

The effect of active debate assisted by e-comics on student collaboration

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Abstract

The main problem in learning Civics in elementary schools is the low collaborative ability of students, characterized by minimal interaction between students, the dominance of teacher-centered learning, and the less than optimal use of innovative learning methods and media. This condition has an impact on the low active participation of students in group work and class discussions. This study aims to analyze the effect of the active debate learning method assisted by e-comic media on the collaborative ability of fifth-grade students in the subject of Civics at SD Negeri 3 Way Galih. The study used a quantitative approach with a quasi-experimental design, posttest only control group design. The research sample consisted of 51 students, all of whom were sampled through saturated sampling techniques, consisting of an experimental class and a control class. The research instrument was a collaborative ability questionnaire that had undergone validity and reliability tests. Data analysis was carried out using normality tests, homogeneity tests, and independent sample t-tests. The results showed that the average posttest score of collaborative ability of students in the experimental class was higher (83.80) than in the control class (61.20). The t-test results showed a t-value of 8.227 with a significance of $0.000 < 0.05$, which indicates a significant influence of the active debate method assisted by e-comics on students' collaborative abilities. This study concluded that the integration of the active debate method and e-comics media is effective in creating active, interactive, and collaborative learning. This finding implies the importance of implementing innovative learning methods and media to support collaborative skills as part of the demands of 21st-century learning in elementary schools.

Keywords: Active Debate; E-Comics; Collaborative Skills; Civics Education; Elementary School

INTRODUCTION

Education is a crucial aspect of human life, serving as a foundation for developing potential and shaping individual character. (Sholihah & Maulida, 2020; Jamilah et al., 2021; Ismail et al., 2021) Learning and teaching activities in education are not limited to imparting knowledge and skills, but also play a crucial role in instilling character, moral values, and basic attitudes needed in children's daily lives (Sari, 2021).

Through a good education, children not only recognize their potential but also learn to cultivate a sense of responsibility, respect differences, and understand their rights and obligations as citizens (Rosyada, 2019; Titin Sunaryati et al., 2022; Vira Permata Sari et al., 2024). Thus, education is an important provision in shaping individuals with character, noble morals, and the ability to contribute positively to life in society, the nation, and the state.

In line with this, Civic Education is one of the strategic tools in shaping the character of students. Civic Education is better known as an educational program to build the character of citizens with the ultimate goal of becoming intelligent and good citizens (Mufidah, n.d. 2020; Yanita Devaraswari et al., 2024). Through Civic Education (PKn) subjects, students are guided to practice the noble values of Pancasila, such as mutual cooperation, justice, and national spirit. Therefore, PKn plays a vital role in character education, which aims to shape intelligent, responsible, and noble citizens in accordance with the principles of democracy and the values of Pancasila.

Civic Education (PKn) is a subject designed to shape students into citizens who have intelligence, skills, and character in accordance with the values of Pancasila and the 1945 Constitution of the Republic of Indonesia. (Chotimah, 2018; Baehaqi, 2020).

As explained in the Minister of National Education Regulation Number 22 of 2006 concerning Content Standards, Civics plays a crucial role in helping students understand and exercise their rights and obligations as members of Indonesian society and the nation responsibly and democratically. This role is not only related to knowledge but also involves the attitudes and skills that students must possess. Therefore, Civics learning serves not only to convey information but also to shape students' attitudes and abilities in navigating life in society.

As learning demands become increasingly complex, the use of technology is a crucial step in strengthening the role of civics in shaping students' character and competencies. Digital technology can be utilized as a tool to support students in building knowledge. Through a variety of available devices and instruments, students can explore and experiment, thus developing their own understanding of various concepts and ideas (Azizah Siti Lathifah, 2024).

Technological developments in the digital era have brought significant changes to various aspects of life, including education. Integrating technology into learning is a necessity to address the challenges of 21st-century education. Effective learning in the digital era requires an innovative, interactive approach that aligns with the characteristics of digital native students. Digital natives tend to be more attracted to learning that involves technology and engaging visuals (Emalfida, 2024).

