

# The influence of teachers' professional and pedagogical competence on the enhancement of students' civic knowledge

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## Abstract

Civic Education plays a strategic role in shaping students' awareness of their rights and responsibilities as citizens. However, its effectiveness in Indonesia remains a challenge, particularly in improving students' civic knowledge. Teachers' competence, particularly professional and pedagogical competence, is a crucial factor in supporting the quality of teaching and learning. This study aims to examine the influence of teachers' professional competence (X1) and pedagogical competence (X2) on students' civic knowledge (Y), both partially and simultaneously. The research employed a quantitative, survey-based approach. The sample consisted of all Grade 11 students taking the Civic Education course at St. Fransiskus Xaverius Seminary Senior High School in Tomohon, selected using a total sampling technique because the entire population that met the study criteria was included ( $n = 41$ ). The results of the analysis revealed that teachers' professional competence has a significant effect on improving students' civic knowledge (the calculated t-value (3.763) > the critical t-value (2.02); sig. 0.001 < 0.05). Teachers' pedagogical competence also partially shows a significant influence on students' civic knowledge (the calculated t-value (7.004) > the critical t-value (2.02); sig. 0.000 < 0.05). Simultaneously, both independent variables significantly affect students' civic knowledge (the calculated F-value (47.273) > the critical F-value (3.24); sig. 0.000 < 0.05). The coefficient of determination ( $R^2$ ) indicates that teachers' professional and pedagogical competence jointly account for 71.3% of the enhancement of students' civic knowledge. In comparison, the remaining 28.7% is influenced by other factors not examined in this study.

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## Introduction

Civic Education plays a strategic role in shaping young generations' awareness of their rights and responsibilities as citizens (Sincer et al., 2022; Sperduti et al., 2025). This subject in Indonesia aims to develop students' civic knowledge, attitudes, and skills to shape responsible, ethical, and participatory citizens grounded in the values of Pancasila and the constitution (Branson, 1998; Wahab & Sapriya, 2011). It also seeks to strengthen national identity, critical thinking, and active engagement in democratic life across elementary and secondary education



(Pangalila & Fatimah, 2023). However, several studies have identified persistent challenges regarding the effectiveness of Civic Education in schools, particularly in improving students' civic knowledge. Civic knowledge encompasses students' understanding of democratic principles, governmental systems, human rights, and responsible political participation (Pangalila & Winoto, 2022).

One of the main factors influencing the quality of Civic Education is teacher competence (Arthur et al., 2008; Biesta, 2015). This is essential because the effectiveness of Civic Education in improving students' civic knowledge ultimately depends on the extent to which teachers' competencies support the delivery, clarity, and depth of the learning process. As facilitators of learning, teachers play a crucial role in transferring knowledge and shaping students' understanding. Teachers' professional and pedagogical competencies are decisive in determining the effectiveness of Civic Education instruction (Larasati & Gafur, 2018). Professional competence refers to teachers' mastery of subject matter and academic insight in the subjects they teach (Bagou & Sukung, 2020), while pedagogical competence concerns the strategies, methods, and approaches used in teaching to enhance student engagement and understanding (Chen et al., 2025; Coe et al., 2014).

Teachers' professional competence in Civic Education encompasses a deep understanding of political, legal, and democratic values that underpin the governmental system (Areta & Purwatiningsih, 2023). This aligns with Indonesian regulations, particularly the Ministry of Education Regulation No. 16 of 2007 on standards of academic qualifications and teacher competence, which mandates that teachers must master subject matter substantively and contextually as part of their professional competence. Teachers with a high level of professional competence can deliver material more comprehensively, enabling students to understand how political and legal systems operate in everyday life. On the other hand, pedagogical competence includes the ability to create an interactive learning environment, apply innovative teaching methods, and adapt instruction to students' individual needs (Nasution & Setiawan, 2020). Teachers with strong pedagogical competence are more effective in delivering lessons, encouraging critical thinking, and enhancing students' motivation to learn Civic Education (Rafzan et al., 2024).

Although several previous studies have discussed the role of teacher competence in student learning outcomes, few have specifically examined the influence of professional and pedagogical competence on students' civic knowledge in Indonesia. Teachers' professional competence affects students' academic achievement in Civic Education (Feldman et al., 2007; Isac et al., 2011); however, it did not address pedagogical competence. Meanwhile, another study by Besare et al. (2024) found that teachers' pedagogical competence significantly increases students' learning interest in Civic Education but did not specifically address teachers' professional competence. Thus, although both variables have been studied separately, no previous research has combined professional and pedagogical competence in a single analytical model to examine their joint impact on students' civic knowledge. The present study establishes its state of the art by simultaneously highlighting both dimensions of teacher competence (professional and pedagogical) and examining their impact on students' civic knowledge. Therefore, this research provides a novel contribution by offering a more comprehensive understanding of the factors influencing the quality of Civic Education in Indonesia.

