1 Elementary School.

Product Validation

SAC media is developed using the SAC app. These media are interactive and include learning objectives, learning objectives, content, worksheets, and educational videos. In this medium, students can interact with the app as they see fit. The media can be accessed by downloading the application provided by the teacher. Designed like a game, this type of media captures students' attention and increases their enthusiasm for learning. Additionally, the primary advantage of this medium is that it can be accessed anywhere and at any time, without requiring an internet connection. The use of Smart Apps Creator has minimal drawbacks, as it can be accessed on smartphones and laptops without requiring internet access. The figure below illustrates the design of the SAC learning media.



Figure 2. Design of Media Smart Apps Creator (SAC) Learning

The SAC learning media developed have undergone an evaluation process, including feasibility analysis and validation by content experts and media experts. The results of the SAC learning media evaluation are presented in Tables 1, 2, and 3 below.

Table 1. Content Expert Analysis

No.	Indicator	Score
1	Aspects of material presentation	15
2	Aspects of language use	15
3	Content aspects and purpose	18
4	Quality aspects	4
Total Score		52

Table 1 shows that content experts have evaluated the material in Smart Apps Creator media, and it falls into the "very feasible" category, scoring 52 out of a maximum of 56, resulting in a percentage of 93%. Additionally, media experts provide the following evaluations for the SAC media.

Table 2. Media Expert Analysis

No.	Indicator	Score
1	Alignment of media with learning objectives	8
2	Alignment of media with student development level	11
3	Ease of use of media	12
4	Visual presentation of media	18
Total Score		49

Table 2 shows that media experts rated SAC's media content as "Very Worthy" with a score of 49 out of a maximum score of 52, corresponding to a percentage of 94%. This aspect of assessment shows that learning media is very feasible for testing students.

Table 3. Practitioner Analysis

No.	Indicator	Score
1	Media presentation	10
2	Presentation of the material	10
3	Content and purpose	10
4	Quality teaching techniques	10
5	Alignment of media with learning objectives	10
6	Media suitability to the student's level of development	10
7	Ease of use of media	10
8	Aspects of Language Use	10
Total Score		80

Table 3 shows that practitioners rated SAC's media content as "Very Worthy" with a score of 80 out of a maximum score of 80, resulting in a 100% rating. These results demonstrate that Smart Apps Creator media is a valuable resource.

Effectiveness of Intelligent Application Builder Media (SAC)

During the product trial stage, two types of testing were conducted: small-scale trials and large-scale trials. In this trial, students were given 10 questions to answer using narrative text writing materials. The subjects in this trial were all grade IV students from Kretek 1 Elementary School, totalling 30 students. The small-scale trial involved six students, and the remaining 24 students participated in the large-scale trial. The data obtained from this trial are presented in Table 4.

Table 4. Results of Small- and Large-Scale Product Trials

No.	Group	Average Pre-test	Post-Test Average	Obtain
1	Small Groups	32.6	91.1	58.5
2	Large Group	27.5	91.9	64.4

The results of small and large-scale product trials show an increase. For small-scale trials, the pre-test result of 32.6 increased to 91.1 with a score difference of 58.5. The results of the large-scale trial also showed an increase, from the pre-test results of 27.5 to 91.9, with a score difference of 64.4. Thus, it can be concluded that there is a significant difference in students' narrative writing skills before and after using SAC media.

Table 5. T and N-Gain Test of Both Groups

Test	Group	Sig. Value (2-tail) / N-Gain	Information
T Test	Small Groups	0.000	There is a significant difference between pre-test and post-test scores.
	Large Group	0.000	There is a significant difference between pre-test and post-test scores.
Average N-Gain	Small Groups	0.87	Quite effective
	Large Group	0.88	Quite effective

The results of the Paired Samples T-Test conducted in both small- and large-scale trials showed a significance value (two-tailed) of 0.000. Because this value is smaller than the threshold of 0.05, it indicates a statistically significant difference between the pre-test and post-test scores in both groups. This shows that the use of SAC learning media has a meaningful impact on students' narrative writing skills. Furthermore, the average N-Gain score for the small group was 0.87, while the large group obtained a slightly higher average of 0.88. According to the Hake classification, these two scores fall into the category of "moderately effective", which indicates that these interventions provide a significant improvement in student performance. Overall, these findings support the effectiveness of SAC as a digital learning medium in increasing students' mastery of narrative text writing.