By utilizing technology that suits these characteristics, learning can be designed to encourage interaction and cooperation among students, thereby fostering the development of one of the essential 21st-century skills, namely collaborative skills. Collaboration is one of the four essential skills (4Cs) that students must master, along with *critical thinking*, *communication*, and *creativity*. (Trilling & Fadel 2019; Anas & Mujahidin, 2022; Ye & Xu, 2023). Collaborative skills are crucial because they prepare students to work in teams and interact with individuals from diverse backgrounds, as they will encounter in the workplace and society.

The implementation of the learning process, both in the planning and implementation stages, still shows various obstacles that impact the low effectiveness of learning. One of the problems researchers found in the field is a lack of understanding of students in carrying out group work. In group activities, often only a few students actively work on assignments, while other members tend to be passive and do not contribute. Judging from the lack of interaction between students indicates that they are not used to working collaboratively, whether in dividing tasks, expressing opinions, or respecting the ideas of others. This condition is exacerbated by the learning model that is still centered on the teacher, which leaves students with no room to develop independently and socially.

Observations at SDN 3 Way Galih indicate that civics learning in fifth grade remains teacher-centered. Learning activities are dominated by lectures and simple questions and answers, leaving students to simply listen and take notes without much involvement. Interaction between students and with the teacher is limited and rarely occurs through group discussions or collaboration. The use of learning media is also minimal, and lessons often end with the task of summarizing from a printed textbook. This situation results in students lacking enthusiasm and motivation, and inadequate opportunities to develop communication and collaboration skills. Consequently, learning becomes less memorable and results in low mastery of the material.

Badri & Azisi (2024) argue that effective learning must provide space for students to be active, creative, and involved in the process of thinking and collaboration. Likewise, Hamzah B. Uno (2020) argues that meaningful learning activities must involve interactions between students so they can learn through direct experience, including the experience of working in groups. The lack of interaction between teachers and students and between students causes learning to be passive and does not encourage the development of social skills or teamwork (Zankadi et al., 2019). If not addressed, this will negatively impact students' collaboration skills, even though

these skills are very important in facing the challenges of the future world of work.

Based on the researchers' findings during pre-research observations, the majority of students in classes VA and VB still demonstrated relatively low levels of collaboration skills. This can be seen in Table 1 below:

Table 1
Collaborative Ability Pre-Research Results
Class V of SD Negeri 3 Way Galih

No.	Value Range	Value Description	Class		Amount	Presentation
			V A	V B		
1	80-100	Very well	2	1	3	6%
2	60-79	Good	4	5	9	18%
3	40-59	Enough	8	9	17	33%
4	20-39	Not enough	1	1	22	43%
Amount			26	25	51	100%

Pre-research data on the collaborative skills of fifth-grade students at SDN 3 Way Galih shows that the majority of students still fall into the low category. Of the 51 students, only a small percentage achieved the excellent and good categories, while the majority fell into the fair and poor categories. This situation demonstrates that the ability to work collaboratively in groups remains a real challenge. Minimal participation in discussions, low enthusiasm in expressing opinions, and a lack of ability to respect the views of peers further reinforce this picture.

To address this issue, innovations in learning methods and media are needed that can increase student engagement while developing their collaborative skills. Melvin L. Silberman (2019) argues that active debate learning methods can be an effective

alternative because they provide space for students to develop critical thinking skills, express ideas, and interact in directed discussions. Through active debate, students not only understand the material but also learn how to work in teams, respect differences of opinion, and reach mutual agreement.

The active debate learning method is a teaching and learning process using a question and answer process, both between students and students with the teacher (Sanory Sulastry, 2019). The active debate learning method is a learning strategy that places students as the main subject in the learning process. Through this method, students are encouraged to actively seek, access, and understand various information and knowledge from various sources, both print and digital. This information is then used as material for discussion and argumentation in debate activities carried out in class. During this process, students not only learn to express opinions logically and structured, but also trained to listen, respect the opinions of others, and think critically to listen, and analyze an issue (Girsang et al., 2024).