The urgency of this research is further supported by increasingly complex global challenges, such as the rise of political polarisation, the spread of misinformation and hoaxes, and the declining political participation of younger generations (Anshori & Izharsyah, 2023). In recent years, numerous studies have indicated that young people are becoming less interested in political and civic issues. This trend poses a serious threat to democracy's sustainability. A lack of understanding of citizens' rights and responsibilities can lead to low levels of political participation and an increased risk of misinformation spreading within

society (Azizah et al., 2024). Therefore, this study examines how teacher competence affects the quality of Civic Education to develop more effective strategies that enhance students' civic knowledge and empower them as critical and responsible citizens.

In addition to challenges related to political participation, low civic knowledge also affects students' ability to discern accurate information and understand their roles within national and civic life. According to Branson (1998), civic knowledge encompasses not only factual understanding of governmental structures and processes but also an awareness of citizens' rights, responsibilities, and the skills necessary for active participation in a democratic society. In today's digital era, students are easily exposed to vast amounts of information, much of which may lack credibility or accountability. Effective Civic Education is therefore essential for equipping students with critical thinking skills, enabling them to be more selective and reflective in their responses to the various social and political issues that arise in society (Shakira & Najicha, 2023).

This study aims to examine whether teachers' professional and pedagogical competencies enhance students' civic knowledge, both partially and simultaneously. The hypotheses to be tested in this research are as follows: Teachers' professional competence has a significant influence on the enhancement of students' civic knowledge (H1); Teachers' pedagogical competence has a significant influence on the enhancement of students' civic knowledge (H2); and Teachers' professional and pedagogical competencies simultaneously have a significant influence on the enhancement of students' civic knowledge (H3).

This study was designed to examine the extent to which teachers' professional and pedagogical competencies contribute to the enhancement of students' civic knowledge, both partially and simultaneously. Grounded in contemporary perspectives on teacher effectiveness, the study conceptualises professional competence as the foundation of subject-matter mastery and ethical responsibility, while pedagogical competence is positioned as the operational dimension that translates knowledge into meaningful learning experiences. Accordingly, three hypotheses were formulated: (H1) teachers' professional competence significantly influences students' civic knowledge; (H2) teachers' pedagogical competence significantly influences students' civic knowledge; and (H3) both competencies simultaneously influence students' civic knowledge. These hypotheses reflect an integrative assumption that effective civic learning is shaped not only by what teachers know, but also by how they facilitate learning processes in the classroom.

From a theoretical standpoint, the formulation of these hypotheses aligns with multidimensional models of teaching quality that emphasise the interplay between content expertise and instructional practice as key drivers of student learning outcomes. In the context of civic education, this interplay becomes particularly critical, as the development of civic knowledge requires both conceptual understanding and opportunities for critical engagement with social realities.

By testing these hypotheses, the study seeks not only to validate the direct effects of teacher competence but also to contribute to a more nuanced understanding of how different dimensions of competence interact in shaping civic learning outcomes. This approach enables a more comprehensive interpretation of teacher effectiveness and supports the development of more integrated and context-sensitive models of civic education.

## Method

The research employed a quantitative method and was conducted at St. Fransiskus Xaverius Catholic Seminary Senior High School, Kakaskasen, Tomohon. The study population consisted of all Grade 11 students enrolled in the Civic Education course. Since the number of students was limited and all met the inclusion criteria, the study used a total sampling method, in which the entire population was taken as the sample. A total of 41 students participated in the study. The primary data used in this study were collected through questionnaires

distributed to respondents, developed based on indicators for each research variable, and administered using a Likert scale. The indicators for the Professional Competence variable (X1) included: (1) understanding of Civic Education material, (2) mastery of democratic and constitutional concepts, and (3) ability to explain material in depth. The indicators for the Pedagogical Competence variable (X2) included: (1) use of interactive teaching methods, (2) classroom management ability, and (3) evaluation of students' learning outcomes. Meanwhile, the indicators for the students' Civic Knowledge variable (Y) included: (1) understanding of citizens' rights and responsibilities, (2) understanding of the constitution and state regulations, and (3) participation in civic discussions.

The collected data were systematically processed and analysed using IBM SPSS Statistics version 26, employing a multiple linear regression model to examine the relationships between variables. Prior to hypothesis testing, a series of preliminary analyses was conducted to ensure the robustness and validity of the data. These included instrument testing through validity and reliability assessments, as well as classical assumption tests for normality, multicollinearity, and heteroscedasticity. Only after these assumptions were satisfactorily met were parametric tests, namely the t-test for partial effects and the F-test (ANOVA) for simultaneous effects, performed. Furthermore, the coefficient of determination ( $R^2$ ) was calculated to assess the proportion of variance in students' civic knowledge explained by the independent variables. This analytical procedure ensures the statistical rigour and reliability of the findings, thereby strengthening the validity of the conclusions drawn in this study.

## Results and Discussion

### Research Instrument Testing: Validity and Reliability

#### *Validity Test*

The decision criterion for the validity test is that if the r-count is greater than the r-table value and the significance level is  $< 0.05$ , the data are considered valid. The r-table value is 0.3081 (see r-table at DF = 39, significance level = 0.05 or 5%). The degree of freedom (DF) is determined using the formula  $n - 2$ , which in this case is  $41 - 2 = 39$ . Based on data analysis using IBM SPSS Statistics version 26, the results are presented in Tables 1, 2, and 3.

