

School Culture and Digital Literacy's Influence on Elementary Student Character

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Abstract: This study aimed to examine the influence of school culture and digital literacy on the character of elementary school students in the Pangudi Luhur Cluster, Gunungwungkal District, Pati Regency. The research was motivated by the low levels of literacy, numeracy, and character development identified in the 2023 education report cards, particularly at SDN Perdopo 02 and several surrounding schools. The study refers to the Pancasila Student Profile, which outlines ideal student attributes such as faith in God, noble character, global diversity, mutual cooperation, independence, critical thinking, and creativity. Using a quantitative approach with an ex-post facto design, the research involved a sample of 71 fifth-grade students selected through simple random sampling from a population of 87. Data were collected using validated and reliable closed-ended questionnaires, then analyzed using t-tests, F-tests, and multiple linear regression with SPSS 26.0. The results showed that school culture and digital literacy significantly influence the character of elementary school students, with a combined contribution of 62.7% to character development. The regression equation obtained was $\hat{Y} = 11.507 + 0.343 X_1 + 0.542 X_2$, indicating that both school culture and digital literacy contribute positively to shaping students' character. These findings highlight the importance of a strong school environment and digital competence in fostering well-rounded, character-driven learners.

Keywords: character, digital literacy, school culture.

1. Introduction

School culture reflects a set of shared habits, behaviors, and values that shape how members of a school community interact, think, and act. Each school has its unique culture that influences student behavior and overall school performance (Utaminingsih and Rachmawaty 2023). Core values of school culture include responsibility, honesty, discipline, mutual respect, and commitment to rules and learning. However, despite these values being instilled, issues such as poor discipline, cheating during tests, low competitiveness, and weak literacy, numeracy, and character skills persist in schools (Saputra et al. 2023). Data from the 2023 education report cards of SDN Perdopo 02, SDN Sidomulyo 02, and SDN Jepalo showed notably low scores in these areas, emphasizing the need to reinforce school culture to create a more supportive and effective learning environment (Shintia et al. 2023).

In line with national education priorities, digital literacy has become an essential component of modern learning since its inclusion in the six foundational literacies in 2015. Digital literacy refers to the ability to access, evaluate, and use information across digital platforms like the internet, smartphones, and computers (Pendidikan et al. 2018). The shift to digital tools became especially crucial during the COVID-19 pandemic when distance learning was implemented nationwide. Students and teachers had to adapt quickly, highlighting the urgent need for digital competence (Lestyaningrum et al. 2022). With the rise of social media and digital communication, schools now play a key role in instilling positive digital habits that support character development and academic growth (Muhammadiyah et al. 2023).

School culture refers to a set of values that guide behavior, shape traditions, daily routines, and symbols practiced by all members of the school community, including the principal, teachers, administrative staff, students, and the surrounding society. It also reflects the identity, character, and public image of the school (Nizary and Hamami 2020). School culture is reflected in the established rules, common practices, upheld values, and patterns of social interaction within the school environment (Dakhi 2020). Digital literacy is the ability to access, comprehend, and utilize information from various sources presented in digital formats (Naufal 2021). Digital literacy encompasses five key dimensions: (1) information literacy, (2) computer literacy, (3) media literacy, (4) communication literacy, and (5) technology literacy (Chetty et al. 2018).

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Character education in schools aims to develop responsible, ethical, and independent individuals. It includes teaching moral values, reinforcing ethical behavior, and building positive habits through collaboration between students and teachers (Purnomo, Wahyudi, and Sawitri 2021). Previous studies show that local culture-based character building and religious school culture can significantly influence students' values and behavior. Meanwhile, digital literacy also contributes to character education by shaping learning practices and student engagement (Ervianti, Sampelolo, and Pratama 2023). Based on this background, it is assumed that students' character is influenced by two main factors leading to this study titled “The Influence of School Culture and Digital Literacy on the Character of Elementary School Students in the Pangudi Luhur Cluster, Gunungwungkal District, Pati Regency.”