The application of active debate learning methods has been proven to have a positive impact on the development of student abilities. Several previous studies, including those conducted by Fatmawati & Setiawan (2021), showed that this method can improve student learning outcomes better than conventional teaching methods. These findings are supported by research by Sulastry (2019), which showed that students who participated in learning with active debate had better critical thinking skills than those who learned without using this method. Research by Rachmad & Zuhdi (2024) also found that debate activities make students more active, creative, and engaged during the learning process, making learning more effective and enjoyable. Increasing student activity and involvement through debate activities shows that the learning process is more effective when students are directly involved. Therefore, selecting engaging learning media that are appropriate to student characteristics is an important strategy to support the learning process.

The use of interesting learning media that suits the characteristics of students can be a catalyst in optimizing the learning process. Richard & Roxana (2022) argue that E-comics are a digitally assisted learning media that combines visual and narrative elements in an interesting and interactive format. According to Syaferi et al. (2022) as a learning medium, E-comics have several advantages, including: (1) they suit the characteristics of students who like visuals, (2) they can present material in the form of contextual stories, (3) they are easily accessible through digital devices, and (4) they can increase students' learning motivation (Rizki et al., 2023).

The use of active debate methods combined with e-comics media can provide more engaging and easily understood learning for students. Active debates provide space for students to discuss, express opinions, and collaborate with group members more regularly. Meanwhile, e-comics help them understand Civics material through the presentation of stories and illustrations that are closer to the world of children. Through this combination, the learning process becomes more lively because students not only receive explanations from the teacher but also directly engage in reading, discussion, and debate. This approach encourages students to be more confident, active, and open in collaborating with their peers. Therefore, this research is directed at helping fifth-grade elementary school students develop their collaborative skills in a more balanced and directed manner in Civics learning.

RESEARCH METHODS

This research was conducted using a quantitative approach, which places numerical data as the basis for drawing research conclusions. This approach was chosen because it is able to provide a clear picture of real conditions in the field through a structured measurement process. As stated by Sugiyono (2019), the Quantitative Research method can be interpreted as a research method based on the philosophy of positivism, used to research a specific population or sample, sampling techniques

are generally carried out randomly, data collection uses research instruments, and data analysis is quantitative (statistical) with the aim of testing predetermined hypotheses (Karimuddin et al., 2022; Mahardini et al., 2024). Through this approach, researchers can determine the extent of influence of the treatment given on the variables studied and assess the results accurately based on relevant statistical analysis.

The type of research used is *Quasi Experimental Design*, which is a type of experimental research that uses a comparison group using the *Nonequivalent Control Group Design*. The design chosen is *Posttest Only Control Group Design*, where the research was carried out involving two groups, namely the experimental group and the control group without prior *pretest administration*. The experimental group was given treatment in the form of the application of active debate learning methods assisted by e-comic media, while the control group followed the learning process with conventional methods as usually applied by teachers.

After the treatment was administered, both groups underwent the same *posttest* to measure students' collaborative abilities. The *posttest results* were then analyzed to determine differences in achievement between the experimental and control groups. The resulting differences in scores served as the basis for determining whether the treatment significantly impacted collaborative abilities. This research design allowed researchers to obtain a measurable picture of the effectiveness of the applied learning methods, and this design is presented in Table 2 below:

Table 2
Research Design Posttest Only Control Group Design

Group	Treatment	Posttest
Experiment	X	O ₁
Control	-	O ₂

Population in research is understood as the entire object that has certain

characteristics and is the target of data collection. Population is not only seen from the number of individuals involved, but also includes the nature, characteristics, and special conditions relevant to the research objectives (Safari, 2019). In this study, the population includes all fifth-grade students of SD Negeri 3 Way Galih located in Nagaria Village, Way Galih Subdistrict, Tanjung Bintang District, South Lampung Regency. The total number of students at that level is 51 students, consisting of classes VA and VB.