**Table 1.**

*Validity Test Results for X1 (Professional Competence)*

Item No.	r-count	Sig.	r-table	Description
1	0,607	0,001	0,3081	Valid
2	0,843	0,000	0,3081	Valid
3	0,820	0,000	0,3081	Valid
4	0,783	0,000	0,3081	Valid
5	0,706	0,002	0,3081	Valid
6	0,741	0,000	0,3081	Valid
7	0,833	0,001	0,3081	Valid
8	0,707	0,000	0,3081	Valid
9	0,710	0,000	0,3081	Valid
10	0,742	0,000	0,3081	Valid

*Source: Processed by the researcher, 2025.*

Based on Table 1, the results of the validity test for variable X1 (Professional Competence) indicate that all statement items (items 1–10) were found to be valid. This is evidenced by the calculated r-value (r-count) for each item, which is consistently greater than the critical r-value of 0.3081, and is supported by significance values (Sig.) that are all below the 0.05 threshold. The relatively high range of calculated r-values (0.607 to 0.843) also indicates that each item has a strong correlation with the construct being measured, thereby adequately representing professional competence.

**Table 2.**  
*Validity Test Results for X2 (Pedagogical Competence)*

Item No.	r-count	Sig.	r-table	Description
1	0,822	0,000	0,3081	Valid
2	0,752	0,000	0,3081	Valid
3	0,865	0,000	0,3081	Valid
4	0,794	0,001	0,3081	Valid
5	0,734	0,001	0,3081	Valid
6	0,838	0,000	0,3081	Valid
7	0,786	0,000	0,3081	Valid
8	0,784	0,002	0,3081	Valid
9	0,875	0,000	0,3081	Valid
10	0,834	0,000	0,3081	Valid

*Source: Processed by the researcher, 2025.*

Based on Table 2, the results of the validity test for variable X2 (Pedagogical Competence) indicate that all statement items (items 1–10) were found to be valid, as the calculated r-values for each item were consistently higher than the critical r-value of 0.3081. All significance levels (Sig.) were below 0.05. The calculated r-values, which fall within a high range (0.734 to 0.875), indicate a strong correlation between each item and the construct of pedagogical competence being measured.

This confirms that the instrument is well-suited to representing aspects of pedagogical competence both conceptually and empirically. Consequently, all items in variable X2 are suitable for use and meet the validity criteria for further research analysis.

**Table 3.**  
*Validity Test Results for Y (Civic Knowledge)*

Item No.	r-count	Sig.	r-table	Description
1	0,903	0,000	0,3081	Valid
2	0,664	0,000	0,3081	Valid
3	0,750	0,001	0,3081	Valid
4	0,801	0,000	0,3081	Valid
5	0,803	0,000	0,3081	Valid
6	0,827	0,000	0,3081	Valid
7	0,803	0,000	0,3081	Valid
8	0,881	0,000	0,3081	Valid
9	0,804	0,000	0,3081	Valid
10	0,764	0,001	0,3081	Valid

*Source: Processed by the researcher, 2025*

Based on Table 3, the results of the validity test for variable Y (Civic Knowledge) indicate that all statement items (items 1–10) were found to be valid, as evidenced by calculated r-values that were consistently higher than the critical r-value of 0.3081, and significance levels (Sig.) that were all below 0.05. The high range of calculated r values (0.664-0.903) indicates a strong correlation between each item and the construct of civic knowledge. Indeed, several items exhibited very high correlations (above 0.80), reflecting the indicators' strong representation of the variable.

#### *Reliability Test*

The reliability test was conducted using Cronbach's Alpha (CA), with the decision criterion that CA values > 0.60 indicate reliable data, and vice versa. The results of the reliability test are presented in the Table 4.

**Table 4.**  
*Reliability Test Results*

Variable	Cronbach's Alpha Result	Description
X1 (Professional Competence)	0,911	Reliable
X2 (Pedagogical Competence)	0,941	Reliable
Y (Civic knowledge)	0,937	Reliable

*Source: Processed by the researcher, 2025*

Based on the results of the above test, the questionnaire data are reliable, as the obtained Cronbach's Alpha (CA) values are  $> 0.60$ . This indicates that if the test were to be repeated, the data would remain consistent. Therefore, as the research data are valid and reliable, the analysis can proceed to the next stage.

*Classical Assumption Test*

1. Normality Test

The normality test was conducted using the One-Sample Kolmogorov-Smirnov test. The decision criterion for this test is that if the resulting significance value is  $> 0.05$ , the data are normally distributed and can be used for regression analysis (Ghozali, 2016).

**Table 5.**  
*Normality Test Result*

One-Sample Kolmogorov-Smirnov Test		
N		41
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	3.34123623
Most Extreme Differences	Absolute	.093
	Positive	.093
	Negative	-.072
Test Statistic		.093
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

*Source: Processed by the researcher, 2025.*

Based on the decision criterion, the data are normally distributed, as indicated by the Asymptotic Significance value of 0.200, which is  $> 0.05$ .

