IDEAS

Journal on Language Teaching and Learning, Linguistics and Literature

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Volume 14, Number 1, June 2026
pp. 5594 - 5601

Issued by English study program of UIN Palopo

The Effect of Digital Visual Comic Media on Third-Grade Students' Reading Interest in Civic Education

Izzatul Nazwa Ussolehah[1], Diana Setiana[2], Asih Wahyuningsih[3]

[1,2,3]Fakultas Keguruan dan Ilmu Pendidikan, Universitas Muhammadiyah Cirebon, Jawa Barat

Article Info

Received: 2026-06-10
Revised: 2026-06-16
Accepted: 2026-06-30

Keywords:
Civic Education;
Digital Comic Media;
Elementary School;
Reading Interest

DOI:
10.24256/ideas. v14i1. 11894

Corresponding Author:
Izzatul Nazwa Ussolehah
izzatulnazawaa@gmail.com
Fakultas Keguruan dan Ilmu Pendidikan, Universitas Muhammadiyah Cirebon, Jawa Barat

Abstract

Reading interest plays a crucial role in improving elementary school students' learning achievement, particularly in Civic Education (PPKn). However, preliminary observations at SDN IV Dawuan revealed that most third-grade students demonstrated low reading interest due to the limited use of engaging instructional media. This study aimed to determine the effect of visual digital comic media on students' reading interest in Civic Education. A quantitative approach was employed using a pre-experimental method with a one-group pretest–posttest design. The study involved 39 third-grade students selected through saturated sampling. Data were collected using a reading interest questionnaire and analyzed using descriptive statistics, the Shapiro–Wilk normality test, and a paired-sample t-test. The findings showed a substantial improvement in students' reading interest after the implementation of visual digital comic media. The mean score increased from 37.08 in the pretest to 67.90 in the posttest, while the distribution of reading interest shifted from predominantly low (71.8%) before the intervention to predominantly high (69.2%) afterward. The normality test indicated that both datasets were normally distributed (pretest $p = 0.051$; posttest $p = 0.099$). Furthermore, the paired-sample t-test revealed a statistically significant difference between pretest and posttest scores ($t = -10.090$, $p = 0.000 < 0.05$), confirming that the implementation of visual digital comic media significantly improved students' reading interest. These findings suggest that visual digital comics provide an engaging and interactive learning experience that effectively promotes reading interest among elementary school students and can be utilized as an innovative instructional medium in Civic Education learning.

1. Introduction

Reading ability is a fundamental foundation that determines elementary school students' success in understanding various learning materials. Therefore, strengthening literacy culture has become an essential component of improving the quality of primary education (Astari, Gading, and Tristiantari 2026). The rapid development of digital technology has encouraged educators to utilize more interactive learning media to enhance students' engagement in reading activities (Wirdiyana, Sunaengsih, and Syahid 2024).

In Pancasila and Civic Education (PPKn), reading ability plays a crucial role because students are required to understand concepts, values, rights, responsibilities, and various issues related to social, national, and civic life that constitute the core content of the subject (Hemafitria, Rohani, and Safira 2024). However, PPKn instruction is still largely dominated by the use of printed textbooks, which often reduces students' interest in reading and results in passive learning experiences (Rahmawati, Oktaviani, and Gunardi 2025). Therefore, there is a need for learning media that can present instructional content in a more engaging, contextual, and developmentally appropriate manner for elementary school students (Kautama et al. 2026).

This problem was also identified among third-grade students at SD Negeri IV Dawuan. Based on classroom observations and interviews with the third-grade teacher, most students demonstrated low reading interest during PPKn lessons. Students tended to show little enthusiasm when asked to read learning materials. Only a small number of students read independently, while the majority were easily distracted throughout the learning process. Furthermore, the teacher primarily relied on printed textbooks as the main learning resource, limiting the attractiveness of the instructional materials. These findings indicate the need for innovative learning media that can effectively enhance students' reading interest in PPKn learning.

One of the learning media that has been widely developed in 21st-century education is digital comics, as they integrate text, illustrations, colors, and storylines into an engaging instructional medium (Astari et al. 2026). The use of digital comics has been shown to improve elementary school students' reading skills by providing visual representations that facilitate reading comprehension (Hidayat 2024). Other studies have also demonstrated that digital comics effectively enhance students' learning interest and academic achievement by creating a more interactive learning environment (Rahmawati et al. 2025). Moreover, digital comics have been considered appropriate learning media for improving elementary school students' reading abilities (Ananda, Yudiana, and Ujianti 2024).