The sample in this study was determined using a *saturated sampling technique*, a sampling method that involves all members of the population. This technique was chosen because the population size was relatively small and fully accessible to the researcher. Therefore, all 51 fifth-grade students at SD Negeri 3 Way Galih were used as the research sample.

This study used a closed-ended questionnaire as the research instrument, designed to assess the level of students' collaboration skills after undergoing the learning process. The questionnaire consisted of statements that had been adjusted to indicators of collaboration skills. The use of a closed-ended questionnaire format was chosen so that the data obtained was more structured, easy to process, and could describe the level of student collaboration objectively. This instrument was administered after the learning process took place as part of the *posttest procedure*. The number of statements in the questionnaire was 16 items that had previously undergone a validity and reliability test process to ensure that the statement items were suitable for use in the study.

Before the questionnaire was used for data collection, a pilot test was conducted to determine the quality of each statement item. Validity testing was conducted to ensure that the items in the questionnaire were truly capable of measuring the aspects of collaboration being studied. Testing was carried out using the Pearson Product Moment Correlation formula, with the provision that an item is declared valid if the calculated r value is $> r_{table}$ or exceeds the reference value of 0.30 according to the criteria

proposed by Sugiyono (2019). Items that did not meet the validity criteria were then eliminated or revised to avoid affecting the accuracy of the research data.

Next, a reliability test was conducted to assess the instrument's internal consistency. Reliability testing used the *Cronbach's Alpha formula*, with a *Cronbach's Alpha value* > 0.60 indicating the instrument is reliable and suitable for use in research. An instrument is considered reliable if all items demonstrate consistent, stable responses. Therefore, the questionnaire, which has undergone validity and reliability testing, is deemed suitable for use as the primary instrument for measuring student collaboration skills in this study.

The data analysis technique in this study began with prerequisite tests including normality and homogeneity tests. The normality test was conducted to ensure that the data were normally distributed so that they were suitable for analysis using parametric statistics. The basis for decision making refers to the significance value, where data are categorized as normally distributed if the significance value is ≥ 0.05 . Next, a homogeneity test was conducted to determine whether the variances of the two groups, namely the experimental class and the control class, were in the same condition. The test used the *Fisher test* (F) with the provision that the data is declared homogeneous if the calculated F value $< F_{table}$, while the calculated F value $> F_{table}$ indicates that the data is not homogeneous.

If both prerequisite tests are met, the analysis is continued with a hypothesis test using an independent sample t -test in accordance with the Posttest-Only Control Group Design research design. The T -test is used to determine whether there is a difference in *posttest results* between the group that received treatment in the form of an active debate learning method assisted by e-comics and the group that did not receive the treatment. The decision-making provisions are based on a comparison of the calculated t and t_{table} values, where H_0 is rejected if the calculated $t > t_{table}$, and H_1 is accepted if the calculated $t < t_{table}$ at a significance level of 5%.

RESULTS AND DISCUSSION

The data were obtained from pre-research observations and a posttest administered during the study. The pre-research observations were used to obtain an initial overview of the collaborative abilities of students in the control and experimental classes. A posttest was then administered after the experimental class received treatment through the designed learning model, while the control class received conventional learning. The posttest provided final data on the collaborative abilities of students in both classes. The results of both data sets are presented in the following table:

Table 3
Posttest results data for the Experimental Class and Control Class
Descriptive Statistics

Variables	N	Range	Minimum	Maximum	Mean	Standard Deviation
Experiment Posttest	25	30	65	95	83.80	8,573
Posttest Control	25	40	40	80	61.20	10,732
Valid N (listwise)	25	—	—	—	—	—

Judging from the *posttest results* obtained after the learning implementation, there was a quite striking difference between the two classes. The control class that received conventional learning obtained an average score of 61.20, with a score range of 40 to 80. Meanwhile, the experimental class that received treatment through the active debate learning model showed significantly higher results, with an average score reaching 83.80 and a score range of 65 to 95.