2. Multicollinearity Test

The multicollinearity test is used to determine whether the independent variables in a regression model are intercorrelated. A good regression model should be free from multicollinearity. The decision criterion for this test is that if the Tolerance value is  $> 0.10$  and the Variance Inflation Factor (VIF) value is  $< 10.00$ , then there is no multicollinearity among the variables. The model can be used in the regression analysis. The results of the multicollinearity test are presented in Table 6.

**Table 6.**  
*Multicollinearity Test Result*

Variable	Collinearity Statistics	
	Tolerance	VIF
X1 (Professional Competence)	0,870	1.150
X2 (Pedagogical Competence)	0,870	1.150

*Source: Processed by the researcher, 2025/*

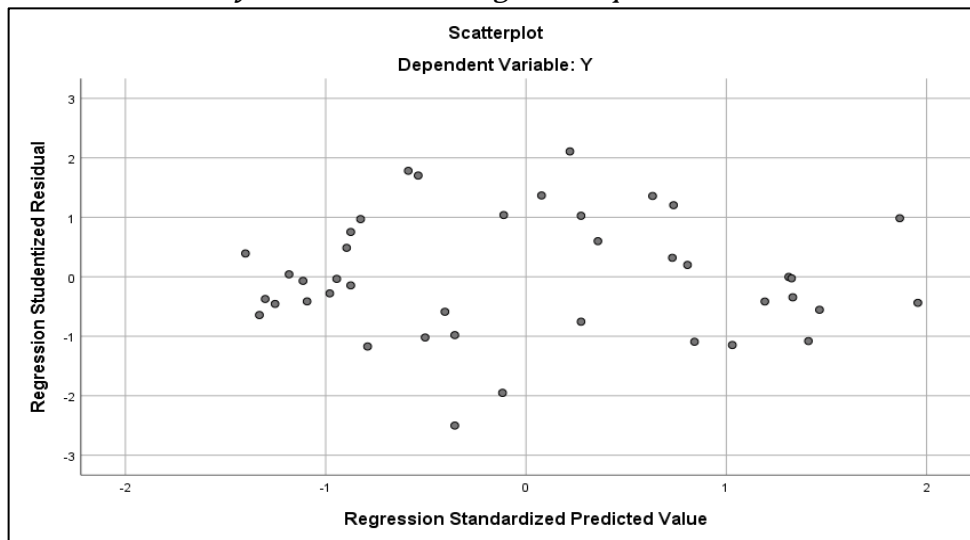
Based on the results of the multicollinearity test presented in the table above, the obtained Tolerance value is 0.870, and the VIF value is 1.150. Therefore, it can be concluded that the decision criteria have been met. This indicates that there is no multicollinearity among the variables, and the model meets the requirements for regression analysis.

### 3. Heteroscedasticity Test

The heteroscedasticity test is used to determine whether the variance of the residuals differs across observations in a regression model. A good regression model should be free from heteroscedasticity. In this study, heteroscedasticity was tested using the Scatter Plot method. The decision criterion is that if the data points in the plot are randomly dispersed above and below the Y-axis line, it can be concluded that the regression model in this study does not exhibit heteroscedasticity.

**Figure 1.**

*Heteroscedasticity Test Results Using Scatterplot Model*



Source: *Processed by the researcher, 2025.*

In Figure 1, the data do not form a specific pattern; instead, they are randomly distributed above and below the Y-axis. Therefore, the regression model in this study is free of heteroscedasticity.

#### *Multiple Linear Regression Analysis*

**Table 7.**

*Results of Multiple Linear Regression Analysis*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-2.024	4.151		-.488	.629
X1	.444	.118	.350	3.763	.001
X2	.628	.090	.652	7.004	.000

Source: *Processed by the researcher, 2025.*

Based on the SPSS output data above, the multiple linear regression model equation obtained is  $Y = -2,024 + 0,444X1 + 0,628X2 + e$ .

This equation can be interpreted as having a constant value of -2.024. Assuming that both independent variables, X1 and X2, are 0 or do not change, the value of Y would be -2.024. The regression coefficient for variable X1 is 0.444. This indicates a positive influence of teachers' professional competence (X1) on students' civic knowledge (Y). In other words, if the value of X1 increases by 1%, assuming other variables remain constant, the value of Y is expected to increase by 0.444. Meanwhile, the regression coefficient for variable X2 is 0.628. This indicates a positive influence of teachers' pedagogical competence (X2) on students' civic knowledge (Y). In other words, if the value of X2 increases by 1%, assuming other variables remain constant, the value of Y is expected to increase by 0.628.

### *Hypothesis Testing (t-Test and F-Test)*

#### 1. Teachers' Professional Competence (X1) Has a Significant Influence on Students' Civic Knowledge (Y)

The first hypothesis (H1) of this study states that Teachers' Professional Competence significantly enhances students' Civic Knowledge. This hypothesis is tested using the t-test. The decision criterion for this test is that if the calculated t-value is  $>$  the critical t-value and the significance level is  $< 0.05$ , the first hypothesis can be accepted; otherwise, it is rejected.

