Clarivate
Web of Science
Zoological Record:

## Pakistan Journal of Life and Social Sciences

www.pjlss.edu.pk



https://doi.org/10.57239/PJLSS-2025-23.1.00435

#### RESEARCH ARTICLE

# The Relationship of Civic Education Teaching Materials and Students' Tolerance Attitudes

Luthfia Devi Romadhoni<sup>1\*</sup>, Triyanto<sup>2</sup>, Triana Rejekiningsih<sup>3</sup>

<sup>1,2,3</sup> Pancasila and Civic Education, Faculty of Teacher Training And Education, Universitas Sebelas Maret, Indonesia

ARTICLE INFO	ABSTRACT
Received: Dec 22, 2024	Tolerance is a critical aspect of civic education learning. Students must have
Accepted: Feb 3, 2025	an attitude of tolerance to create a harmonious environment. No literature correlated tolerance and the use of civic education teaching materials. This
	study seeks to evaluate the impact of civic education teaching materials on
Keywords	attitudes toward tolerance. Data was collected using a questionnaire administered to 72 persons categorized into two groups. The questionnaire
Civic Education	had two categories: the tolerance attitude assessment and the teaching
Teaching Materials	materials questionnaire. Both surveys will be subjected to statistical analysis, encompassing validity assessments, reliability evaluations,
Tolerance Attitudes	normality examinations, and independent t-tests. The tolerance attitudes of
	students at State Senior High School 1 Karanganyar are predominantly good. The T-test showed the correlation between students' tolerance
*Corresponding Author:	attitudes and civic education teaching materials. The majority tolerance indicator was inside the excellent category. The result of the research
luth fia devi 23 @ student.uns.ac.	demonstrated that the teaching materials employed positively influenced
id	students' attitudes toward tolerance.

## **INTRODUCTION**

Tolerance is based on multiple concepts, including tolerance, acceptance, and admiration for the great diversity of world cultures, different forms of self-expression, and various human ways (Benaziria & Murdiono, 2019; Dwintari & Murdiono, 2023; Hjerm et al., 2020). Tolerance encompasses several indicators, including love and affection, respect and reverence for others, and an openness to diverse diversity (Hjerm et al., 2020). An attitude of tolerance is crucial for students as it fosters a sense of camaraderie, cohesion, and reciprocal respect among individuals (Dwintari & Murdiono, 2023). The efficacy of the learning process is also affected by the attitude of tolerance among pupils (Dwintari & Murdiono, 2023).

The absence of character-building implementation fosters the emergence of intolerance among students (M. I. Maulana, 2022; Rokhman et al., 2014; Triyanto & Rejekiningsih, 2021). Common manifestations of intolerance among students include bullying (E. Sanders & D. Phye, 2003; Maromi et al., 2024), gang affiliation (Dustmann et al., 2023; Gxubane & Mguzulwa, 2019; Jailani, 2023), and fanaticism (Fauziah et al., 2024; Nugroho et al., 2021). Building character is a component examined in civic education (Ginting & Brutu, 2023; Sholeh et al., 2019). A notable achievement of civic education is student engagement, which is affected by utilizing teaching materials (Ahmed et al., 2024; Junaedi et al., 2023; Utami, 2020). Consequently, it is crucial to investigate the impact of civic education teaching materials on students' tolerance.

An investigation will be carried out concerning the civic education teaching material and the tolerance attitudes of students at State Senior High School 1 Karanganyar. This study seeks to evaluate the impact of civic education teaching materials on attitudes toward tolerance. This discussion has never been found in previous literature. The approach involved administering a

questionnaire on learning materials and attitudes toward tolerance. Various statistical tests were performed, including validity, reliability, normality, and independent t-tests. This research can be used as a basis for developing teaching materials to improve attitudes of tolerance.

### **MATERIAL AND METHOD**

This study was a quantitative analysis. The data-collecting approach employed the teaching material questionnaire with 10 indicators (Appendix A in supplementary data) and the tolerance attitude questionnaire, consisting of 3 indicators (Appendix B in supplementary data). The teaching material questionnaire assessed the learning circumstances of implemented civic education programs. The tolerance attitude questionnaire assessed the tolerance attitudes of students. The study was performed at State Senior High School 1 Karanganyar during the 2024/2025 academic year. Data collection was conducted in the tenth grade, including 72 students from two classrooms (Class A and Class B). The data acquired from the questionnaire underwent statistical analyses (validity, reliability, normality, homogeneity, and independent t-test) using Minitab 18.

The questionnaire was administered using a Likert scale questionnaire. The Likert scale was divided into four levels, as seen in Table 1. The overall score for each questionnaire was determined using Equation 1 (Sugiyono, 2013). The mean value of each indicator in the questionnaire was categorized based on the criteria outlined in Table 2.

