



THE IMPACT OF CIVIC EDUCATION ON SOCIAL BEHAVIOR CHANGES AND CRITICAL THINKING SKILLS OF GEN Z AT BANYUWANGI STATE POLYTECHNIC

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Abstract

Civics education is a key factor in shaping the social and critical behavior of the younger generation in the digital era. It is known that Gen Z's social behavior lately when giving criticism on social media can be said to be impolite. In addition, they are also less concerned about the environment. This study aims to analyze the impact of civics education on the social behavior and critical thinking of Gen Z (students) at Banyuwangi State Polytechnic. This research method uses a quantitative approach with a survey method of 150 students, data collected through a Likert-scale-based questionnaire that measures aspects of social concern, public participation, and critical thinking. The results show a significant positive correlation between the level of understanding of civics education on social behavior and critical thinking skills of students (Gen Z). The highest correlation coefficient is found in the relationship between understanding of Civics Education and Critical Thinking Skills with r = 0.921 (p < 0.01). This finding confirms that in-depth and integrated civics education in the campus curriculum can encourage the birth of more aware, proactive, and critical thinking citizens. Practical implications include the importance of strengthening contextual civics education modules and learning based on case studies, interactive, and relevant to current issues among students (Gen Z).

Keywords: Impact, Civic Education, Changes in Social Behavior, Critical Thinking Skills

Introduction

Civics Education plays a crucial role in shaping the social behavior and critical thinking skills of Gen Z, particularly in higher education settings like Banyuwangi State Polytechnic. Gen Z, born between the mid-1990s and early 2010s, faces unique challenges in the context of globalization and digitalization. (Cleofas & Labayo, 2024). Studies show that Civic Education not only teaches national values but also encourages active participation in society. (Younas & Imran, 2025) However, the effectiveness of Civic Education in the context of vocational education remains underexplored, especially in Indonesia. Many studies have discussed the impact of Civic Education on the younger generation, but specific research on Gen Z in polytechnic environments is still limited. (Agustianingsih, D., Susiba, S., Az-zahra, N., & Sari, 2025; Nur Alvi Puriamandawati & Jani Jani, 2025; Syahwalia, 2025) This study aims to analyze the impact of Civics Education on the social behavior and critical thinking skills of Gen Z students at Banyuwangi State Polytechnic. This Civics Education program utilizes video-based case studies, which are then analyzed in-depth by the students.

Several studies have identified that conventional approaches to Civics Education are still less effective for Gen Z, who are more accustomed to digital learning. It has also been shown that technology integration in Civics Education can increase student engagement. Recent literature shows a growing trend of using social media and online discussions in Civics Education to enhance student engagement. (Waghid, 2024) However, its effectiveness in vocational settings like Banyuwangi State Polytechnic still requires further study. This research is expected to provide recommendations to Civics Education teaching teams at various vocational campuses regarding the evaluation of Civics Education learning that directs social awareness, public participation, and critical thinking among Gen Z. (Eka Rahma Salsabila et al., 2024; Pradana & Sundawa, 2023). In this research, a learning method will be carried out using case studies that lead to real projects so that Gen Z can experience the process of character formation slowly. (Biringan et al., 2025; Burce & Callo, 2024; Younas & Imran, 2025; Yuniwati et al., 2025). Case study learning also encourages

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changes in social behavior as explained in various studies. (Gherguţ-Babii et al., 2025; Japar, 2018; Younas & Imran, 2025) The test is in the form of a questionnaire regarding the understanding of Civic Education and a rubric for changes in social behavior and critical thinking skills during the learning process. The Pancasila Education comprehension test uses a Likert scale with a score of 1 to 4. A correlation analysis is then conducted. The results of this analysis will determine the relationship between the understanding of Civic Education among Gen Z students and changes in social behavior and critical thinking skills.

Research methods

This study employed quantitative research by distributing questionnaires to students after learning and using an assessment rubric throughout the learning process. The number of students studying Citizenship Education at Banyuwangi State Polytechnic is 1,000. Therefore, a sample selection was conducted to ensure more accurate research results. The sample was selected using stratified random sampling to ensure representation across various study programs.(Trianasari et al., 2022)The number of students involved was 150 students from Banyuwangi State Polytechnic. The stages of this research are shown in Figure 1 below.