Research on comics as instructional media has grown substantially in recent years, making digital comics one of the most extensively studied digital learning media in primary education (Rahmawati et al. 2025). Nevertheless, most previous studies have focused on improving reading ability, reading comprehension skills, and learning interest in Indonesian language and science (IPAS) subjects (Kautama et al. 2026).

A review of previous studies reveals a research gap regarding the use of visual digital comics to improve students' reading interest in Pancasila and Civic Education (PPKn), particularly in lower elementary grades. Most existing studies have primarily examined improvements in reading ability, reading comprehension, and learning outcomes, while students' reading interest in PPKn has received limited attention (Setianingsih, Nurmahanani, and Sari 2024). In fact, the characteristics of PPKn materials, which emphasize values and real-life situations, are highly suitable for presentation through digital comics that integrate visual illustrations, dialogues, and narrative storylines capable

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

of increasing students' interest, motivation, and engagement in reading and learning activities (Sari and Ninggar Renata Putri 2025).

Based on this research gap, the present study aims to analyze the effect of using visual digital comic media on the reading interest of third-grade students in Pancasila and Civic Education (PPKn) at SD Negeri IV Dawuan. Specifically, this study seeks to examine students' reading interest before and after the implementation of visual digital comic media and to determine the effect of this instructional medium on improving their reading interest. The novelty of this study lies in the application of visual digital comics in PPKn instruction with a specific focus on enhancing the reading interest of third-grade elementary school students. The findings are expected to provide empirical evidence for the development of innovative digital learning media that support the strengthening of literacy culture in elementary education.

2. Method

Research Design

This study employed a quantitative research method using a pre-experimental approach with a one-group pretest–posttest design to examine the effect of visual digital comic media on the reading interest of third-grade students in Pancasila and Civic Education (PPKn) at SD Negeri IV Dawuan. In this design, participants completed a reading-interest questionnaire before receiving the intervention (pretest) and after participating in learning activities using visual digital comic media (posttest). The difference between the pretest and posttest scores was used to determine the effectiveness of the intervention. The one-group pretest–posttest design is widely employed in educational intervention research because it enables researchers to evaluate changes in participants' outcomes before and after the implementation of a learning strategy within the same group(Alessandri, Zuffianò, and Perinelli 2017).

Furthermore, the one-group pretest–posttest design is frequently adopted to evaluate the immediate impact of educational interventions because it allows researchers to compare participants' performance before and after treatment using the same measurement instrument (Shahid Hassan and Nadarajah 2021). The study was conducted during the second semester of the 2025/2026 academic year. Students first completed the pretest questionnaire, participated in PPKn learning using visual digital comic media, and subsequently completed the posttest questionnaire after the intervention.

Pretest	Treatment	Posttest
O_1	X	O_2

Population and Sample

The population of this study consisted of all third-grade students at SD Negeri IV Dawuan during the 2025/2026 academic year. Because the population size was relatively small and accessible, all students were selected as research participants using a saturated sampling (total sampling) technique. Consequently, the study involved 39 students who participated in all stages of the research, including the pretest, treatment, and posttest. Total sampling is considered appropriate when the entire population can be involved because it minimizes sampling bias and provides comprehensive information representing the target population (Etikan 2017).

Data Collection and Research Instruments

Data were collected using questionnaires and documentation. Students' reading interest was measured using a structured questionnaire consisting of 20 Likert-scale items developed based on five indicators: reading attraction, reading attention, willingness to read, reading frequency, and engagement in reading activities. The questionnaire was administered twice, before and after the intervention, to measure changes in students' reading interest. Documentation, including classroom photographs and school records, was collected to complement the quantitative findings.

Before implementation, the questionnaire was evaluated through validity and reliability testing. Item validity was assessed using Pearson's Product Moment correlation, whereas internal consistency reliability was examined using Cronbach's Alpha coefficient. The development and validation of research instruments are essential to ensure that the collected data accurately measure the intended construct and produce reliable findings in educational research (Boateng et al. 2018). Furthermore, psychometric evaluation is a crucial stage in instrument development because evidence of validity and reliability ensures that the instrument consistently measures the intended construct and supports the credibility of research findings (Prinsen et al. 2018).

Data Analysis

The collected data were analyzed using IBM SPSS Statistics version 25 through descriptive and inferential statistical techniques. Descriptive statistics, including the mean, minimum score, maximum score, and standard deviation, were used to describe students' reading-interest scores before and after the intervention. Prior to hypothesis testing, the normality of the data was examined using the Shapiro–Wilk test because the sample consisted of fewer than 50 participants. Data with a significance value greater than 0.05 were considered normally distributed.