Table 1: Likert scale

Category	Score
Very Agree	4
Agree	3
Disagree	2
Strongly Disagree	1

$$P = \frac{f}{N} x 100\%....(1)$$

P= Percentage of score obtained

f = Total score obtained

N= Maximal score

Table 2: Eligibility criteria

Percentage of Score	Criteria
0%-20%	Not needed /not good
20,1%-40%	Less needed/less good
40,1%-60%	Quite needed/quite good
60,1%-80%	needed/good
80,1%-100%	Very needed/very good

## **RESULT**

## A. Questionnaire validity test

Validity assessments were performed to evaluate the legitimacy of the tolerance attitude questionnaire questions and instructional materials (Sudaryono et al., 2019; Sugiarta et al., 2023). The questionnaire assessing students' tolerance attitudes was constructed using 10 indicators, including twenty questions. The questionnaire for assessing instructional material requirements was created using three indicators, including fifteen questions. The validity test was conducted by calculating the  $R_{cal}$  value with Minitab 18 software and comparing it with the Rtable value. If  $R_{cal}$  is higher than  $R_{table}$ , the instrument's inquiries are considered valid. If  $R_{cal}$  is lower than  $R_{table}$ , the instrument's questions are deemed invalid (Nur et al., 2019; Razali et al., 2012). All  $R_{cal}$  values for classes A and B on the tolerance attitude and teaching materials questionnaire exceed  $R_{table}$  (Tables 3 and 4). Consequently, each question in the tolerance attitude was considered relevant and appropriate for this research.

Table 3: Results of the validity test of the tolerance attitude questionnaire

Question	R table	R cal				
	(N= 36)	Class A Result		Class B	Result	
1		0.364	Valid	0.336	Valid	
2		0.388	Valid	0.603	Valid	
3		0.630	Valid	0.526	Valid	
4		0.386	Valid	0.399	Valid	
5		0.509	Valid	0.503	Valid	
6		0.331	Valid	0.361	Valid	
7		0.527	Valid	0.589	Valid	
8		0.505	Valid	0.492	Valid	
9		0.470	Valid	0.653	Valid	
10	0.329	0.464	Valid	0.504	Valid	
11	0.329	0.465	Valid	0.455	Valid	
12		0.512	Valid	0.496	Valid	
13		0.506	Valid	0.436	Valid	
14		0.519	Valid	0.548	Valid	
15		0.519	Valid	0.336	Valid	
16		0.520	Valid	0.594	Valid	
17		0.591	Valid	0.548	Valid	
18		0.377	Valid	0.450	Valid	
19		0.682	Valid	0.447	Valid	
20		0.643	Valid	0.421	Valid	

Table 4: Results of the validity test of the teaching materials questionnaire

Overtion	Rtable	Ro	cal		
Question	(N=36)	Class A	Result	Class B	Result
1		0.679	Valid	0.419	Valid
2		0.486	Valid	0.342	Valid
3		0.749	Valid	0.527	Valid
4		0.361	Valid	0.364	Valid
5		0.549	Valid	0.409	Valid
6		0.356	Valid	0.501	Valid
7		0.465	Valid	0.657	Valid
8	0.329	0.771	Valid	0.472	Valid
9		0.600	Valid	0.389	Valid
10		0.658	Valid	0.427	Valid
11		0.683	Valid	0.429	Valid
12		0.677	Valid	0.764	Valid
13		0.702	Valid	0.483	Valid
14		0.575	Valid	0.679	Valid
15		0.739	Valid	0.458	Valid

## B. Reliability test

Reliability testing is employed to evaluate the consistency of a questionnaire (Oktavia et al., 2018; Taherdoost, 2018). This reliability test is conducted to support the establishment of validity (A. Maulana, 2023; Sugiarta et al., 2023). A questionnaire was considered consistent or reliable if the Cronbach's Alpha value was higher than the Rtable. According to Table 5, Cronbach's Alpha exceeds the  $R_{table}$  for Class A and Class B in the tolerance attitude questionnaire and teaching materials. The results demonstrate that the questionnaire instrument is reliable and suitable for application.

Table 5: Reliability test result

Classes	Cronbach's Alph	Cronbach's Alpha				
	Tolerance	Attitude	Teaching	Materials	(N=36)	
	Questionnaire		Questionnaire			
Α	0.8212	·	0.8589		0.220	
В	0.8286		0.7556		0.329	

### C. Normality test

The normality test was performed to determine if the data obtained from the questionnaire follows a normal distribution. The normal distribution is a symmetrical, bell-shaped data distribution pattern that tapers at the edges and peaks at the center (Brereton, 2014; Das & Imon, 2016). Normality assessment was done with the Shapiro-Wilk technique through Minitab 18 software. This strategy was employed due to a small sample size (fewer than 50) (Hanusz et al., 2016; Mishra et al., 2019). Figure 1 illustrated a linear data distribution, with the P-value exceeding the significance level ( $\alpha$ =0.05). The results showed that the tolerance attitude and teaching materials questionnaire data were normally distributed.

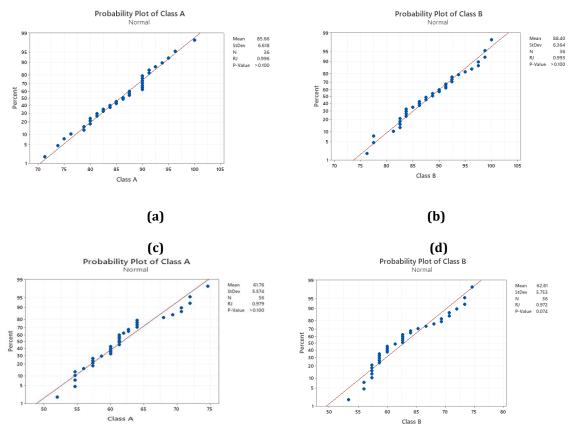


Figure 1: Normal distribution diagram of questionnaire: tolerance attitude (a and b), teaching materials (c and d)

## D. Homogeneity test

The homogeneity test verifies whether the sample data originates from a uniform population (Calle-Saldarriaga et al., 2021; Zhou et al., 2023). According to Table 6, the P-value above the significance level ( $\alpha$ =0.05) for both the tolerance attitude and the teaching materials questionnaire indicated that the data from both questionnaires are homogenous or originate from the same group.