1.1 Conceptual framework

The rapid advancement of knowledge and technology today highlights the importance of students' ability to utilize digital technology as an integral part of their learning process. This is a response to the demands of the times, which require students to adapt their learning to technological developments. In addition, students are expected to embody the values outlined in the Pancasila Student Profile, which reflects the ideal characteristics of Indonesian learners. This profile describes students as individuals who are faithful and devoted to God Almighty, possess noble character, embrace global diversity, collaborate effectively, demonstrate independence, think critically, and exhibit creativity (Lubaba and Alfiansyah 2022). By emphasizing moral, social, and intellectual values, the profile aims to shape individuals who are not only academically competent but also socially aware, capable of critical thinking, and creative (Hayati et al. 2024).

School culture is a system of shared values, beliefs, and norms embraced by all members of the school community. It is consciously practiced as a natural behavior shaped by the school environment, fostering a shared understanding among stakeholders (Utaminingsih and Ismaya 2014). A positive school culture can encourage all resources within the school to work in synergy toward achieving the school's vision and mission collectively.

1.2 Research objectives

The objectives of this study are: to analyze the extent to which school culture influences the character of elementary school students in the Pangudi Luhur Cluster, Gunungwungkal District, Pati Regency; to examine the extent to which digital literacy affects the character of these students; and to assess the combined influence of school culture and digital literacy on the character development of elementary school students in the same area.

2. Method

2.1 Research design

The method used in this study is quantitative. Quantitative research involves the use of numerical data at various stages, from data collection to interpretation and presentation of research findings (Achjar et al. 2023).

2.2 Respondents of the study

The population in this study consists of fifth-grade students who participated in the ANBK (National Assessment), specifically from SDN Gunungwungkal 01, SDN Perdopo 02, SDN Sidomulyo 01, SDN Sidomulyo 02, SDN Jepalo, SDN Gulangpongge 01, and SDN Gulangpongge 02. These schools are part of the Pangudi Luhur Cluster in Gunungwungkal District, Pati Regency, with a total of 87 students. The researcher used the Slovin formula to obtain an adequate sample from the population of 87 students, ensuring that the research findings could be appropriately generalized. The desired level of precision in this study was set at 5% (Sumargo 2020).

2.3 Research Instrumen

The instrument used in this study was a questionnaire. A questionnaire is a set of questions given to respondents to answer based on the researcher's request. The purpose of using the questionnaire was to obtain data on the influence of variable X (Nurlan 2019), namely school culture and digital literacy, on variable Y, which is student character. This study employed a closed-ended questionnaire, where the items were structured in such a way that respondents were asked to select the option that best reflected their characteristics by placing a check mark (√).

Table 1. Instrument School Culture, Students' Digital Literacy Skills, Elementary School Students' Character.

No	Variable	Indicator	Statement Numbers
1	School Culture	Rules and regulations	1-2
		Habits	3-4

No	Variable	Indicator	Statement Numbers
2	Students' Digital Literacy Skills	Values	5-6
		Social interaction	7-8
		Total Number of Questions	8
		Information literacy	9-10
		Computer literacy	11-13
		Media literacy	14-16
		Communication literacy	17-19
		Technology literacy	20-22
3	Elementary School Students' Character	Total Number of Questions	14
		Faith in God Almighty and noble character	23-25
		Global diversity	26-28
		Mutual cooperation	29-31
		Independence	32-34
		Critical thinking	35-37
		Creativity	38-40
		Total Number of Questions	28

3. Findings and discussion

The following are the results of data processing collected from the dependent variable, namely the character of elementary school students and two independent variables, namely school culture and digital literacy.

3.1 Normality Test

The purpose of the normality test is to determine whether the data distribution in the study is normal (Syahrone 2022). To assess whether the data are normally distributed, the One-Sample Kolmogorov-Smirnov test is used. If the result of this test is greater than 0.05, the data are considered to follow a normal distribution. In this study, questionnaire data on school culture, digital literacy, and elementary students' character were tested using SPSS version 26.0. Based on the Kolmogorov-Smirnov test, the obtained Asymp. Sig. value was 0.065, which is greater than 0.05. Therefore, it can be concluded that the data are normally distributed.