Discussion

This section presents an in-depth discussion of the research findings, emphasizing the importance of developing SAC media, which is designed using SAC applications to improve students' narrative writing skills and learning outcomes. This study showed a significant improvement in students' writing skills on narrative text materials. A key indicator of the effectiveness of this media is the measured improvement of students' writing skills, as shown by the results of the pre-test and post-test. This improvement is consistent with previous research, which suggests that the development of interactive media can help teachers deliver lessons and serve as an effective learning resource (Cobena & Surjono, 2022).

In addition to improving narrative writing skills, SAC media also has the potential to improve student learning outcomes. Surveys conducted during the study showed that students prefer to use interactive learning media because they are easier to understand, which ultimately increases student engagement during the learning process. This observation is further supported by statements from teachers who show that the level of student involvement increases when teaching narrative text writing material using SAC media. According to increased engagement, this increase in involvement is crucial in Indonesian language learning, considering that active participation and practice are essential aspects in developing students' language skills (Maritsa et al., 2021; Muhardini et al., 2020). When students feel connected to the material being taught, they tend to be more active in the learning process, which ultimately results in improved learning outcomes.

The development of SAC media aims to enhance students' writing skills and learning outcomes, tailored to their individual learning needs. This approach enables students to comprehend information more effectively in reading, ultimately improving their understanding of narrative text writing and learning outcomes. Interviews with teachers reveal that SAC media can enhance students' motivation to learn and better meet their learning needs, thereby making the learning process more engaging. Thus, the development of this medium makes a significant contribution to improving students' understanding of writing.

While the study yielded many positive outcomes, challenges were also identified, particularly those related to students' digital literacy and their ability to effectively utilise technology for learning purposes. For example, some students are limited in accessing technological devices, have visual impairments that cannot be corrected with glasses, and some are unable to read. These limitations can hinder students' ability to make optimal use of SAC learning media. These findings suggest that future media adoption should include additional support to enhance students' digital literacy, ensuring that all

students can effectively utilize learning media. Overcoming these challenges will help ensure that future students can fully experience the benefits of digital media.

To support the use of SAC media, it is essential to enhance digital literacy among both teachers and students. Some strategies that can be implemented include: 1) teachers should be trained to integrate digital media into the learning process, including how to use the SAC application, send and download the application to other devices, and troubleshoot technical issues that may occur. This training should also include how to teach students to use technology wisely, 2) students need to be given basic training on the use of technology, such as how to access applications offline, download the SAC application on smartphones, and understand the basic functions of the application. This training can be done gradually, using visual guides or video tutorials, 3) create a simple tutorial that students and teachers can access to understand how to use the app or how to create and edit on the SAC app, if the teacher wants to develop their media, 4) use a simple and accessible learning platform to support digital learning, such as providing an online discussion forum or WhatsApp group that can be used to share tips, ask questions, or complete tasks based on the SAC app, and 5) as part of digital literacy, it is important to teach learners about digital security, such as protecting personal data, avoiding malicious websites, and using devices safely. This will equip learners with the knowledge to use technology wisely.

One of the important considerations for implementing digital learning media is the availability of supporting infrastructure in the classroom. This research was conducted at Kretek 1 Elementary School, Wonosobo Regency, which has adequate supporting facilities, namely TVs and projectors in each classroom. The availability of these facilities makes it very easy for educators to integrate digital learning media into the learning process, thereby increasing the effectiveness and quality of learning provided to students.