Standard **Class** Significance Lavene test Questionnaire N of **Varians** level (P-value) **Deviation** Tolerance A 6.62 43.79 0.90 Attitude В 6.36 40.50 0.05 36 41.70 0.88 Teaching Α 6.46 Materials В 5.75 33.09

Table 6: Results of the homogeneity test for the tolerance attitude questionnaire

## E. Independent t-test

A T-test was performed with Minitab 18 software. This test evaluated the disparities in the average data of classes A and B regarding the tolerance attitude questionnaire and instructional materials.

Table 7 indicates that the P-value for the tolerance attitude questionnaire and the developed teaching materials was above the significance level of 0.05. A P-value exceeding the significance level indicates the acceptance of H0, meaning that classes A and B possess identical means. These results showed the similarity of tolerance levels and a uniform necessity for teaching tools in classes A and B.

Questionnaire	Class	N	Standard of Deviation	Means	Significance level	P-value
Tolerance	Α		6.62	43.79		
Attitude	В	36	6.36	40.50	0.05	0.08
Teaching	A	30	41.70	41.70	0.05	0.57
Materials	В		33.09	33.09		0.57

Table 7: T-test results for Class A and B

## F. Relationship between tolerance and teaching materials

The relationships between tolerance attitudes and the educational materials utilized by students may be assessed by T-testing the total average scores (classes A and B) of the tolerance attitude questionnaire and the teaching materials. The P-value signifies a value under the significance level (Table 8). The results indicate that H1 is accepted, indicating the impact of students' tolerant attitudes on civic education teaching materials. Previous research showed that developing interactive visual-based educational materials using Adobe Flash Player positively influences the enhancement of students' tolerance attitudes, as evidenced by an increase in the class average from 7.08 to 8.5 between the pre-test and post-test (Iasha et al., 2018).

Questionnaire	N	Standard of Deviation	Means	Significance level	P-value
Tolerance Attitude	72	6.09	62.41	0.05	0.00
Teaching Materials	72	6.59	87.03	0.03	0.00

Table 8: Tolerance and teaching materials questionnaire T-test

### **G.** Analysis of questionnaire results

Tolerance questionnaires and training materials were provided to students in classes A and B, each with 36 students. Figure 2 illustrates the outcomes of the tolerance attitude questionnaire assessment. The categorization of each indicator in the tolerance attitude questionnaire reveals equal scores for Class A and Class B. The results demonstrate the congruence of tolerance attitudes in both classes. The score of each indication reveals that most of the category is rated as "very good" in classes A and B. These results indicate that students comprehend the concept of tolerance, facilitating the application of its values in daily life.

Figure 3 illustrates the outcomes of the teaching materials questionnaire in classes A and B. According to Indicator 1, the condition of civic education learning is good. The civic education instruction results in the tolerance attitudes of students in classes A and B being categorized as excellent. The results support the statistical analysis in sub-chapter 3.5, indicating a strong correlation between the utilization of teaching materials and students' attitudes toward tolerance in civic education. However, there is a necessity for innovation in the used teaching material. The results of indicator 2 emphasize the need for visually-based teaching material. Moreover, students desire a technology-based learning strategy to enhance their comprehension of the subject matter (as shown by indicator 3). The four highest percentages of students selecting optimal instructional materials possess creative traits, emphasize visual elements, are easily comprehensible, and are applicable (Figure 4).

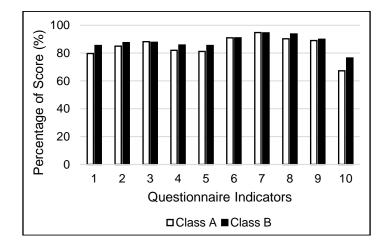


Figure 2: Comparison of the values of each indicator in the tolerance attitude questionnaire

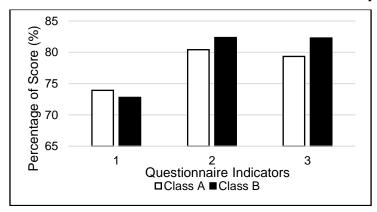


Figure 3: Comparison of the values of each indicator in the teaching material questionnaire

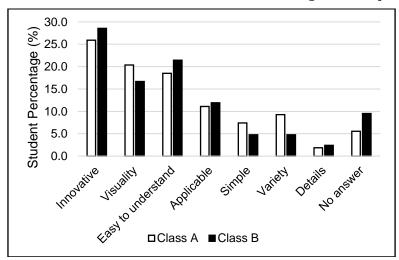


Figure 4: Characteristics of ideal teaching materials according to students

## **DISCUSSION**

This research included two instruments: the tolerance attitude and teaching materials questionnaire. The objective of giving these two questionnaires was to assess the impact of the teaching materials questionnaire on tolerance attitudes at State Senior High School 1 Karanganyar. All items on the questionnaire have been confirmed as validated and exhibit strong reliability, as detailed in points A and B. The questionnaire used for the research must be valid to ensure that the data generated accurately reflects the actual conditions (Ranganathan & Caduff, 2023; Taherdoost, 2018). Simultaneously, the questionnaire must exhibit reliability to ensure that the generated data is

steady and consistent (Mohajan, 2017; Taherdoost, 2018). The outcomes of both questionnaires exhibited a normal distribution with good homogeneity, fulfilling the primary criteria for performing a t-test (Kim, 2019; Rizky et al., 2024; Susrianty et al., 2024).