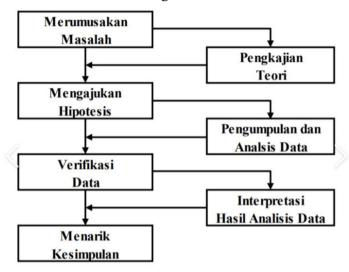


Figure 1. Research Stages

The research instruments included a closed-ended questionnaire to measure civics understanding, a rubric for social behavior change, and a rubric for assessing critical thinking skills. A questionnaire was used to measure civics understanding and social behavior change. The questionnaire used a Likert scale. A Likert scale is a measurement tool that provides assignments based on symbols or numbers to individuals or behaviors based on specific rules. The scale used in this study is a modified Likert scale with four levels: strongly agree (SS), agree (S), disagree (TS), and strongly disagree (STS). The Likert scale was chosen because it is easy to use in measuring psychomotor and affective domains, while the selection of four levels was taken into consideration so that students' answers do not tend to be in the middle. For scoring negative statements, the STS level is given a score of 4, TS is given a score of 3, S is given a score of 2, SS is given a score of 1. Meanwhile, positive statements at the SS level are given a score of 4, S is given a score of 3, TS is given a score of 1. This avoids the tendency for someone or respondents to give answers at the middle level if the number of levels is odd, so that the researcher does not obtain definitive information. (Yuniwati et al., 2021)If 75% of Gen Z understands Civics, it can be expanded to critical thinking skills and social behavior change.

Meanwhile, according to Facione, there are six dimensions to critical thinking skills: interpretation, analysis, evaluation, inference, explanation, and self-regulation. (Warsame et al., 2023) Interpretation is the ability to accurately understand the meaning, intent, or significance of data, text, symbols, or situations. Analysis is the process of breaking information down into its components, identifying relationships, patterns, or underlying assumptions. Evaluation is the process of judging the quality of arguments, evidence, or sources against standards of logic, relevance, and validity. Inference is drawing logical conclusions or projecting consequences based on available evidence, without jumping to unproven causal conclusions. Explanation is constructing arguments or descriptions in a coherent, structured, and accountable manner with evidence. Self-Regulation is the ability to monitor, control, and revise one's own thought processes; to recognize biases, examine assumptions, and correct errors. After the data was collected, a correlation analysis was conducted. This analysis was conducted to measure whether there was an impact between

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civics education and changes in social behavior and critical thinking skills. (Edwards et al., 2022; Popovici & Mironov, 2015; Saadati & Celis, 2023). The hypothesis used is:

$$H_0$$
: $r_1 = r_2$
 H_1 : $r_1 \neq r_2$

 $H_1: r_1 \neq r_2$ This analysis used a 99% confidence level using SPSS. Based on these results, we analyzed the correlation coefficient of each relationship. A correlation level above 0.7 is considered high and indicates impact.

Results and Discussion

Research Instrument Development

This study developed three research instruments: the Civics Education Understanding Measurement Instrument, the Social Behavior Change Test Instrument, and the Critical Thinking Instrument. The Civics Education Understanding Measurement Instrument consisted of 15 Likert-scale statements with indicators as shown in Table 1.

Table 1. Indicators of Gen Z's Understanding of Civic Education

No	Indicator	Item Number
1	Knowledge of the constitution	Items 1-3 (1 positive statement, 2
	and basic rights	negative statements)
2	Ability to explain the democratic	Items 4-6 (2 positive statements, 1
	process	negative statement)
3	Understanding the	Items 7-9 (1 positive statement, 2
	implementation of citizenship activities	negative statements)
4	Attitude of tolerance and respect	Items 10-12 (2 positive
	for diversity	statements, 1 negative statement)
5	Awareness of civic responsibility	Items 13-15 (2 positive
		statements, 1 negative statement)

Based on the scale that has been explained in the background, the maximum total score for Gen Z's Civics Education Understanding is 60 and the minimum total score for Gen Z's Civics Education Understanding is 15. From this score range, Gen Z is divided into 3 Gen Z categories as in Table 2.

Table 2. Categories of Gen Z's Understanding of Civic Education

No	Total Value Interval	Category	
1	15 - 30	Gen Z Doesn't Understand	
		Citizenship Education	
2	31 - 45	Gen Z Understands Citizenship	
		Education Enough	
3	46 - 60	Gen Z Really Understands	
		Citizenship Education	

After developing an instrument for Gen Z's understanding of Civic Education, a second instrument was developed, measuring social behavior change and critical thinking skills in case study activities. The rubric for social behavior change is shown in Table 3.