However, this condition is not necessarily optimally applied in all schools. In some other schools, there is limited infrastructure that can hinder the integration of technology in learning. For example, there are still schools that do not yet have devices such as TVs, projectors, or other necessary equipment to fully utilize digital media. Therefore, although digital-based learning media has proven effective at Kretek 1 Elementary School due to the facilities available, its implementation in other schools with limited infrastructure may face challenges and limitations. This needs to be a serious concern in an effort to ensure equal access to educational technology in all schools.

For learning media to be applied more widely, especially in areas with limited infrastructure, several solution-oriented strategies need to be implemented gradually and sustainably. One approach that can be adopted is to utilize alternative technologies. In areas with limited access to technology, the use of applications that can operate offline or the use of smartphones can be an effective solution. Further research can be directed to explore the potential of more affordable technologies. This view aligns with the opinion that Android-based learning media is an educational technology innovation worthy of development and application (Maasawet et al., 2023).

In addition, for areas that lack access to technology, the use of manual-based media, such as creating media through paper or posters, can also be an effective learning alternative. According to research, the process of creating media manually encourages students to think creatively and organise information in a more personalised manner. These activities not only enhance students' understanding of the material but also develop analytical thinking and problem-solving skills in an authentic and relevant manner, according to their experiences (Khoirudin et al., 2021).

Another effort that is equally important is to enhance teacher competence through targeted training. Teachers need to be trained on the use of learning media, both digital and manual, so that the learning process continues to run optimally, even with limited facilities. stated that this training will help teachers in integrating media in the learning process and adapting teaching strategies in accordance with the conditions and infrastructure available in each school (Khoirudin et al., 2021).

Furthermore, this learning media testing needs to be expanded to include students from a variety of backgrounds, including those with special needs or learning difficulties. This aims to create a more inclusive and equitable learning environment. In line with this view, this approach can help students with special needs understand the material through a method that is more appropriate to their needs, while enriching the learning experience for all students in the classroom (Makransky & Mayer, 2022).

Ultimately, the implementation of comprehensive learning media requires support from collaboration between educational institutions and policymakers. Education policies must support the equitable distribution of technology and teacher training in various regions. According to Degner et al.

(2022), collaboration between application developers and educational institutions must be fostered through clear regulations, the ethical use of digital media, and the active involvement of parents and students in the process of implementing learning media. With a comprehensive, adaptive, and collaborative approach, the use of digital media, such as SAC, can be applied more broadly and equitably, despite ongoing infrastructure challenges in some areas. Overall, the study's results show that the developed learning media are feasible and effective. A structured development process, based on needs analysis and validated by experts, ensures that Smart Apps Creator products can address learning gaps identified in the classroom. Furthermore, the application of these media demonstrates that innovations in the use of digital learning tools can not only enhance students' cognitive achievement but also foster their affective engagement and psychomotor skills, aligning with the demands of 21st-century education.

The study's results, which showed the effectiveness of SAC media in improving the narrative writing skills of grade IV students, received strong support from various similar studies that had been conducted previously. The findings of this study are in line with a study conducted by Syadida & Erita (2022), who developed learning media using the SAC application in integrated thematic learning for grade IV elementary schools, with a validity rate of 89.1% and practicality of 90.6%. This comparison demonstrates the consistency of SAC's effectiveness as a digital learning medium at the elementary school level, particularly for grade IV students who exhibit cognitive development characteristics that necessitate a more visual and interactive learning approach.

The significant improvement in narrative writing ability in this study, with an average N-Gain of 0.87 for the small group and 0.88 for the large group, showed a similar pattern to the study by Zuhroh (2022), who developed serial image media through the SAC application for narrative text writing skills for grade IV elementary school students. Zuhroh's research showed an increase in N-Gain from 0.46 to 0.51, categorised as moderate. Although the N-Gain value in this study was higher, both studies confirmed that SAC had a measurably positive impact on improving the narrative writing skills of elementary school students.