The t-test illustrates the comparability of the average questionnaire results for teaching materials and tolerance attitudes between class A and class B. The t-test also demonstrates the impact of teaching materials on tolerance attitudes. The results suggest applying similar teaching materials in civic education for classes A and B. The teaching materials could foster a uniform tolerance attitude between classes A and B. According to Figure 2, most tolerance indicators exhibit an excellent category. Indicator 1 of the teaching material questionnaire indicates that civic education learning is classified as good. Using suitable teaching materials can promote this beneficial category of learning, hence improving students' engagement in the learning process (Abubakar, 2020; Ahmed et al., 2024; Andala, 2023). Students' attitudes toward tolerance are influenced by their significant interest in civic education (Beyer & Brese, 2024; Dwintari & Murdiono, 2023).

Indicator 1 of the teaching material questionnaire indicates that civic education learning activities are classified as good. Indicators 2 and 3 demonstrate that students require and are interested in visually-oriented instructional materials using a technology approach. Visual teaching materials enhance students' comprehension of the subject matter (F. Setiawan & Taiman, 2020; Snigdha & Moriom Akter, 2023). Moreover, visual teaching materials can be highly effective for illustrating the practical application of concepts in daily life (Pham & Nguyen, 2023; Shabiralyani et al., 2015). Visual teaching material, such as e-comics, can enhance student engagement and academic performance (Anggraeni et al., 2023; Bukian et al., 2024; Fitria et al., 2023; Indriana et al., 2024; Surya et al., 2020). The technology method of applying teaching materials is advantageous for accessibility, cost-efficiency, and enhancement of digital competencies (Haleem et al., 2022; Ramadhan & Inayati, 2024; Yang et al., 2014). The development of instructional materials at State Senior High School 1 Karanganyar may be enhanced using a visual and technological approach, more successfully influencing students' views toward tolerance. Using visual and technology-based instructional materials will satisfy the four attributes of optimal teaching materials identified by students: innovation, visual appeal, applicability, and comprehensibility (Figure 4).

### **CONCLUSION**

Based on the research that has been conducted, it can be concluded that civic education teaching materials influence students' tolerance attitudes. The tolerance attitude of students at State Senior High School 1 Karanganyar is categorized as very good for most indicators. Although teaching materials significantly impact attitudes of tolerance, students consider it necessary to develop teaching materials by prioritizing the characteristics of a technological approach, innovation, visuals, ease of understanding, and applicability. The influence of innovative technology-based and visual teaching materials on attitudes of tolerance should be further investigated at primary, middle, or high school levels.

### **Authors' contributions**

All authors have contributed to the paper. LDR developed concepts, performed in research activities, and composed manuscripts. T and TR, as LDR supervisors, corrected the research data and publications prepared before to submission.

## Acknowledgment

The authors express gratitude to all respondents who generously contributed their time to complete the questionnaire for this study, which was crucial in forming the results drawn. The authors express gratitude to the organizations and government authorities who supplied the essential resources and approvals for the completion and execution of this study.

## **REFERENCES**

Abubakar, M. B. (2020). Impact of instructional materials on students' academic performance in Physics, in Sokoto-Nigeria. *IOP Conference Series: Earth and Environmental Science*, 476(1). https://doi.org/10.1088/1755-1315/476/1/012071

Ahmed, S., Baloch, M. A., & Karim, H. (2024). Investigating the Impact of Teaching-Learning Materials on Students' Academic Performance in Government Primary Schools in the Naseerabad