Table 3 Rubric for Assessment of Social Rehavior Change

	Table 5. Rubi le 101 Assessment of Social Benavior Change					
No	Indicator	Point 30	Point 20	Point 10		
1	Environmental	can explain in detail examples of	adequate	almost unaware		
	Awareness	pollution and its impacts	explanation but still	of the pollution		
	Increases		lacking in detail	issue.		
2	Active	Participate in >2 consistent	Participate in 12	Never		
	Participation in	documentation case resolution	activities per case	participated or		
	Environmental	activities	resolution	only passively		
				attended without		

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No	Indicator	Point 30	Point 20	Point 10
	Retention		consistent	real contribution
	Activities		documentation	or inconsistent
				documentation
3	Changing	Household waste audit shows ≥	Household waste	Household waste
	Consumption	80% of waste is separated	audits show 60-	audit shows <
	and Recycling	_	79% of waste is	60% of waste is
	Habits		sorted	separated
4	Advocacy and	High interaction (likes,	Interaction (likes,	Low interaction
	Information	comments) on videos uploaded	comments) on	(likes,
	Dissemination	to YouTube (>10)	videos uploaded on	comments) on
	to Peers/		YouTube (5-9)	videos uploaded
	public		, ,	on YouTube (<5)

The third instrument developed was an instrument for assessing critical thinking skills in case study work. The rubric indicators were taken from Facione (2015). The critical thinking skills rubric can be seen in Table 4.

Table 4. Critical Thinking Skills Assessment Rubric

No	Dimensions	Point 30	Point 20	Point 10	
1	Interpretation	Identify all important	Identify 2	Identify 1	
		data (location,	important data	important data	
		pollution source,	(location, pollution	(location, pollution	
		impact)	source, impact)	source, impact)	
2	Analysis	Mapping factors	Mapping factors	Mapping factors	
		(economic, social,	(economic, social,	(economic, social,	
		technical) in a	technical) in a	technical) in a	
		structured manner and	structured manner	structured manner	
		all factors	and only 2 factors	and only 1 factor	
3	Evaluation	Evaluation is limited to	Evaluation is	No critical	
		all sources or all	limited to one	evaluation; just	
		solutions; in-depth	source or one	presenting	
		criticism (at least 2	solution; criticism	solutions without	
		solutions are	lacks depth.	consideration	
		compared)			
4	Inference	Draw logical	Draw logical	There are no	
		conclusions based on	conclusions based	logical conclusions	
		analysis; predict long-	on analysis; but do	based on analysis;	
		term impact	not predict long-	there is no	
			term impacts	prediction of long-	
				term impact	
5	Explanation	The presentation	The presentation	Unstructured	
		(written and video) is	(written and video)	presentation	
		highly structured:	is well structured:	(written and	
		introduction,	introduction,	video):	
		methodology, findings,	methodology,	introduction,	
		solutions, and	findings, solutions,	methodology,	
		reflections; the	and reflections; the	findings, solutions,	
		language is clear,	language is clear,	and reflections;	
		visuals support the	and the visuals	clear language,	
		argument.	support the	visuals support	
-	G 10 D 1 1		arguments.	arguments.	
6	Self-Regulation	Demonstrates critical	Demonstrates	Does not show	
		reflection, videos	critical reflection,	critical reflection,	
		contain self-	but the video does	video does not	

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No	No Dimensions Point 30		Point 20	Point 10
		commentary on	not contain self-	contain self-
		improvement	commentary about	commentary about
		_	improvement.	improvement

The Learning Process and Evaluation of Understanding of Civic Education

The Civics learning process is conducted using a case study method. This case study method was chosen so that Gen Z can directly implement changes in social behavior and critical thinking. The relevant case chosen is understanding how to be an Indonesian citizen who cares about the environment around the home. The environmental cases chosen include river pollution and soil pollution from waste. The case study learning syntax can be seen in Table 5.