After satisfying the normality assumption, the research hypothesis was tested using a paired-samples *t*-test to determine whether there was a statistically significant difference between students' pretest and posttest scores at the 0.05 significance level. The paired-samples *t*-test is an appropriate statistical procedure for comparing two related measurements collected from the same participants before and after an educational intervention (Lakens 2017). The use of paired-samples t-tests in pretest–posttest intervention studies is recommended because it enables researchers to determine whether the observed changes after an intervention are statistically significant while accounting for repeated measurements obtained from the same participants (Kim et al. 2021).

3. Result

This study examined the effect of visual digital comic media on the reading interest of third-grade students in Civic Education (PPKn) at SDN IV Dawuan. The findings were obtained through descriptive statistical analysis, normality testing, and hypothesis testing using a paired-sample *t*-test. The results indicate a substantial improvement in students' reading interest after the implementation of visual digital comic media.

Table 1. Descriptive Statistics of Students' Reading Interest Before and After the Implementation of Visual Digital Comics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	39	20.00	60.00	37.08	16.67
Posttest	39	50.00	78.00	67.90	6.34

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Table 1 shows that the average pretest score was 37.08, with a minimum score of 20 and a maximum score of 60. After the implementation of visual digital comic media, the average posttest score increased to 67.90, with scores ranging from 50 to 78. In addition, the standard deviation decreased from 16.67 in the pretest to 6.34 in the posttest, indicating that students' scores became more homogeneous after the intervention. These descriptive findings suggest an improvement in students' reading interest following the use of visual digital comic media.

Table 2. Distribution of Students' Reading Interest Categories Before and After the Implementation of Visual Digital Comics

Category	Before Intervention n (%)	After Instervention n (%)
High	0 (0.0)	27 (69.2)
Moderate	11 (28.2)	11 (28.2)
Low	28 (71.8)	1 (2.6)
Total	39 (100)	39 (100)

As presented in Table 2, students' reading interest showed a noticeable improvement after the intervention. Before using visual digital comics, most students (71.8%) were classified in the low reading interest category, while none reached the high category. Following the intervention, 69.2% of students were categorized as having high reading interest, whereas only **2.6%** remained in the low category. These findings demonstrate a positive shift in students' reading interest after learning through visual digital comics.

Table 3. Results of the Shapiro–Wilk Normality Test

Variable	Statistic	df	Sig.
Pretest	37.08	39	0,051
Posttest	68.21	39	0.099

Table 3 indicates that the significance values of the Shapiro–Wilk test were 0.051 for the pretest and 0.099 for the posttest. Since both significance values were greater than 0.05, the data were normally distributed. Therefore, the assumption of normality was satisfied, allowing further analysis using a parametric statistical test.

Table 4. Results of the Paired-Sample t-Test

Variable	Mean	Mean Difference	t	df	Sig. (2-tailed)
Pretest	37.08				
Posttest	68.21	31.13	-10.090	38	0.000

The paired-sample *t*-test revealed a significance value of 0.000, which is lower than the significance level of 0.05. The average score increased from 37.08 in the pretest to 68.21 in the posttest, representing an improvement of 31.13 points. These findings indicate a statistically significant difference between students' reading interest before and after the implementation of visual digital comic media. Therefore, the use of visual digital comics significantly improved third-grade students' reading interest in Civic Education learning.

4. Discussion

The findings indicate that the implementation of visual digital comic media significantly improved the reading interest of third-grade elementary school students in Civic Education (PPKn). This improvement is reflected in the increase in the mean score from 37.08 during the pretest to 67.90 during the posttest. In addition, the proportion of

students categorized as having high reading interest increased substantially after the intervention. These results suggest that visual digital comics successfully create a more engaging learning environment by presenting learning materials through attractive illustrations, simple narratives, and contextual stories that encourage students to participate actively in reading activities. The statistical analysis also confirmed a significant difference between students' reading interest before and after the intervention (Sig. = 0.000 < 0.05), indicating that the use of visual digital comics positively influenced students' reading interest.

These findings are consistent with the study conducted by (Umairoh and Amaliyah 2022)**,** which reported that educational digital comic media effectively increased elementary school students' reading interest because visual storytelling attracts students' attention and encourages them to read independently. The study emphasized that colorful illustrations and interactive storylines help students remain engaged throughout the learning process, making digital comics an effective medium for literacy development in elementary education.