- Division, Balochistan, Pakistan. *Journal of Development and Social Sciences*, 5(I). https://doi.org/10.47205/jdss.2024(5-i)49
- Andala, H. O. (2023). Effect of Instructional Materials Utilization on Students' Academic Performance in Twelve Years Basic Education in Rwanda. *Journal of Education*, 6(4), 101–116. https://doi.org/10.53819/81018102t5263
- Anggraeni, S. W., Alpian, Y., Prihamdani, D., & Damayanti, T. (2023). Development of Comic-Based Teaching Materials in Elementary Schools. *Indonesian Journal of Social Research (IJSR)*, *5*(1), 23–35. https://doi.org/10.30997/ijsr.v5i1.263
- Ayub, N., & Jehn, K. (2014). When diversity helps performance: Effects of diversity on conflict and performance in workgroups. *International Journal of Conflict Management*, *25*(2), 189–212. https://doi.org/10.1108/IJCMA-04-2013-0023
- Benaziria, B., & Murdiono, M. (2019). Civic teacher strategy in the integration of nationalism and tolerance character in school based on pesantren in Yogyakarta city. *Journal of Social Studies* (*JSS*), 15(1), 13–34. https://doi.org/10.21831/jss.v15i1.25227
- Beyer, C., & Brese, F. (2024). Secondary school students' attitudes of tolerance towards minorities. *Large-Scale Assessments in Education*, 12(1). https://doi.org/10.1186/s40536-024-00217-8
- Brereton, R. G. (2014). The normal distribution. *Journal of Chemometrics*, 28(11), 789–792. https://doi.org/10.1002/cem.2655
- Bukian, I. G. A. M. W. P., Gading, I. K., & Bayu, G. W. (2024). Modernizing Education: Empowering the Potential of E-Comic Media for Improved Learning Interest and Learning Outcomes. *Jurnal Pedagogi Dan Pembelajaran*, 7(1), 1–13. https://doi.org/10.23887/jp2.v7i1.75823
- Calle-Saldarriaga, A., Laniado, H., Zuluaga, F., & Leiva, V. (2021). Homogeneity tests for functional data based on depth-depth plots with chemical applications. *Chemometrics and Intelligent Laboratory Systems*, 219, 1–29. https://doi.org/10.1016/j.chemolab.2021.104420
- Costantini, H., Al Mujahid, M. A. A., Hosaka, K., Ono, T., & Nihei, M. (2024). Instruments to Assess People's Attitude and Behaviours towards Tolerance: A Systematic Review of Literature. *Societies*, *14*(7), 1–24. https://doi.org/10.3390/soc14070121
- Das, K. R., & Imon, R. (2016). A Brief Review of Tests for Normality. *American Journal of Theoretical and Applied Statistics*, *5*(1), 5–12. https://doi.org/10.11648/j.ajtas.20160501.12
- Dustmann, C., Mertz, M., & Okatenko, A. (2023). Neighbourhood Gangs, Crime Spillovers and Teenage Motherhood. *The Economic Journal*, 133(1991), 1901–1936.
- Dwintari, J. W., & Murdiono, M. (2023). The strategy of integrating tolerance values into civics learning in inclusive school. *Jurnal Civics: Media Kajian Kewarganegaraan*, 20(2), 214–222. https://doi.org/10.21831/jc.v20i2.42158
- E. Sanders, C., & D. Phye, G. (2003). *Bullying Implications for the Classroom*. Elsevier.
- Fauziah, S. P., Castara, T. I., & Gunadi, G. (2024). The Influence Of K-Pop Fanatism on The Social Behavior of High-Class Students. *Didaktika Tauhidi: Jurnal Pendidikan Guru Sekolah Dasar,* 11(1), 31–45. https://doi.org/10.30997/dt.v11i1.12890
- Fitria, Y., Malik, A., Mutiaramses, Halili, S. H., & Amelia, R. (2023). Digital comic teaching materials: It's role to enhance student's literacy on organism characteristic topic. *Eurasia Journal of Mathematics, Science and Technology Education, 19*(10). https://doi.org/10.29333/ejmste/13573
- Gibson, J. L. (2006). Enigmas of intolerance: Fifty years after Stouffer's communism, conformity, and civil liberties. *Perspectives on Politics*, 4(1), 21–34. https://doi.org/10.1017/S153759270606004X
- Ginting, R., & Brutu, L. M. (2023). the Role of Civic Education in Building Character Inthe Younger Generation. *International Journal of Students Education*, 2(1), 99–102. https://doi.org/https://doi.org/10.62966/ijose.v2i1.273
- Gxubane, T., & Mguzulwa, S. (2019). THE IMPACT OF YOUTH GANG VIOLENCE ON THE EDUCATIONAL ATTAINMENT OF MALE HIGH SCHOOL LEARNERS IN KHAYELITSHA. *Social Work/Maatskaplike Werk*, 55(3).
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, *3*(February), 275–285. https://doi.org/10.1016/j.susoc.2022.05.004
- Hanafiah, H., Kushariyadi, K., Wakhudin, W., Rukiyanto, B. A., Wardani, I. U., & Ahmad, A. (2024). Character Education's Impact On Student Personality: Curriculum And School Practices Review. *At-Ta'dib*, *19*(1), 51–69. https://doi.org/10.21111/attadib.v19i1.12047