Based on the data presented in Table 7 above, the calculated t-value for variable X1 is 3.763 with a significance value of 0.001, while the critical t-value is 2.02 (two-tailed test at a 0.05 or 5% significance level). This indicates that the calculated t-value is  $>$  the critical t-value and the significance value is  $< 0.05$ . Therefore, the decision criterion is met, and H1 is accepted. In conclusion, Teachers' Professional Competence significantly enhances students' Civic Knowledge.

The results of this study indicate that teachers' professional competence significantly enhances students' civic knowledge. Teachers with high professional competence master the learning material in depth, select appropriate teaching methods, and manage the classroom effectively, thereby improving students' understanding of citizenship. This finding aligns with Mulyasa's (2013) theory of teacher competence, which posits that professional competence is directly related to the quality of learning and students' learning outcomes, including civic knowledge (Mulyasa, 2019).

This study is also consistent with Antonius (2021), who found that teachers' professional competence significantly influences Civic Education learning outcomes among junior high school students. Similarly, a study by Purnomo (2013) demonstrated a positive and significant effect of teachers' professional competence on the improvement of students' learning outcomes in Civic Education (Purnomo, 2013). These findings reinforce previous research, highlighting that teachers' professional competence is a key factor in shaping students' understanding of civic values.

Furthermore, research by Jumrawati and Lina (2025) revealed that teachers with high professional competence can integrate contemporary civic issues into their teaching, enabling students not only to understand theoretical aspects but also to relate them to social realities. This is relevant to the findings of the present study, which confirm that professional competence plays a crucial role in enhancing students' civic knowledge as a foundation for becoming critical, participatory, and responsible citizens.

#### 2. Teachers' Pedagogical Competence (X2) Has a Significant Influence on Students' Civic Knowledge (Y)

The second hypothesis (H2) of this study states that Teachers' Pedagogical Competence significantly enhances students' Civic Knowledge. This hypothesis is also tested using the t-test. The decision criterion is that if the calculated t-value is  $>$  the critical t-value and the significance level is  $< 0.05$ , the second hypothesis can be accepted; otherwise, it is rejected.

Based on the data presented in Table 7 above, the calculated t-value for variable X2 is 7.004 with a significance value of 0.000, while the critical t-value is 2.02 (two-tailed test at a 0.05 or 5% significance level). This indicates that the calculated t-value is  $>$  the critical t-value and the significance value is  $< 0.05$ . Therefore, the decision criterion is met, and H2 is accepted. In conclusion, Teachers' Pedagogical Competence has a very significant influence on the enhancement of students' Civic Knowledge.

The results of this study indicate that teachers' pedagogical competence significantly enhances students' civic knowledge. This finding demonstrates that a teacher's ability to design, implement, and evaluate learning plays a crucial role in students' understanding of rights, responsibilities, and civic values. Pedagogical competence enables teachers to select teaching

strategies that are relevant to students' social contexts and to create an interactive and participatory classroom environment. As a result, students are better able to understand civic concepts and internalise these values in their daily lives.

This study aligns with the findings of Besare et al. (2024), which emphasise that teachers' pedagogical competence is strongly related to improvements in students' learning outcomes, particularly in the cognitive domain, including civic knowledge. In addition, research by Purba et al. (2025) demonstrates that teachers' pedagogical competence and creativity significantly enhance students' learning outcomes in Civic Education. The better the teacher's pedagogical competence, the higher the level of student engagement in Civic Education, which directly affects their understanding of democratic concepts, political participation, and legal awareness (Purba et al., 2025).

Furthermore, research by Widyawati et al. (2019) emphasises that pedagogical competence not only plays a role in the cognitive domain but also contributes to the development of students' attitudes (civic disposition). This means that the teacher's role extends beyond merely transferring civic knowledge to serving as a facilitator who encourages students to think critically, reason logically, and relate their learning to real-life national and civic contexts. Therefore, the findings of this study reinforce the understanding that teachers' pedagogical competence is a key factor in the successful implementation of Civic Education in schools.

### 3. Teachers' Professional Competence (X1) and Pedagogical Competence (X2) Simultaneously Have a Significant Influence on Students' Civic Knowledge (Y)

The third hypothesis (H3) of this study states that teachers' Professional Competence and Pedagogical Competence simultaneously have a significant influence on students' Civic Knowledge. This hypothesis is tested using the F-test (ANOVA). The decision criterion is that if the calculated F-value is  $>$  the critical F-value and the significance level is  $< 0.05$ , the third hypothesis can be accepted; otherwise, it is rejected. The results of the ANOVA test are presented below:

**Table 8.**  
*F-Test (Anova) Result*

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1111.055	2	555.528	47.273	.000 <sup>b</sup>
Residual	446.554	38	11.751		
Total	1557.610	40			

*Source: Processed by the researcher, 2025*

Based on the data presented in Table 8 above, the calculated F-value is 47.273 with a significance value of 0.000, while the critical F-value is 3.24 (at a 0.05 or 5% significance level). This indicates that the calculated F-value is  $>$  the critical F-value and the significance value is  $< 0.05$ . Therefore, the decision criterion is met, and H3 is accepted. In conclusion, teachers' Professional Competence and Pedagogical Competence simultaneously have a very significant influence on students' Civic Knowledge.