The level of media validity, which reached 93% among content experts and 94% among media experts in this study, was strengthened by the results of a study by Syadida (2022), who developed learning media using the SAC application with the ADDIE model. The study demonstrated 93.33% validation by material experts, 92% validation by media experts, and 97.78% validation by design experts. This high level of validity consistency indicates that Smart Apps Creator has reliable quality standards in the development of learning media, both in terms of material content and media technology aspects.

The practicality aspect of the media, assessed by practitioners with a perfect score of 100% in this study, was supported by the findings of Fauziah & Muhammadi (2024), who developed interactive learning media on announcement writing skills using SAC in grade V elementary school. Their research showed that the practicality level of teacher responses reached 95.31%, and student responses reached 94.44% to 96.09%. The high level of practicality in these studies shows that SAC has a user-friendly interface and is easy to operate by teachers and students at the elementary school level.

The effectiveness of media in improving student learning outcomes, as shown in this study, is in line with the findings of Rahmadani et al. (2023), who developed interactive learning media based on SAC for grade IV students to understand various energy sources. Their research showed an effectiveness rate of 87.5% in limited trials and 91.3% in large trials. This comparison reinforces the argument that SAC is not only effective for Indonesian language learning but can also be applied effectively to a wide range of subjects at the elementary school level.

The increase in student motivation and engagement observed in this study was confirmed by Aini & Sukartiningsih (2022), who developed interactive multimedia using SAC at the beginning of reading and writing learning for first-grade elementary school students. Their research showed a very positive student response, with percentages of 96.11% on the first trial and 92.06% on the usage test. The high positive response from these students indicates that SAC is able to create an engaging learning experience and motivate students to engage in the learning process actively.

The findings related to improving students' knowledge competencies in this study are strengthened by the results of the research Surikno & Wahyuni (2023), which examines students' knowledge competencies using SAC in elementary schools in Islamic religious subjects. Their research showed an increase in the average score from 45.38 to 90.38 with a significance value of 0.00 in the

paired samples test. The consistency of this significant improvement demonstrates that Smart Apps Creator has a proven ability to enhance students' understanding and mastery of material across various subject areas.

The interactive multimedia aspect, which is a strength of SAC in this study, received theoretical and empirical support from the research by Khairani & Suriani (2025), who developed interactive multimedia using SAC in learning to write nonfiction texts in grade V of elementary school. Their research shows that interactive multimedia is highly valid and practical, achieving an average N-Gain in the high category. This confirms that the interactive multimedia approach, facilitated by SAC, is not only effective for writing narratives but also for various types of texts in Indonesian learning.

Overall, the convergence of the results of this study with those of similar studies demonstrates that SAC has proven to be a reliable and effective platform for developing digital learning media at the elementary school level. The consistency of results across different studies, subjects, and implementation contexts strengthens the argument that SAC can be a viable solution to improve the quality of learning, especially in developing the writing skills of elementary school students. These findings make a significant contribution to the development of the literature on the use of educational technology in Indonesian language learning and can serve as a reference for similar implementations in other schools.

Conclusion

This research aims to develop learning media using Smart Apps Creator (SAC) to enhance the narrative writing skills of fourth-grade students at Kretek 1 Elementary School. Based on the results of expert validation and effectiveness tests, this media has proven to be very feasible and quite effective. Validation by material experts and media experts yielded scores of 93% and 94%, respectively, along with a practicality score of 100%. The effectiveness test demonstrated a significant improvement in students' writing ability, with an average N-Gain of 0.87 (small scale) and 0.88 (large scale), which falls within the high effectiveness category. These findings suggest that SAC media can enhance student motivation, engagement, and learning outcomes in the process of learning to write narratives. The integration of visual, audio, and interactive elements makes this media in line with the learning characteristics of elementary school students. Thus, the development of technology-based learning media such as SAC has the potential to be applied more widely, not only in Indonesian lessons but also in other subjects that require critical and creative thinking skills. Future researchers are encouraged to explore the potential of this medium in collaborative learning contexts, particularly in enhancing students' communication skills and teamwork.

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