- Hanusz, Z., Tarasinska, J., & Zielinski, W. (2016). Shapiro–Wilk test with known mean. *REVSTAT-Statistical Journal*, *14*(1), 89–100. https://doi.org/10.57805/revstat.v14i1.180
- Hasanah, I. (2016). Developing English Materials for Character Building Based on 2013 Curriculum for Eighth Grade Students. *IJOLTL: Indonesian Journal of Language Teaching and Linguistics*, 1(2), 111. https://doi.org/10.30957/ijoltl.v1i2.89
- Hjerm, M., Eger, M. A., Bohman, A., & Fors Connolly, F. (2020). A New Approach to the Study of Tolerance: Conceptualizing and Measuring Acceptance, Respect, and Appreciation of Difference. *Social Indicators Research*, *147*(3), 897–919. https://doi.org/10.1007/s11205-019-02176-y
- Iasha, V., Sumantri, M. S., Sarkadi, S., & Rachmadtullah, R. (2018). Development Media Interactive Learning in Education Pancasila and Citizenship Education to Improve Tolerance of Students in Elementary School. *Conference: Annual Civic Education Conference (ACEC 2018)*, 251, 311–314. https://doi.org/10.2991/acec-18.2018.71
- Indriana, I., Umar, I., Nofrion, N., & Novio, R. (2024). The Effectiveness of E-Comic Utilization as a Learning Media for Tsunami Disaster Mitigation at SMA 1 Pertiwi Padang City. *Journal Of Education And Teaching Learning (JETL)*, 6(1), 51–61. https://doi.org/10.51178/jetl.v6i1.1725
- Jailani, M. (2023). Character Education for Early Childhood: to Prevent Juvenile Delinquency and The Negative Impacts of Gadget Use in Indonesia. *Journal of Religious Policy*, *2*(1), 37–74. https://doi.org/https://doi.org/10.31330/repo.v2i1.14
- Junaedi, M., Nasikhin, Hasanah, S., & Hassan, Z. (2023). Learning Patterns in Influencing Attitudes of Religious Tolerance in Indonesian Universities. *Education Sciences*, 13(3). https://doi.org/10.3390/educsci13030285
- Kim, H. Y. (2019). Statistical notes for clinical researchers: the independent samples t -test. *Restorative Dentistry & Endodontics*, 44(3), 2–7. https://doi.org/10.5395/rde.2019.44.e26
- Mahapatra, A. (2018). Value of Tolerance and its Importance on the Principle and Practice of Democracy. *Pramana Research Journal*, 8(11), 62–70.
- Maromi, C., Turhan Yani, M., Sya'dullah, A., Jannah, M., & Yes Matheos Lasarus Malaikosa, Y. (2024). The Impact of Violence, Bullying and Intolerance on Early Childhood. *Journal of Islamic Education Students (JIES)*, 4(1), 177. https://doi.org/10.31958/jies.v4i1.12370
- Maulana, A. (2023). Analysis of Validity, Reliability and Feasibility of Student Confidence Assessment Instruments. Schola, 1(1), 1–12. https://journal2.upgris.ac.id/index.php/schola/%0AANALYSIS
- Maulana, M. I. (2022). Teachers' Enactments of Character Education: A Case Study from Indonesia. *Jurnal Pendidikan Karakter*, *13*(2), 122–132.
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, 22(1), 67–72. https://doi.org/10.4103/aca.ACA\_157\_18
- Mohajan, H. K. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University. Economic Series*, *17*(4), 59–82. https://doi.org/10.26458/1746
- Nugroho, R. S., Taufiqurrohman, M., & Fatmawaty, L. S. W. A. (2021). Ethnography Study about Fanaticism of "Figure Purwokerto" Community's Members. *J-Lalite: Journal of English Studies*, 2(1), 64. https://doi.org/10.20884/1.jes.2021.2.1.4196
- Nur, J., Widjanarko, D., & Khumaedi, M. (2019). Validity and Reliability Test of Assessment Instrument of the Suitability of Electric Power Steering Media. *Journal of Vocational Career Education*, 4(1), 61–69. https://journal.unnes.ac.id/nju/index.php/jvce
- Nurshakilah, H. (2022). International Journal of Students Education. *The Cultivation of Morality and Discipline Character in the World of Education*, *1*(2), 29–34.
- Oktavia, R., Irwandi, I., Rajibussalim, T., Mentari, M., & Mulia, I. S. (2018). Assessing the validity and reliability of questionnaires on the implementation of Indonesian curriculum K-13 in STEM education. *Journal of Physics: Conference Series, 1088.* https://doi.org/10.1088/1742-6596/1088/1/012014
- Pasaribu, M., Khairifa, F., Ali, R., Muis, A. A., & Ritonga, M. (2024). Youth Character Building through Quality Education in Realizing Golden Indonesia 2045. *Journal of Ecohumanism*, *3*(4), 180–192. https://doi.org/10.62754/joe.v3i4.3473
- Pham, C. T., & Nguyen, C. (2023). the Efl 9Th Graders' Attitudes Toward the Use of Visual Aids in