Table 2. Result of One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		71
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.55741409
Most Extreme Differences	Absolute	.102
	Positive	.102
	Negative	-.077
Test Statistic		.102
Asymp. Sig. (2-tailed)		.065 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

3.2 The multicollinearity test

The multicollinearity test aims to determine whether there is a correlation among the independent variables. If a significant relationship is found, it indicates the presence of multicollinearity. This can be detected by examining the Tolerance values and the Variance Inflation Factor (VIF) (Ghozali 2011).

Table 3. Result of the Multikolinieritas Test

		Coefficients ^a				Collinearity Statistics		
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
Model		B	Std. Error	Beta				
1	(Constant)	11.729	7.593		1.545	.127		
	Budaya Sekolah	.865	.255	.286	3.397	.001	.785	1.273
	Literasi Digital	.637	.087	.614	7.301	.000	.785	1.273

a. Dependent Variable: Karakter Siswa SD

Based on the table above, the following conclusions can be drawn:

- a. The Tolerance value for the school culture variable is 0.785, and the VIF is 1.273. This indicates that there is no multicollinearity in the regression model.
- b. The Tolerance value for the digital literacy variable is also 0.785, with a VIF of 1.273, which similarly suggests no multicollinearity in the model.

Overall, the results of the multicollinearity test show that there is no multicollinearity problem between the independent variables in the regression model.

3.3 Partial Regression Analysis (t-Test)

The t-test is used to examine the partial (individual) effect of each independent variable on the dependent variable. This is done by testing the regression coefficient of each independent variable using the t-test (Jannah 2019).

Table 4. Result of the t-Test

		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta		
1	(Constant)	11.507	8.535		1.348	.182
	Budaya Sekolah	.343	.100	.285	3.413	.001
	Literasi Digital	.542	.073	.618	7.390	.000

a. Dependent Variable: Karakter Siswa SD

Based on the table above, it can be analyzed whether school culture and digital literacy variables have a partial effect on student performance. The decision rules for the t-test in regression analysis are as follows:

- a. If the calculated t-value > t-table (0.025; 71 = 1.996), it indicates a significant effect of the independent variable (X) on the dependent variable (Y), and the hypothesis is accepted.
- b. If the calculated t-value < t-table, it means there is no significant effect, and the hypothesis is rejected.

Decisions can also be made by examining the significance value (Sig.):

- a. If Sig. < 0.05, the independent variable significantly affects the dependent variable, and the hypothesis is accepted.
- b. If Sig. > 0.05, there is no significant effect, and the hypothesis is rejected.

From Table 4.11, the following results are obtained:

- a. The significance value (Sig.) for the digital literacy variable (X1) is 0.001, with a t-value of 3.413. Since 0.001 < 0.05 and t-value > t-table (1.996), it can be concluded that digital literacy has a significant effect on elementary students' character (Y), and the hypothesis is accepted.
- b. The significance value (Sig.) for the school culture variable (X2) is 0.000, and the t-value is 7.390. Since 0.000 < 0.05 and t-value > t-table (1.996), it can be concluded that school culture significantly affects elementary students' character (Y), and the hypothesis is accepted.

3.4 Multiple Regression

According to Nurlan (Nurlan 2019), "Multiple regression analysis is used by researchers when the goal is to predict the condition (increase or decrease) of the dependent variable (criterion) based on the manipulation (increase or decrease) of two or more independent variables as predictor factors." For the purpose of analysis and hypothesis testing, multiple linear regression analysis was employed using the SPSS 26.0 software.

Table 5. Result of the multiple regression test (F-test)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1852.640	2	926.320	57.200	.000 ^b
	Residual	1101.219	68	16.194		
	Total	2953.859	70			

a. Dependent Variable: the character of elementary school students

b. Predictors: (Constant), school culture and digital literacy

Source: Processed Data Results (2024)

Based on the table above, the significance value (Sig.) is 0.000, which is less than the probability threshold of 0.05. This indicates that the variables of school culture (X1) and digital literacy (X2), when considered simultaneously, have a significant influence on the character of elementary school students (Y). Furthermore, the calculated F-value is 57.200, which is greater than the F-table value of 3.13. Therefore, it can be concluded that school culture (X1) and digital literacy (X2) simultaneously have a significant effect on the character of elementary school students (Y).