The findings are consistent with those of (Mu'awiah, Khairiah, and Rais 2025), who found that digital comic media significantly increased elementary school students' reading interest by providing interactive learning experiences through visual storytelling and contextual learning materials. Their classroom action research demonstrated that students became more enthusiastic about reading activities, participated more actively during lessons, and showed continuous improvement in reading interest after the implementation of digital comics. The researchers concluded that digital comics create an enjoyable learning environment that motivates students to develop positive reading habits. These findings support the present study, indicating that visual digital comic media effectively enhance students' reading interest in Civic Education learning.

Furthermore, the present findings support the study conducted by (Reinita, Jannah, and Sandika 2023), who found that Problem-Based Learning integrated with digital comic media created more interactive and student-centred learning environments in elementary schools. Their research explained that digital comics encourage students to explore learning materials independently, discuss ideas collaboratively, and improve their comprehension through contextual visual representations. Such learning experiences increase students' motivation and active participation throughout the learning process.

These findings are also supported by (Ishak, Adam, and Haslinda 2026) who concluded that digital comic media effectively increased elementary school students' interest in reading fiction texts. Their study showed that students were more enthusiastic about reading because digital comics combined colourful illustrations with simple language that matched students' cognitive characteristics. Consequently, students developed more positive reading habits and showed greater willingness to complete reading activities.

Similarly, (Tikayani et al. 2025) reported that discovery learning assisted by digital comics significantly enhanced students' reading interest and language learning outcomes. According to their findings, integrating digital comics into classroom instruction encouraged students to become more involved in reading activities because visual narratives reduced learning boredom and helped students understand textual information more effectively. This evidence further supports the present study, in which students demonstrated substantial improvement in reading interest after learning with visual digital comics.

The effectiveness of visual digital comic media is further supported by the findings of (Rehiara, Ririhena, and Notanubun 2025), who demonstrated that the use of digital comic media significantly improved elementary school students' reading ability while simultaneously fostering greater interest and active participation in classroom learning.

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Their classroom action research showed continuous improvement in students' reading comprehension across learning cycles after digital comics were implemented as instructional media. The researchers explained that the integration of illustrations, concise text, and contextual storylines enabled students to comprehend reading materials more effectively and maintain their attention throughout the learning process. These findings are consistent with the present study, in which visual digital comic media successfully enhanced students' reading interest in Civic Education by creating a more engaging and meaningful learning experience.

Overall, the findings indicate that visual digital comic media represent an effective instructional innovation for improving elementary school students' reading interest. The consistency between the statistical findings of this study, previous empirical research, and multimedia learning theory demonstrates that digital comics not only increase students' motivation to read but also create enjoyable, meaningful, and interactive learning experiences. Therefore, visual digital comic media can be recommended as an alternative instructional medium for Civic Education learning to strengthen literacy development among elementary school students.

5. Conclusion

This study concludes that the implementation of visual digital comic media significantly improved the reading interest of third-grade students in Civic Education (PPKn) at SDN IV Dawuan. The descriptive analysis showed an increase in the mean score from 37.08 in the pretest to 67.90 in the posttest, accompanied by a shift in students' reading interest from predominantly low to predominantly high categories. Furthermore, the paired-sample *t*-test produced a significance value of 0.000 ($p < 0.05$), indicating a statistically significant difference between students' reading interest before and after the implementation of visual digital comic media.

These findings demonstrate that visual digital comic media provide an engaging and interactive learning experience that encourages students to participate actively in reading activities, enhances their motivation to read, and fosters positive reading habits. Therefore, visual digital comic media can be recommended as an effective instructional medium for improving students' reading interest in elementary Civic Education classrooms. Future studies are encouraged to involve larger samples, different grade levels, and various subject areas to further examine the effectiveness of digital comic media in diverse educational settings.

6. References

Alessandri, Guido, Antonio Zuffianò, and Enrico Perinelli. 2017. "Evaluating Intervention Programs with a Pretest-Posttest Design: A Structural Equation Modeling Approach." *Frontiers in Psychology* 8(MAR):1–12. doi:10.3389/fpsyg.2017.00223.

Ananda, Vadila Nurista, Kadek Yudiana, and Putu Rahayu Ujianti. 2024. "Feasibility of Digital Comic Media in Enhancing Early Reading Skills for First-Grade Elementary School Students." *Jurnal Edutech Undiksha* 12(2):364–71. doi:10.23887/jeu.v12i2.69140.