The results of this study indicate that teachers' professional competence and pedagogical competence jointly have a significant influence on the enhancement of students' civic knowledge. These findings show that both competencies complement each other in creating high-quality Civic Education learning. Professional competence ensures that teachers have a strong mastery of the subject matter, while pedagogical competence ensures that the material is delivered using methods suited to students' learning needs. The combination of both makes the learning process more meaningful, enabling students to understand and internalise civic values more deeply.

This study aligns with the findings of Larasati and Gafur (2018), which indicate that teachers' professional and pedagogical competencies jointly have a strong relationship with students' learning. Furthermore, research by Andayani et al. (2022) also confirms that the integration of teachers' professional and pedagogical competencies contributes to the development of both students' civic knowledge and civic disposition, thereby enabling the objectives of Civic Education to be achieved optimally

Furthermore, research by Sari et al. (2021) revealed that the success of Civic Education learning is not determined by a single aspect of teacher competence but rather by the simultaneous combination of various competencies (Sari et al., 2021). The findings of this study reinforce this argument, providing empirical evidence that the synergy between teachers' professional and pedagogical competencies can enhance students' understanding of their rights, responsibilities, and duties as citizens. Thus, these findings provide an important foundation for improving educators' quality, particularly by developing teaching strategies that integrate subject mastery and instructional skills.

#### *Coefficient of Determination Test ( $R^2$ )*

In the previous section, the hypothesis testing results indicated that teachers' Professional Competence and Pedagogical Competence simultaneously have a very significant influence on the enhancement of students' Civic Knowledge. Through the Coefficient of Determination ( $R^2$ ) test, the magnitude of the influence of variables X1 and X2 on Y can be determined. Based on the statistical analysis, the results are as follows:

**Table 9.**

*Coefficient of Determination ( $R^2$ ) Test Results*

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.845 <sup>a</sup>	.713	.698	3.42804

*Source: Processed by the researcher, 2025*

Based on the coefficient of determination data presented in Table 9 above, the magnitude of the influence of the independent variables (X1 and X2) on the dependent variable (Y) can be determined. The R-value of 0.845 indicates a strong relationship between the independent and dependent variables. Meanwhile, the  $R^2$  value is 0.713 or 71.3%, indicating that teachers' Professional and Pedagogical Competence account for 71.3% of the variance in students' Civic Knowledge. The remaining 28.7% is influenced by other factors or variables not examined in this study.

These findings are consistent with recent theoretical and empirical studies that emphasise that teacher competence is a central determinant of students' cognitive outcomes, particularly in civic learning contexts. Contemporary frameworks of teacher effectiveness highlight that professional competence (including subject-matter mastery and ethical commitment) and pedagogical competence (encompassing instructional strategies, classroom management, and adaptive teaching) jointly shape meaningful learning experiences and knowledge construction (Fauth et al., 2018; König et al., 2022). Empirical evidence from large-scale studies demonstrates that teachers' pedagogical knowledge and instructional quality significantly predict students' cognitive achievement and higher-order thinking skills (Fauth et al., 2018; König et al., 2022).

In the context of Civic Education, these mechanisms are particularly relevant, as the development of civic knowledge requires not only content transmission but also dialogic engagement, critical reflection, and contextual understanding of societal issues (Reichert & Print, 2018) Nevertheless, the remaining unexplained variance (28.7%) signals the presence of other influential variables—such as students' socio-cultural background, digital learning environments, and institutional support—which may interact with teacher competence in complex ways. This suggests that while strengthening teacher competence is necessary, it is not sufficient on its own to fully optimise civic learning outcomes. Therefore, future research

should adopt more integrative models that account for multilevel influences and explore how pedagogical competence operates in synergy with broader educational ecosystems to enhance students' civic knowledge more holistically.

### **Conclusion**

The results of this study provide robust empirical evidence that teachers' professional and pedagogical competence are significant determinants of students' civic knowledge, both individually and in combination. The statistical findings confirm that pedagogical competence exerts a comparatively stronger influence than professional competence, highlighting the centrality of instructional practices, classroom interaction, and adaptive teaching strategies in facilitating meaningful civic learning. The coefficient of determination ( $R^2 = 0.713$ ) further indicates that these two dimensions of teacher competence explain a substantial proportion of variance in students' civic knowledge, suggesting that teacher-related factors remain pivotal within the broader ecosystem of civic education.

From a theoretical perspective, these findings reinforce and extend contemporary models of teacher effectiveness by demonstrating that the integration of professional and pedagogical competence is not merely additive but synergistic in shaping cognitive civic outcomes. This study contributes to the growing body of literature by situating teacher competence as a core mechanism for constructing civic knowledge, particularly in contexts where learning requires not only content mastery but also critical engagement and contextual understanding. However, the unexplained variance also points to the importance of incorporating multilevel factors, such as socio-cultural context, learning environments, and institutional support, into future models of civic education. Therefore, this study offers a basis for developing more integrative and context-sensitive frameworks that link teacher competence with broader determinants of civic learning, thereby enhancing both the explanatory power and generalizability of research in this field.