- Reading Comprehension At a Secondary School in Kien Giang, Vietnam. *European Journal of Education Studies*, 10(4), 201–218. https://doi.org/10.46827/ejes.v10i4.4762
- Rahmani, Mustadi, A., Maulidar, & Senen, A. (2021). the Development of Teaching Materials Based on Context and Creativity To Increase Students Scientific Literacy. *Jurnal Ilmiah Peuradeun*, 9(2), 345–364. https://doi.org/10.26811/peuradeun.v9i2.506
- Ramadhan, M. Q., & Inayati, N. L. (2024). Benefits of Digital Tools in Learning Evaluation. *Jurnal Pelita Nusantara*, *2*(1), 91–96. https://doi.org/10.59996/jurnalpelitanusantara.v2i1.348
- Ranganathan, P., & Caduff, C. (2023). Designing and validating a research questionnaire Part 1. *Perspectives in Clinical Research*, 14(3), 152–155. https://doi.org/10.4103/picr.picr\_140\_23
- Rangkuti, S. S., Zulhimma, Z., & Zulhammi, Z. (2022). Character Building In Cultural Perspective and Implementation. *AL-ISHLAH: Jurnal Pendidikan*, 14(3), 4557–4566. https://doi.org/10.35445/alishlah.v14i3.2049
- Razali, N. M., Shamsudin, N. R., Maarof, N. N. N. A., Hadi, A. A., & Ismail, A. (2012). A comparison of normality tests using SPSS, SAS and MINITAB: An application to health related quality of life data. *ICSSBE 2012 Proceedings, 2012 International Conference on Statistics in Science, Business and Engineering: "Empowering Decision Making with Statistical Sciences,"* 267–272. https://doi.org/10.1109/ICSSBE.2012.6396570
- Rizky, O. B., Raibowo, S., Ilahi, B. R., Permadi, A., Prabowo, A., & Education, P. (2024). *The Effect of Training Models Using Modified Goals and Pyongyo on Dollyo Chagi Kick Skills in Taekwondo Athletes* 1. 6(2), 482–490. https://doi.org/10.35724/mjpes.v6i4.6317
- Rokhman, F., Hum, M., Syaifudin, A., & Yuliati. (2014). Character Education for Golden Generation 2045 (National Character Building for Indonesian Golden Years). *Procedia Social and Behavioral Sciences*, 141, 1161–1165. https://doi.org/10.1016/j.sbspro.2014.05.197
- Sahal, M., Musadad, A. A., & Akhyar, M. (2018). Tolerance in Multicultural Education: A Theoretical Concept. *International Journal of Multicultural and Multireligious Understanding*, *5*(4), 115. https://doi.org/10.18415/ijmmu.v5i4.212
- Samsul, M. (2023). Urgency Of Development Of Teaching Materials In Schools Of Social Studies Subjects. *The Kalimantan Social Studies Journal*, *5*(1), 75. https://doi.org/10.20527/kss.v5i1.9376
- Setiawan, A., Purnomo, P., Marzuki, Charismana, D. S., & Zaman, A. R. B. (2024). Jurnal Civics: Media Kajian Kewarganegaraan The implementation of tolerance values through multicultural education program The implementation of tolerance values through multicultural education program. *Jurnal Civics: Media Kajian Kewarganegaraan*, 21(2), 332–341.
- Setiawan, F., & Taiman, T. (2020). Visual-Based and Verbal-Based Materials in Teaching Writing To Students With Different Learning Styles. *Gema Wiralodra*, 11(2), 233–249. https://doi.org/10.31943/gemawiralodra.v11i2.143
- Setya, R., Putri, W., Handoyo, E., & Purnomo, A. (2024). *The Influence of Character Education on Students' Learning Achievement at SMP Negeri 1 Seyegan. 2*, 225–234.
- Shabiralyani, G., Hasan, K. S., Hamad, N., & Iqbal, N. (2015). Impact of Visual Aids in Enhancing the Learning Process Case Research: District Dera Ghazi Khan. *Journal of Education and Practice*, 6(19), 226–233.
- Sholeh, A. R., Fadhilah, S. S., & Murwaningsih, T. (2019). Building Students' Character on Civic Education Through Local Wisdom of Sadranan. *AL-ASASIYYA: Journal Of Basic Education*, *3*(2), 179. https://doi.org/10.24269/ajbe.v3i2.1852
- Snigdha, S. S., & Moriom Akter. (2023). Effectiveness of Audio-visual Materials in Teaching Reading for Young EFL Learners in Bangladesh. *EIKI Journal of Effective Teaching Methods*, 1(4), 65–82. https://doi.org/10.59652/jetm.v1i4.84
- Sudaryono, Rahardja, U., Aini, Q., Isma Graha, Y., & Lutfiani, N. (2019). Validity of Test Instruments. *Journal of Physics: Conference Series*, 1364(1). https://doi.org/10.1088/1742-6596/1364/1/012050
- Sugiarta, R. D., Arofiati, F., & Rosa, E. M. (2023). Validity and Reliability of Research Instruments on the Effect of Motivation on Nurse Performance in Moderation with Nurse Credentials. *JMMR* (Jurnal Medicoeticolegal Dan Manajemen Rumah Sakit), 12(1), 46–55. https://doi.org/10.18196/jmmr.v12i1.6
- Sugiyono. (2013). Metode Penelitian Kuantitatif, Kualitatif dan R&D (19th ed.). Alfabeta.
- Sukarno, S., & Riyadini, M. V. (2024). Enhancing Learners' Character Development: Insights from Utilizing Learning Materials and Teaching-Learning Activities in TEFLIN. *Journal of*

- Languages and Language Teaching, 12(3), 1100. https://doi.org/10.33394/jollt.v12i3.11191
- Surya, A., Poerwanti, J. I. S., & Sriyanto, M. I. (2020). The Effectiveness of the Use of Digital-Based Educational Comic Media in Improving Reading Interest in Elementary School Students. *Advances in Social Science, Education and Humanities Research*, 397, 411–415. https://doi.org/10.2991/assehr.k.200129.052
- Susrianty, N., Sepyanda, M., & Dwiputri, R. (2024). the Effect of Pop-Up Books Toward Students' Vocabulary Mastery. *ELP (Journal of English Language Pedagogy)*, 9(1), 29–42. https://doi.org/10.36665/elp.v9i1.856
- Taherdoost, H. (2018). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *International Journal of Academic Research in Management (IJARM)*, 5(3), 28–36. https://doi.org/10.2139/ssrn.3205040
- Triyanto, & Rejekiningsih, T. (2021). Building Tolerance Character for Students in the Digital Era. *Advances in Social Science, Education and Humanities Research*, 524, 58–63. https://doi.org/10.2991/assehr.k.210204.008
- Utami, S. (2020). Needs Analysis of Tolerance-Based Text Material on MPK Students at Sriwijaya University. *International Conference on Language, Literature, and Education (ICLLE 2020)*, 485, 312–319. https://doi.org/10.2991/assehr.k.201109.052
- Verkuyten, M., & Kollar, R. (2021). Tolerance and intolerance: Cultural meanings and discursive usage. *Culture and Psychology*, *27*(1), 172–186. https://doi.org/10.1177/1354067X20984356
- Wiradarma, K. S., Suarni, N. K., & Renda, N. T. (2021). The Relationship of Learning Interest to Science Online Learning Outcomes for Third-Grade Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, 5(3), 425. https://doi.org/10.23887/jisd.v5i3.39544
- Yang, L., Weng, T., Yang, D., & Wu, P. (2014). The Effectiveness of Digital Teaching Materials on Introduction Statistics. *Proceedings of the 2014 International Conference on Education Reform and Modern Management*, 75. https://doi.org/10.2991/ermm-14.2014.73
- Zhou, Y., Zhu, Y., & Wong, W. K. (2023). Statistical tests for homogeneity of variance for clinical trials and recommendations. *Contemporary Clinical Trials Communications*, *33*, 1–11. https://doi.org/10.1016/j.conctc.2023.101119