3.5 Coefficient of Determination (R²)

This test is used to determine the extent of the contribution made by the independent variables school culture (X1) and digital literacy (X2) to the dependent variable, which is elementary students' character (Y). From the results of the F-test (simultaneous test), it is known that digital literacy (X1) and school culture (X2) jointly influence the dependent variable. However, the exact percentage of their influence still needs to be determined using the coefficient of determination (R²) (Unaradjan 2019).

Table 6. Result of the Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792 ^a	.627	.616	4.024

a. Predictors: (Constant), Literasi Digital, Budaya Sekolah

To determine the extent to which digital literacy and school culture variables simultaneously influence the character of elementary school students, the R square value in Table 4.13 can be examined (Sihotang 2023). The table shows that the coefficient of determination (R square) is 0.627. This indicates that, collectively, school culture and digital literacy contribute 62.7% to the students' character, while the remaining 37.3% is influenced by other factors not included in this model.

3.6 Regression Test Results

Regression analysis is a statistical method used to examine the relationship between one or more independent variables (predictors) and a dependent variable (response) within a model. Essentially, regression testing helps us understand how changes in the independent variables affect the dependent variable and how strong that relationship is (Paramita, Rizal, and Sulistyana 2021).

Table 7. Result of the Regression Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.507	8.535		1.348	.182
	Budaya Sekolah	.343	.100	.285	3.413	.001
	Literasi Digital	.542	.073	.618	7.390	.000

a. Dependent Variable: Karakter Siswa SD

Source: Processed Data Results (2024)

The results of the multiple regression analysis show the regression equation $\hat{Y} = 11.507 + 0.343X_1 + 0.542X_2$, indicating that without the influence of the independent variables, the character of elementary school students (Y) has a base value of 11.507. The regression coefficient for school culture (X_1) is 0.343, meaning that an increase of one unit in school culture leads to an increase of 0.343 in student character. Similarly, the coefficient for digital literacy (X_2) is 0.542, suggesting that a one-unit increase in digital literacy contributes to a 0.542 increase in the character of elementary school students, independent of other variables.

4. Conclusions and recommendations

Based on the research findings and hypothesis testing, the overall conclusion of this thesis is as follows: School culture has been proven to have a significant influence on the character of elementary school students in the Pangudi Luhur Cluster, Gunungwungkal District, Pati Regency. Digital literacy also shows a significant impact on students' character in the same area. Furthermore, school culture and digital literacy together have a simultaneous and significant effect on the character development of elementary school students.

Moreover, Schools should continue to cultivate positive habits that have become part of the school culture to support the development of students with the Pancasila Student Profile. Teachers' digital literacy must be continuously enhanced through relevant training and adequate technological facilities to motivate students in character development. Future research is encouraged to explore additional or alternative variables, such as student leadership or school infrastructure. School principals are advised to implement various management strategies to strengthen student character and overall school performance. Furthermore, teachers are expected to innovate and remain motivated in their professional roles to support the formation of well-rounded students.

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Conflict of Interest

The authors declare no conflicts of interest.