The average difference indicates that both groups did experience progress, but the experimental class's performance appeared to improve more significantly. This indicates that the implementation of active debate learning has a stronger impact on improving student collaboration than conventional learning.

Before conducting hypothesis testing, researchers first conducted prerequisite tests, namely normality and homogeneity tests. The

normality test was conducted to determine whether the data in both groups had a normal distribution pattern. Next, the homogeneity test was used to ensure that both groups had similar variances. Both tests are necessary for proper hypothesis analysis. The results of the normality test are shown in the following table:

Table 4
Normality Test Results

Class	Kolmogorov-Smirnov Statistics	d	Sig.	Shapiro-Wilk Statistics	d	Sig.
Post-test Experiment	0.165	25	0.077	0.930	25	0.088
Post-test Control	0.118	25	0.200*	0.966	25	0.550

Before further analysis, the *posttest data* for both classes were tested to determine whether they met the assumption of normality. The Kolmogorov-Smirnov test showed that the experimental class had a significance value of 0.077, while the control class had a significance value of 0.200. Similar findings were also seen in the Shapiro-Wilk test, where the experimental class recorded a significance value of 0.088 and the control class a significance value of 0.550.

All significance values were above the 0.05 threshold, thus concluding that the posttest data in both groups were normally distributed. After the normality requirements were met, the analysis continued with a homogeneity test. This test aims to ensure that the data from the experimental and control classes have comparable variances. A summary of the homogeneity test results can be seen in the following table:

Table 5
Results of Homogeneity Test

Variables	Levene Statistics	df1	df2	Sig.
Based on Mean	1,473	1	48	0.231
Based on Median	1,592	1	48	0.213
Based on Median and with adjusted df	1,592	1	47,000	0.213
Based on trimmed mean	1,572	1	48	0.216

After the normality test was met, the next step was to test for homogeneity of variance to ensure that the posttest data in both classes had the same variance. Based on the Levene's test results, the significance value for the *mean-based calculation* was 0.231. This value is above the 0.05 limit, as were the *median-based calculations* (0.213), *median-adjusted-df* (0.213), and *trimmed mean* (0.216).

All of these results indicate that the variance between the experimental and control classes is homogeneous. Thus, the homogeneity assumption is met, and the analysis can proceed to the prerequisite test stage. Hypothesis testing was conducted using parametric statistics through an *independent sample t-test* to determine the difference in average posttest scores between the experimental and control classes. The testing procedure was run using SPSS version 26 for Windows software. The test results are presented in the following table:

Table 6
Results of the *t*-test

Variables	Variance Assumptions	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Standard Error	95% CI Lower	95% CI Upper
Collaboration Skills	Equal variances assumed	1,473	0,231	8,227	48	0,000	22,600	2,747	17,077	28,123
	Equal variances not assumed	—	—	8,227	45,768	0,000	22,600	2,747	17,077	28,123

the independent sample t-test calculation, it can be seen that the calculated *t value* obtained reached 8.227. This figure indicates a significant difference between the experimental class and the control class. This difference is also evident from the *mean difference value* of 22.600, which means that the average collaborative ability results in the experimental class were higher than those in the control class. In this test, 48 degrees of freedom (df) were used, so *the t-* table value at a significance level of 0.05 was 2.010.

When compared, the calculated *t value* (8.227) is much greater than the *t* table (2.010). In addition, the significance value in the Sig. (2-tailed) column is 0.000, which is clearly smaller than the significance limit of 0.05. This condition indicates that there is a significant difference between the two groups. Thus, the analysis decision states that H_0 is rejected and H_1 is accepted.

These findings demonstrate that the treatment given to the experimental class significantly impacted students' collaborative skills. This means that the methods applied during the learning process proved more effective than the conventional learning used

in the control class. Students in the experimental class demonstrated improved collaboration skills, both in working together, exchanging ideas, and completing assignments in groups. These results reinforce the belief that the applied learning methods were able to create a more active learning environment, support interaction, and help students develop optimal collaborative skills.