Astari, Ni Luh Putu Dian, I. Ketut Gading, and Ni Ketut Desia Tristiantari. 2026. "Electronic Comic Media to Improve Elementary School Students ' Reading Interest and Reading Skills." *Jurnal Mimbar Ilmu* 31(1):250–58.

Boateng, Godfred O., Torsten B. Neilands, Edward A. Frongillo, Hugo R. Melgar-Quiñonez, and Sera L. Young. 2018. "Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer." *Frontiers in Public Health* 6(June):1–18. doi:10.3389/fpubh.2018.00149.

Etikan, Ilker. 2017. "Sampling and Sampling Methods." *Biometrics & Biostatistics International Journal* 5(6):215–17. doi:10.15406/bbij.2017.05.00149.

Shahid Hassan, and Sunil Pazhayanur Venkateswaran Vishna Devi Nadarajah. 2021. "Evaluation of Immediate Impact of Faculty Development Programme Using a Pretest–Post-test Study Design Format." *Innovation and Education* 3(1):1–9. doi:10.1186/s42862-021-00009-9.

Hemafitria, Hemafitria, Rohani Rohani, and Mirna Safira. 2024. "Implementasi Kurikulum Merdeka Dalam Perwujudan Profil Pelajar Pancasila Melalui Pendidikan Kewarganegaraan." *Jurnal Pendidikan Kewarganegaraan* 8(1):180–94. doi:10.31571/jpkn.v8i1.7382.

Hidayat, N. R. 2024. "Digital Comics for Differentiated Learning in Elementary Education." *Jurnal Teknologi Pendidikan* 26(December):843–59.

Kautama, Elsa Dwi, Nuni Widiarti, Sri Sumartiningsih, and Kata Kunci. 2026. "Analisis Literatur : Efektivitas Komik Digital Dalam Meningkatkan Minat Belajar Dan Pemahaman IPAS Siswa Sekolah Dasar A . Pendahuluan Pembelajaran Ilmu Pengetahuan Alam Dan Sosial (IPAS) Di Sekolah Dasar (SD) Banyak Menyongsong Kesulitan Berupa Renda." 10(1):323–36.

Kim, Kyong Jee, Yeon Ji Lee, Mi Jin Lee, and Young Hyo Kim. 2021. "E-Learning for Enhancement of Medical Student Performance at the Objective Structured Clinical Examination (OSCE)." *PLoS ONE* 16(7 July):1–10. doi:10.1371/journal.pone.0253860.

Lakens, Daniël. 2017. "Equivalence Tests: A Practical Primer for t Tests, Correlations, and Meta-Analyses." *Social Psychological and Personality Science* 8(4):355–62. doi:10.1177/1948550617697177.

Prinsen, C. A. C., L. B. Mokkink, L. M. Bouter, J. Alonso, D. L. Patrick, H. C. W. de Vet, and C. B. Terwee. 2018. "COSMIN Guideline for Systematic Reviews of Patient-Reported Outcome Measures." *Quality of Life Research* 27(5):1147–57. doi:10.1007/s11136-018-1798-3.

Rahmawati, Oka Mania, Anna Maria Oktaviani, and Ari Gunardi. 2025. "Exploring the Development of Comic Media Research to Increase Elementary School Students' Reading Interest Over the Last Decade." *Jurnal Ilmiah Pendidikan Profesi Guru* 8(2):244–57. doi:10.23887/jippg.v8i2.95392.

Sari, Pratiwi Kartika, and Ninggar Renata Putri. 2025. "Pixton Digital Comic Media in PPKN Lessons to Improve the Character Profile of Pancasila Students." *Jurnal Penelitian Dan Pengembangan Pendidikan* 9(1):125–35. doi:10.23887/jppp.v9i1.85144.

Setianingsih, Desti, Indah Nurmahanani, and Nadia Tiara Antik Sari. 2024. "PENGARUH STRATEGI SURVEY, QUESTION, READ, RECITE, REVIEW (SQ3R) BERBANTUAN MEDIA KOMIK DIGITAL TERHADAP PENINGKATAN KEMAMPUAN MEMBACA PEMAHAMAN PESERTA DIDIK DI SEKOLAH DASAR." *Pendas : Jurnal Ilmiah Pendidikan Dasar* 9(September):898–907.

Wirdiyana, Adhista Ayu, Cucun Sunaengsih, and Aah Ahmad Syahid. 2024. "Utilization of Digital Books in Increasing Students' Reading Interest." *Pedagogia : Jurnal Pendidikan* 13(1):134–44. doi:10.21070/pedagogia.v13i1.1632.