Table 5. Syntax of Civic Education Learning Using the Case Study Method

No	Stages	Lecturer Activities	Student Activities (Gen	
1,0	~ · · · g • ·		Z)	
1	Introduction and Case Selection	The lecturer explains the flow of the case study learning process and provides case examples.	Students form groups and record individual and group assignments.	
2	Identification of problems	The lecturer asked students to identify environmental pollution problems.	Students conduct surveys and observations in the surrounding environment	
3	Citizenship Activities	The lecturer asks students to solve the selected case by sorting waste, etc., according to the students' innovations.	Students carry out waste sorting and various activities to resolve environmental pollution cases.	
4	Data Collection and Report Preparation	The lecturer asked students to analyze from surveys, observations and real actions of citizenship.	Students identify the factors causing environmental pollution and compile a report.	
5	Video Making	The lecturer asked students to make a video with a duration of 2-3 minutes and upload it to their respective YouTube channels.	Students make videos and upload them to YouTube.	
6	Presentation and Reflection	The lecturer asked students to present the videos they made and provide reflections on the results of the case.	Students conduct group presentations and discussions	

The results of understanding Civic Education can be seen in Figure 2.

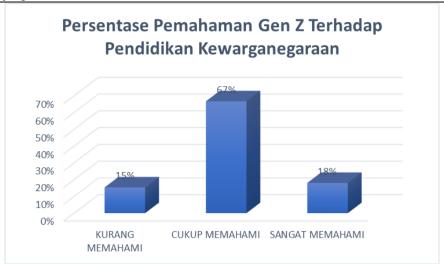


Figure 2. Results of Understanding Civic Education

Based on Figure 2, it can be seen that the percentage of students (Gen Z) is divided into 3 categories: Gen Z who do not understand civics education, Gen Z who understand civics education sufficiently, and Gen Z who understand civics very well. From the Figure, it can be seen that 67% of Gen Z have a sufficient understanding of Civics Education. Meanwhile, for Gen Z who understand Civics Education very well, it is 18%. If these categories are added together, the total number has exceeded 75%, so it can be continued for the Assessment of Social Behavior Change and Critical Thinking Skills.

The Relationship between Understanding of Civic Education and Changes in Students' Social Behavior and Students' Critical Thinking

The relationship between Civics understanding, changes in social behavior, and critical thinking skills among Gen Z was analyzed using SPSS software. A correlation analysis was performed on each variable to determine the closeness of the relationship. The results of the analysis can be seen in Table 6.

Table 6. Results of the Correlation Analysis of Understanding Civic Education, Changes in Social Behavior, and Critical Thinking Skills of Gen Z

Correlations

		Understanding Civic Education	Critical thinking skills	Social Behavior Change
Understanding Civic	Pearson Correlation	1	,921**	,903**
Education	Sig. (1-tailed)		,000	,000
	N	150	150	150
Critical thinking skills	Pearson Correlation	,921**	1	,864**
	Sig. (1-tailed)	,000		,000
	N	150	150	150
Social Behavior Change	Pearson Correlation	,903**	,864**	1
	Sig. (1-tailed)	,000	,000	
	N	150	150	150

^{**.} Correlation is significant at the 0.01 level (1-tailed).

Based on Table 6 above, it can be seen that the understanding of Civic Education and Critical Thinking Skills has a correlation coefficient of 0.921 with a p-value of 0.000. So it can be said that there is a relationship between Civic Education and Critical Thinking Skills. Meanwhile, the understanding of Civic Education and Social Behavior Change has a correlation coefficient of 0.903 with a p-value of 0.000. So it can be said that there is a relationship between Civic Education and Social Behavior Change. For Critical Thinking Skills and social behavior changes, it has a correlation coefficient of 0.864 with a p-value of 0.000. So it can be said that there is a relationship between

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Critical Thinking Skills and Social Behavior Change. Of the three relationships, it can be seen that the strongest correlation is the Understanding of Civic Education with Gen Z's Critical Thinking Skills.

Conclusion

Civics plays a significant role in enhancing the critical thinking skills of Gen Z at Banyuwangi State Polytechnic. This can be seen in that Civics has a strong contribution to positive changes in students' social behavior, indicating that this learning can foster responsible citizenship attitudes. Critical thinking skills are closely related to changes in social behavior, indicating that students who are able to think critically tend to demonstrate more proactive and collaborative social behavior. Of the three relationships, the most dominant relationship is between understanding Civics Education and critical thinking skills, so improving the quality of Civics Education materials and teaching methods can be a key factor in developing both while improving social behavior.

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