The results of the analysis in this study indicate a difference in the achievement of collaboration skills between Class VA, which is the experimental class, and Class VB, or the control class, after being given treatment. Based on the results of descriptive statistical analysis, it was found that there was a difference in the achievement of collaboration skills between the two groups. In the experimental class that was given active learning method treatment, the *posttest* score showed an average of 83.80 with a range of 30, a minimum of 65, and a maximum of 95, and a standard deviation of 8.573. This indicates that the achievement of student collaboration in the experimental class tends to be in the high category and has a relatively low level of value variation. Meanwhile, the control class that only received conventional learning showed an average *posttest* score of 61.20 with a range of 40, a minimum of 40, and a maximum of 80, and a standard deviation of 10.732. The average score in the control class indicates that the achievement of student collaboration skills is in a lower category compared to the experimental class.

The improvement in collaborative skills in this study aligns with Nurchabibah's (2019) findings, which show that the application of active debate methods can increase the effectiveness of discussion learning. Her research explains that the application of active debate can increase the effectiveness of the learning process while simultaneously encouraging optimal student engagement.

This alignment demonstrates that the use of active debate methods is not only relevant but also proven to have a positive impact on student skill development, particularly in learning contexts that require active cooperation and interaction.

Before testing the hypothesis, a prerequisite analysis test was first conducted, including a normality test and a homogeneity test to ensure that the research data met the parametric statistical assumptions. The normality test was conducted on the *posttest data* from the experimental and control classes. Based on the results of the *Kolmogorov-Smirnov test*, a significance value of 0.077 was obtained for the experimental class and 0.200 for the control class, while the results of the *Shapiro-Wilk test* showed a significance value of 0.088 in the experimental class and 0.550 in the control class. All significance values were above the error tolerance limit of <0.05 , so it can be concluded that the *posttest data* in both classes were normally distributed.

Next, a homogeneity of variance test was conducted using Levene's test to determine the similarity of variance between the experimental and control classes. Based on the test results shown in the *Test of Homogeneity of Variance image*, a significance value of 0.231 (based on the mean) was obtained, which is greater than 0.05. Thus, the *posttest data* of both groups have homogeneous variance or there is no significant difference in variance between the experimental and control classes. Because both prerequisites for normality and homogeneity tests have been met, the data is suitable for further analysis using parametric statistical tests in testing the research hypothesis.

After the data met the assumptions of normality and homogeneity, the next stage was hypothesis testing using the *Independent*

Samples T-Test to determine whether there was a significant difference in collaboration ability between the experimental class and the control class. Based on the analysis results, the calculated *t value* was obtained = 8.227 with a significance value (Sig. 2-tailed) of 0.000 which was far below the significance limit of 0.05. Thus, it can be stated that there was a significant difference between the *posttest* scores of the experimental class and the control class. Because the significance value was smaller than 0.05 and the calculated *t value* > *t* table, the alternative hypothesis (H1) was accepted.

These findings indicate that the implementation of the learning treatment given to the experimental class had a significant effect on improving students' collaborative abilities compared to the control class that was not given the treatment. Thus, it can be concluded that the active debate learning method given to the experimental class not only provided a statistical difference, but also had great effectiveness in improving collaboration among fifth-grade students in Civics at Way Galih 3 Public Elementary School.

The development of students' collaborative skills through the application of active debate methods assisted by E-comics in Civics subjects can be explained through a combination of the role of active debate in building social interactions and E-comics media that support the discussion and collaboration process. The active debate method allows students to exchange arguments, listen to different views, and jointly conclude the results of the discussion. This encourages the growth of the ability to work together, tolerance of other opinions, as well as communication and negotiation skills in groups. As stated in Yuniarti's research (2019), active debate stimulates critical thinking skills, listening and finding out the

positive and negative sides of an issue, learning to think systematically and analytically, and communicating the results of thinking to others.