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### **Disclosure Statement**

The authors declare that there are no potential conflicts of interest with respect to the research, authorship, and/or publication of this manuscript. All authors have reviewed and confirmed that no financial, personal, or professional interests exist that could be perceived as influencing the outcomes or interpretations of this study.

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### **Ethics Approval**

This is an observational study. The Research Ethics Committee of Universitas Negeri Manado has confirmed that no ethical approval is required.

## References

- Andayani, S., Ismail, M., Zubair, M., & Haryanto, H. (2022). Pengembangan kompetensi pedagogik dan profesional guru PPKn pada masa new normal Covid 19 di Madrasah Tsanawiyah Negeri se-Kota Mataram. *Manazhim*, 4(2), 260–278. <https://doi.org/10.36088/manazhim.v4i2.1795>
- Anshori, A., & Izharsyah, J. R. (2023). Dampak literasi politik dan pemilu 2024 bagi pemilih pemula terhadap pengendalian informasi hoax. *Jurnal Audiens*, 4(1), 86–97. <https://doi.org/10.18196/jas.v4i1.8>
- Antonius, I. (2021). *Pengaruh kompetensi profesional guru terhadap hasil belajar PPKn siswa kelas VIII SMP Negeri 21 Medan tahun pelajaran 2020/2021* [Skripsi, Universitas Negeri Medan].
- Areta, C. C., & Purwatiningsih, A. (2023). Upaya menjadi sosok guru pendidikan kewarganegaraan yang profesional bagi generasi Z. *Prosiding Temu Ilmiah Nasional Guru*, 15(1), 107–120. <https://doi.org/10.33830/ting.v15i1.2238>
- Arthur, J., Davies, I., & Hahn, C. (2008). *The SAGE handbook of education for citizenship and democracy*. SAGE Publications Ltd. <https://doi.org/10.4135/9781849200486>
- Azizah, N., Trisiana, A., Yulianto, A., Dewi, A. P., Febriyanti, F., & Andini, V. P. (2024). Peran dinamis generasi muda dalam mendorong partisipasi politik di Indonesia. *Resolusi: Jurnal Sosial Politik*, 7(2), 90–106. <https://doi.org/10.32699/resolusi.v7i2.8239>
- Bagou, D. Y., & Sukung, A. (2020). Analisis kompetensi profesional guru. *Jambura Journal of Educational Management*, 1(1), 122–130. <https://doi.org/10.37411/jjem.v1i2.522>
- Besare, S. D., Sasingan, M., & Manutede, Y. Z. (2024). Pengaruh kompetensi pedagogik guru terhadap efektivitas belajar siswa. *Jurnal Studi Guru dan Pembelajaran*, 7(3), 1013–1022. <https://doi.org/10.30605/jsgp.7.3.2024.4222>
- Biesta, G. (2015). What is education for? On good education, teacher judgement, and educational professionalism. *European Journal of Education*, 50(1), 75–87. <https://doi.org/10.1111/ejed.12109>
- Branson, M. S. (1998). *The role of civic education*. Center for Civic Education. [https://civiced.org/papers/articles\\_role.html](https://civiced.org/papers/articles_role.html)
- Chen, W., Huang, Z., Peng, B., Li, L., & Chen, J. (2025). Teacher competency and work engagement among secondary school physical education teachers: The multiple mediating roles of occupational stress, emotional exhaustion, and professional achievement. *Frontiers in Psychiatry*, 16, Pasal 1530413. <https://doi.org/10.3389/fpsy.2025.1530413>
- Coe, R., Aloisi, C., Higgins, S., & Major, L. E. (2014). *What makes great teaching? Review of the underpinning research*. Sutton Trust. <https://www.suttontrust.com/wp-content/uploads/2014/10/What-Makes-Great-Teaching-REPORT.pdf>
- Fauth, B., Decristan, J., Rieser, S., Klieme, E., & Büttner, G. (2018). Exploring teacher popularity: Associations with teacher characteristics and student outcomes in primary school. *Social Psychology of Education*, 21(5), 1225–1249. <https://doi.org/10.1007/s11218-018-9462-x>
- Feldman, L., Pasek, J., Romer, D., & Jamieson, K. H. (2007). Identifying best practices in civic education: Lessons from the student voices program. *American Journal of Education*, 114(1), 75–100. <https://doi.org/10.1086/520692>
- Ghozali, I. (2016). *Aplikasi analisis multivariete IBM SPSS 23*. Badan Penerbit Universitas Diponegoro.
- Isac, M. M., Maslowski, R., & van der Werf, G. (2011). Effective civic education: An educational effectiveness model for explaining students' civic knowledge. *School Effectiveness and School Improvement*, 22(3), 313–333. <https://doi.org/10.1080/09243453.2011.571542>