## APPENDIX A Results of the tolerance attitude questionnaire

Ind	icator	Question	Class A (%)	Category	Class B (%)	Category
		If my friends bully me, I will not retaliate against them.	56.94		71.53	
1	Tolerance creates peace	I want to unite differences into a strength in my interactions with friends of different beliefs.  Gratitude for what one has, then a person will prioritize gratitude to God for all the abundant gifts given Average	97.92 79.86	Good	90.28 94.44 85.42	Very Good
2	A sense of appreciation for differences	I respect my friend's opinion even though his opinion is not right for me  I do not criticize other people's work I accept the results of the deliberation and consensus with an open heart Average	81.94 86.11 86.81 84.95	Very Good	84.03 91.67 86.81 87.50	Very Good
3	Tolerance can eliminate negative prejudices	Being kind to other people is a commendable attitude  When my friends tell other people, I always avoid bad prejudice  Average	96.53 79.86 88.19	Very Good	93.06 82.64 87.85	Very Good
4	An attitude of understanding between people is a form of tolerance.	Even though my opinion is not respected, I accept it sincerely I always accept my friends' opinions if it makes me better in the future.  Average	75.00 88.89 81.94	Very Good	79.86 91.67 85.76	Very Good
5	Indifference and fear are the main causes of intolerance	Indifference towards others is a form of intolerance  Average	81.25	Very Good	85.42	Very Good
6	Love and compassion are the fundamental foundations of an attitude of tolerance.	In my opinion, being kind to others is a good attitude of tolerance I am always friendly to others Everyone has their own goodness Average	95.83 84.72 92.36 90.97	Very Good	95.83 84.72 92.36	Very Good
7	Intolerant attitudes can occur due to the absence of love	It is not good to badmouth the ethnicity and religion of friends whose beliefs are different from ours.  I think criticizing other people's shortcomings is a bad trait  Average	95.14 94.44 94.79	Very Good	93.06 95.83 94.44	Very Good
8	Knowing and appreciating the goodness and conditions of others is part of an attitude of tolerance.	In my opinion, being kind to others and not showing favoritism is a good attitude of tolerance  Average	90.28	Very Good	93.75	Very Good

	The attitude of	I always distance myself from	06.44		00.40	
	tolerance is	useless (actions) in relationships	86.11		88.19	
	demonstrated	Be more open and broad-minded				
9	through the	about religion	91.67	Very	91.67	Very
9	ability to face			Good		Good
	difficult					Good
	conditions in	Average				
	diversity		88.89		89.93	
	Forgiving and					
	accepting	I don't hate and accept friends who				
10	others who	have disturbed me	66.67	C 1	77.08	C 1
10	have done		00.07	Good	77.08	Good
	wrong is part	Avorago				
	of tolerance.	Average	67.14		76.43	

## APPENDIX B

## Results of teaching materials questionnaire

Ind	icator	Question	Class A (%)	Category	Class B (%)	Category
		Civic education learning is fun and interesting	80.56		75.00	-
		Civic education is my favorite subject	67.36		62.50	
	Civic	During learning, teachers are always enthusiastic about inviting you to interact and discuss	81.25		81.94	
1	education learning	Civic Education is a difficult subject for you to understand	63.89	Good	67.36	Good
	conditions	In your opinion, are the learning resources used in class sufficient?	68.06		70.83	
		I feel interested if studying civic education can use innovative teaching materials	81.94		79.17	
		Average	73.84		72.80	
		Visual-based learning media is interesting to use in civic education learning	86.11		84.72	
	The need for visual- based learning	Presenting material in visual-based teaching materials can help you answer questions.	78.47		89.58	
2		Visual-based teaching materials can provide motivation for learning civic education	82.64	Very Needed	84.03	Very Needed
	media	Material is easy to understand when presented in an attractive visual form	80.56		86.81	
		The learning resources used by teachers are varied	74.31	-	66.67	
		Average	80.42		82.36	
		Existing learning resources can help you achieve your learning goals.	77.78		78.47	
	The need	By using media, methods and technology-based learning resources, it helps to understand learning materials.	81.25		87.50	
3	to learn through technology	Teachers have provided technology- based learning resources that are relevant to the learning material.	75.69	Needed	77.78	Very Needed
		The use of technology-based teaching materials makes me practice civic education learning.	82.64		85.42	
		Average	79.34		82.29	