Meanwhile, the use of e-comics as a support for active debates makes a significant contribution to improving collaboration and learning effectiveness. This is in line with research by Septya (2024), which also showed that students in classes using e-comics experienced significant improvements compared to control classes, indicating that e-comics can increase student interest in learning and engagement in the learning process. With e-comics, the civics material discussed in the debate becomes more engaging, contextual, and easier to understand, so students are more motivated to actively participate in the debate, discuss within groups, and help each other clarify their understanding. Therefore, this supports collaboration between students, because e-comics provide visual and narrative representations that unify views, making it easier for students from various backgrounds to understand the issues being discussed together (Collins et al., 2021).

Furthermore, several studies have shown that combining active debate with learning media such as comics or digital media can increase student engagement in general. Students are no longer passive recipients of material but are actively involved in the process of thinking, discussion, and reflection (Maulida Nuzula Firdaus, 2023). These findings indicate that active debate methods not only improve cognitive learning outcomes but also strengthen social and collaborative aspects. Students can learn to respect other opinions, make decisions together, and collaborate to produce shared arguments or conclusions.

Based on the analysis results and research findings, it can be concluded that the application of the active debate method assisted by E-comics has proven effective in improving the collaborative skills of fifth grade students in Civics at Way Galih 3 Public Elementary School. The significant difference between the achievements of the experimental class and the control class shows that learning involving active interaction, discussion, and interesting visual media can encourage students to work together better, respect each other's opinions, and participate optimally in the learning process. Thus, the active debate method assisted by E-comics can be an alternative learning strategy that is relevant and feasible to be implemented to support the development of collaborative skills of students in elementary schools.

CONCLUSION

Referring to the findings obtained, the application of the active debate learning method assisted by e-comic media has been proven to significantly improve students' collaborative abilities. This can be seen from the difference in the average *posttest results* between the experimental class of 83.80 which is in the high category, while the control class only reached 61.20 with a lower category. The results of the independent sample *t* test show a calculated *t value* = 8.227 and Sig. (2-tailed) = 0.000 < 0.05 so that H_1 is accepted, which means there is a significant influence of the use of the active debate method assisted by e-comic on students' collaborative abilities in Civics learning in grade V of SDN 3 Way Galih. From this description, the combination of methods and media is effective in creating active, interactive learning, and is able to develop communication and cooperation between students.

Based on the results of this study, it is recommended that teachers can implement the active debate method assisted by e-comic media as an alternative learning strategy to improve students' collaborative skills,

especially in Civics subjects, because it has proven to be more effective than conventional methods currently used. Schools are also expected to provide support in the form of providing technology-based learning facilities so that the application of e-comic media can be carried out optimally. In addition, further research is expected to develop other variables such as communication skills or other learning outcomes and involve a wider sample to obtain a more in-depth generalization of the results.

BIBLIOGRAPHY

- Anas, A., & Mujahidin, E. (2022). implementation of the 4c concept in learning in the educational policy analysis course. *Tadbiruna* , 2 (1), 1–13.
- Azizah Siti Lathifah. (2024). Utilization of digital technology in constructivist learning: improving the quality of education in the digital era. *Journal of Education and Culture (JURDIKBUD)* , 4 (1), 69–76.
- Badri, B., & Azisi, A. (2024). Creating creative learning environments: a systematic review in education. *Al-Idaroh: Journal of Islamic Educational Management Studies* , 8 (2 SE-Articles), 163–180.
- Baehaqi, ML (2020). COOPERATIVE learning as a character building strategy in pancasila and citizenship education learning in schools. *Journal of Character Education* , 11 (1 SE-Articles).
- Chotimah, U. (2018). revitalizing the role of pancasila and civics education as part of nationality development and character building in indonesia bt - proceedings of the first indonesian communication forum of teacher training and education faculty leaders international con. *Published by Atlantis Press* , 225–229.
- Emalfida. (2024). Synergy of Canva and wordwall in generation z digital