- Jumrawati, J., & Lina, K. (2025). Tinjauan kompetensi profesional guru bersertifikat pendidik terhadap efektivitas pembelajaran. *Transformasi: Jurnal Penelitian dan Pengembangan Pendidikan Non Formal Informal*, 11(1), 150–160. <https://doi.org/10.33394/jtni.v11i1.16867>
- König, J., Santagata, R., Scheiner, T., Adleff, A. K., Yang, X., & Kaiser, G. (2022). Teacher noticing: A systematic literature review of conceptualizations, research designs, and findings on learning to notice. *Educational Research Review*, 36, Pasal 100453. <https://doi.org/10.1016/j.edurev.2022.100453>
- Larasati, V., & Gafur, A. (2018). Hubungan kompetensi pedagogis dan kompetensi profesional guru PPKn dengan prestasi belajar siswa sekolah menengah. *Jurnal Civics: Media Kajian Kewarganegaraan*, 15(1), 45–51. <https://doi.org/10.21831/jc.v15i1.17282>
- Mulyasa, E. (2019). *Standar kompetensi dan sertifikasi guru*. Remaja Rosdakarya.
- Nasution, R., & Setiawan, D. (2020). Pengaruh kompetensi pedagogik guru PPKn terhadap minat belajar siswa. *EJoES (Educational Journal of Elementary School)*, 1(3), 59–64. <https://doi.org/10.30596/ejoes.v1i3.7221>
- Pangalila, T., & Fatimah, S. (2023). The influence of civic education learning and the Pancasila Student Profile Program on improving ideological values understanding. *Jurnal Civics: Media Kajian Kewarganegaraan*, 20(2), 359–369. <https://doi.org/10.21831/jc.v20i2.61511>
- Pangalila, T., & Winoto, D. E. (2022). The effect of citizenship education learning to improving student civic knowledge. *SHS Web of Conferences*, 149, Pasal 01057. <https://doi.org/10.1051/shsconf/202214901057>
- Purba, Y. O. I. B., Nababan, W., & Sihombing, S. D. (2025). Pengaruh kompetensi pedagogik serta kreativitas guru pada prestasi belajar murid pada mata pelajaran Pendidikan Kewarganegaraan: The influence of pedagogical competence and teacher creativity on student learning achievement in civic education subjects. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 5(2), 436–448. <https://doi.org/10.47709/educendikia.v5i02.5815>
- Purnomo, S. (2013). Pengaruh kompetensi profesional guru terhadap hasil belajar siswa pada mata pelajaran Pendidikan Kewarganegaraan pokok bahasan Hak Asasi Manusia di kelas VII pada Sekolah Menengah Pertama. *Vox Edukasi: Jurnal Ilmiah Ilmu Pendidikan*, 4(2), 106–113. <http://jurnal.stkipppersada.ac.id/jurnal/index.php/VOX/article/view/446>
- Rafzan, R., Belladonna, A. P., & Saputra, E. (2024). Improving critical thinking skills in civic education based on project citizen building awareness of environmental issues. *Jurnal Civics: Media Kajian Kewarganegaraan*, 21(2), 359–368. <https://doi.org/10.21831/jc.v21i2.73198>
- Reichert, F., & Print, M. (2018). Civic participation of high school students: The effect of civic learning in school. *Educational Research*, 70(3), 318–341. <https://doi.org/10.1080/00131911.2017.1316239>
- Sari, R. N. I., Winarno, W., & Rejekiningsih, T. (2021). Strategi guru PPKN dalam mengembangkan instrumen penilaian kecakapan kewarganegaraan. *Civics Education and Social Science Journal (CESSJ)*, 3(1), 61–76. <https://doi.org/10.32585/cessj.v3i1.1406>
- Shakira, A. M., & Najicha, F. U. (2023). Sinergi teknologi informasi dan pendidikan kewarganegaraan di era digital. *Borneo Law Review*, 7(2), 206–217. <http://jurnal.borneo.ac.id/index.php/bolrev/article/view/4663>
- Sincer, I., Volman, M., van der Veen, I., & Severiens, S. (2022). Students' citizenship competencies: The role of ethnic school composition and perceived teacher support. *Theory & Research in Social Education*, 50(1), 125–155. <https://doi.org/10.1080/00933104.2021.2014375>

- Sperduti, V. R., Arpacı, S., Engel, L., Yemini, M., & Borzenko, M. (2025). Beyond the buzzwords: How Washington, DC education policies shape youth activism. *International Journal of Educational Research*, 134, Pasal 102765. <https://doi.org/10.1016/j.ijer.2025.102765>
- Wahab, A. A., & Sapriya. (2011). *Teori dan landasan pendidikan kewarganegaraan* (ed. ke-1). Alfabeta.
- Widyawati, I., Herianto, E., & Rispawati, R. (2019). Analisis kompetensi pedagogik guru dalam mengembangkan tahapan penilaian sikap sosial pada mata pelajaran PPKn di SMPN se-Kota Mataram. *Jurnal Pendidikan Sosial Keberagaman*, 6(2), 124–135. <https://doi.org/10.29303/juridiksiam.v6i2.97>