References

- Achjar, K. A. H., Rusliyadi, M., Zaenurrosyid, A., Rumata, N. A., Nirwana, I., & Abadi, A. (2023). *Metode penelitian kualitatif: Panduan praktis untuk analisis data kualitatif dan studi kasus*. PT Sonpedia Publishing Indonesia.
- Chetty, K., Qigui, L., Geora, N., Josie, J., Wenwei, L., & Fang, C. (2018). Bridging the digital divide: Measuring digital literacy. *Economics*, 12(1). <https://doi.org/10.5018/economics-ejournal.ja.2018-23>
- Dakhi, A. S. (2020). *Kiat sukses meningkatkan disiplin siswa*. Deepublish.
- Ervianti, E., Sampelolo, R., & Pratama, M. P. (2023). The influence of digital literacy on student learning. *Klasikal: Journal of Education, Language Teaching and Science*, 5(2), 358–365.
- Ghozali, I. (2011). *Aplikasi analisis multivariate dengan program IBM SPSS 19*. Badan Penerbit Universitas Diponegoro.
- Hayati, N. N., Hariyadi, A., Utaminingsih, S., & Setiadi, G. (2024). Implementasi projek penguatan profil pelajar Pancasila (P5) pada tema kewirausahaan di SD 5 Kedungsari Kudus. *SABDA (Seminar Nasional Bahasa dan Sastra Indonesia)*, 1.
- Jannah, L. M. (2019). *Metode penelitian kuantitatif*. [Publisher Name Needed].
- Kementerian Pendidikan dan Kebudayaan. (2018). *Modul literasi digital di sekolah dasar*. Direktorat Jenderal PAUD, Pendidikan Dasar, dan Pendidikan Menengah.
- Lestyningrum, I. K. M., Trisiana, A., Safitri, D. A., Pratama, A. Y., & Wahana, T. P. (2022). *Pendidikan global berbasis teknologi digital di era milenial*. Unisri Press.
- Lubaba, M. N., & Alfiansyah, I. (2022). Analisis penerapan profil pelajar Pancasila dalam pembentukan karakter peserta didik di sekolah dasar. *Edusaintek: Jurnal Pendidikan, Sains dan Teknologi*, 9(3), 687–706.

- Muhammadiyah, M., Novelti, N., Jasiah, J., Safar, M., & Nuramila, N. (2023). Transformasi pembelajaran bahasa Indonesia berbasis literasi digital untuk mewujudkan pendidikan karakter di era disrupsi 4.0. *Innovative: Journal of Social Science Research*, 3(2), 2276–2288.
- Naufal, H. A. (2021). Literasi digital. *Perspektif*, 1(2), 195–202.
- Nizary, M. A., & Hamami, T. (2020). Budaya sekolah. *At-Ta'fikir*, 13(2), 161–172.
- Nurlan, F. (2019). *Metodologi penelitian kuantitatif*. CV Pilar Nusantara.
- Paramita, R. W. D., Rizal, N., & Sulistyan, R. B. (2021). *Metode penelitian kuantitatif* (3rd ed.). Widya Gama Press.
- Purnomo, E., Wahyudi, A. B., & Sawitri, S. (2021). Nilai kemandirian dalam wacana ungkapan hikmah di SD se Karesidenan Surakarta. *Jurnal Pendidikan*, 30(1), 73–80.
- Saputra, A. M. A., Tawil, M. R., Hartutik, H., Nazmi, R., Abute, E. L., Husnita, L., Nurbayani, N., Sarbaitinil, S., & Haluti, F. (2023). *Pendidikan karakter di era milenial: Membangun generasi unggul dengan nilai-nilai positif*. PT Sonpedia Publishing Indonesia.
- Shintia, D., Asbari, M., Khairunisa, F., & Azizah, N. (2023). Rapor pendidikan Indonesia: Quo vadis kualitas pendidikan Indonesia? *Journal of Information Systems and Management (JISMA)*, 2(6), 18–21.
- Sihotang, H. (2023). *Metode penelitian kuantitatif*. [Publisher Name Needed].
- Sumargo, B. (2020). *Teknik sampling*. UNJ Press.
- Syahroni, M. I. (2022). Prosedur penelitian kuantitatif. *E-Jurnal Al Musthafa*, 2(3), 43–56.
- Unaradjan, D. D. (2019). *Metode penelitian kuantitatif*. Penerbit Unika Atma Jaya.
- Utaminingsih, S., & Ismaya, E. A. (2014). *Moral education evaluation model based on local culture "GUSJIGANG" involving three components* [Research summary]. Lembaga Penelitian Universitas Muria Kudus.
- Utaminingsih, S., & Rachmawaty, S. (2023). Peran budaya organisasi dalam membentuk sikap tanggung jawab sosial guru PAUD. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(6), 6808–6817.