- learning at state senior high school 11 banda aceh. *FITRAH Journal of Educational Studies* , 14 (2), 229–240.
- Girsang, LB, Trianton, T., & Syahfitri, D. (2024). the influence of debate methods on argumentative ability in vocational high school students. *Jurnal Educatio* , 10 (3), 1015–1024.
- Ismail, S., Suhana, S., & Yuliati Zakiah, Q. (2021). analysis of character education strengthening policy in creating pancasila students in schools. *Journal of Educational Management and Social Sciences* , 2 (1 SE-Articles), 76–84. <https://doi.org/10.38035/jmpis.v2i1.388>
- Jamilah, J., Suherman, A., Melati, P., Darajat, A., Hermansyah, H., & Rosita, N. (2021). implementation of pancasila student profile by citizens education teachers as an effort to realize nation character. *Indonesian Journal of Community Empowerment (IJCE)* , 2 (03 SE-Articles).
- Karimuddin, A., Jannah, M., Hasda, S., Fadila, Z., Taqwin, Masita, Ardiawan, KN, & Sari, ME (2022). *quantitative research methodology* .
- Mahardini, D.F., Kasenda, I., Afgani, M.W., & Isnaini, M. (2024). quantitative research philosophy in research methodology. *JUPE: Jurnal Pendidikan Mandala* , 9 (4), 1135.
- Mufidah, N. (nd). citizenship education (Pkn) as a vessel for democratic education in creating smart and good citizens. *EDUKASIA Journal of Education and Learning* , 1 (2 SE-Articles), 259–269.
- Rizki, D., Amalia, K., Indrowati, M., & Oetomo, D. (2023). development of e-comic-based learning media on respiratory system material to increase high school students' learning motivation. *Proceedings of the Biology Education Conference* , 19 (1), 91–100.
- Rosyada, D. (2019). new paradigm of education. in *jpi fiai tarbiyah department: Vol. VIII* (Issue VI, pp. 6–15).
- Safari, AS (2019). *Atang Sabur Safari, 2015 the effect of qualification, competency, and lecturer-to-student ratio on permanent lecturer performance in tourism college in bandung city indonesian university of education | \upi.edu perpustakaan.upi.edu . 2002* , 81–123.
- Sanory Sulastry, M. (2019). the effect of active debate method in outdoor learning on critical thinking skills of grade x students in biology subject at sman 7 bandar lampung. *Hilos Tensados* , 1 , 1–476.
- Sari, DR (2021). The role of science learning in character building in early childhood. *Journal of Practice Learning and Educational Development* , 1 (1 SE-Articles), 42–47.
- Sholihah, AM, & Maulida, WZ (2020). islamic education as the foundation of character education. *QALAMUNA: Journal of Education, Social, and Religion* , 12 (1 SE-Articles), 49–58.
- Titin Sunaryati, Trias Wibiwirutami, Habibah Habibah, Khopipah Khopipah, & Alya Rasikhah Zahra Rossi. (2022). development of civic education learning in elementary schools. *ENGANG: Journal of Education, Language, Literature, Arts, and Culture* , 3 (1 SE-Articles), 273–277.
- Trilling, B., & Fadel, C. (2019). 21st century skills learning. *Journal of Sustainable Development Education and Research* , 2 (1), 243.

- Vira Permata Sari, Ririn Julian Tika, & Try Audyta Rezky Rahmadani. (2024). understanding the rights and obligations of citizens: a study of students' perspectives through a group discussion approach. *sadewa journal: publication of educational sciences, learning and social sciences* , 2 (3 SE-Articles), 76–80.
- Yanita Devaraswari, Citra Aulia Restu, Shakila Putri, Hanisah Putri, & Ersa Deltia. (2024). the influence of civic education on student character formation. *Journal of Creative Student Research* , 2 (4 SE-Articles), 205–212.
- Ye, P., & Xu, X. (2023). A case study of interdisciplinary thematic learning curriculum to cultivate “4C skills.” *Frontiers in Psychology* , Volume 14 - 2023 .
- Zankadi, H., Hilal, I., Daoudi, N., & Idrissi, A. (2019). towards a social learning environment. *Information Integration and Web-Based Applications & Services* , 607–610.