

# **Digital adaptation and critical thinking skills in Buddhist religious education at Xaverius 1 junior high school Bandar Lampung**

**May Tria Agustina<sup>1</sup>, Sutiyono<sup>2</sup>, Juni Suryanadi<sup>3</sup>**

<sup>1,2</sup>Buddhist Education Department, Jinarakkhita Buddhist College of Lampung, Indonesia

<sup>3</sup>Buddhist Business and Management Department, Jinarakkhita Buddhist College of Lampung, Indonesia

Email: [may.tria.agustina@sekha.kemena.go.id](mailto:may.tria.agustina@sekha.kemena.go.id)

**Abstract:** The ability to adapt to technology is not only related to technical skills, but is also believed to be related to cognitive abilities, one of which is critical thinking. The purpose of this study was to determine the effect of digital adaptation on critical thinking skills in Buddhist education at SMP Xaverius 1 Bandar Lampung. This study used a quantitative approach with a survey method involving 50 students as respondents. The research instrument was a questionnaire with a Likert scale that measured digital adaptation abilities with four indicators, namely the ability to use digital technology, the use of technology for learning, digital information evaluation skills, and the ability to adapt to new technology. The success of education is greatly influenced by the quality of learning that can encourage active involvement and deep understanding in students. However, in practice, many students still show low participation, tend to only memorize without being able to analyze the material critically, and misuse technology for activities that do not support the learning process. The lack of interactive teaching methods discourages students from thinking critically or reflecting on the teachings contextually. This study aims to examine the effect of digital adaptation on students' critical thinking skills in Buddhist Education at Xaverius 1 Junior High School in Bandar Lampung. The results of the study show that there is a positive and significant influence between digital adaptation and students' critical thinking skills. The analysis indicates that digital adaptation has a highly significant influence on students' critical thinking abilities. This finding suggests that the better students adapt to digital technologies, the more capable they become in analyzing, evaluating, and solving problems logically. Overall, digital adaptation plays a strong role in enhancing students' critical thinking, although other external factors beyond this study also contribute to shaping these skills.

**Keywords:** Digital Adaptation, Critical Thinking, Buddhist Education

## **1. Introduction**

The educational needs of the 21<sup>st</sup> century require students to have critical thinking skills to respond to various challenges in the digital era. Critical thinking skills are important, but the reality in the field is not yet as expected. The critical thinking skills of students in Indonesia are still relatively low. This is based on the four-yearly International Trends in International Mathematics and Science Study (TIMSS) conducted on junior

high school students with high cognitive level questions that can measure students' critical thinking skills, which shows that Indonesian students consistently rank at the bottom [1].

Based on data from the Programme for International Student Assessment (PISA) 2022, which is conducted every three years, Indonesia ranks 69th out of 80 countries listed by the Organisation for Economic Co-operation and Development (OECD). Based on data from the Programme for International Student Assessment (PISA) 2022, which is conducted every three years, Indonesia ranks 69th out of 80 countries registered by the Organisation for Economic Co-operation and Development (OECD). Indonesia ranks 69th or 12th from the bottom of the list with a score of 1,108 [2].



Figure 1. OECD Graph

The graph above shows that the low critical thinking skills of students in Indonesia are a significant problem that must be addressed immediately. These low thinking skills may be caused by the use of learning models that do not emphasize 21st-century skills such as analysis and problem solving. The Programme for International Student Assessment (PISA) report emphasizes that critical thinking skills are key skills that students must develop to face future challenges. Unfortunately, many students still find it difficult to evaluate information critically, especially in a digital environment full of data that may not necessarily be valid [3].

The development of digital technology has brought major changes to various aspects of life, including education. The Industrial Revolution 4.0 and digital transformation have shifted the learning paradigm from conventional methods to technology-based approaches [4]. According to a UNESCO report (2021), digital transformation in education has had a significant impact on teaching methods, learning materials, and student engagement, especially in elementary schools. The use of digital technology in education not only increases access to information but also enables more interactive and collaborative learning. However, success in technology-based learning is highly dependent on the individual's ability to adapt to the digital environment [5].

This shift enables more active and flexible learning, enriches educational resources, and increases student motivation and participation. However, challenges such as limited

internet access, device availability, and teacher readiness remain. In this digital age, students are not only required to have academic skills, but also the ability to think critically in filtering the information they receive. Adapting to digital education requires ongoing support and appropriate policies to ensure effective and inclusive implementation [6]. Digital education has also influenced civil society, with social media platforms becoming powerful tools for mobilizing communities and raising awareness about social issues [7].

Digital adaptation refers to a person's ability to understand, accept, and effectively utilize digital technology in their daily lives [8]. In the context of education, digital adaptation not only includes the ability to operate technological devices, but also the readiness to accept digital innovations as part of the learning process [9]. Critical thinking skills enable individuals to analyze, evaluate, and synthesize information before making decisions or solving problems.

In this ever-evolving digital age, adapting to technology has become an important necessity in various aspects of life, including in Buddhist education at the Xaverius Bandar Lampung junior high school level. The learning process, which was previously conventional, is now beginning to transform with the use of digital technology, such as e-learning platforms, interactive applications, and social media as a means of spreading religious values. However, not all students and teachers are equally prepared to face these changes, whether in terms of digital literacy, access to technology, or understanding of the ethics of using digital media. Therefore, digital adaptation in Buddhist education at SMP Xaverius 1 Bandar Lampung is both a challenge and an opportunity to improve the quality of learning, broaden students' horizons, and strengthen their understanding of religious values in a way that is more contextual and relevant to their current lives [10].

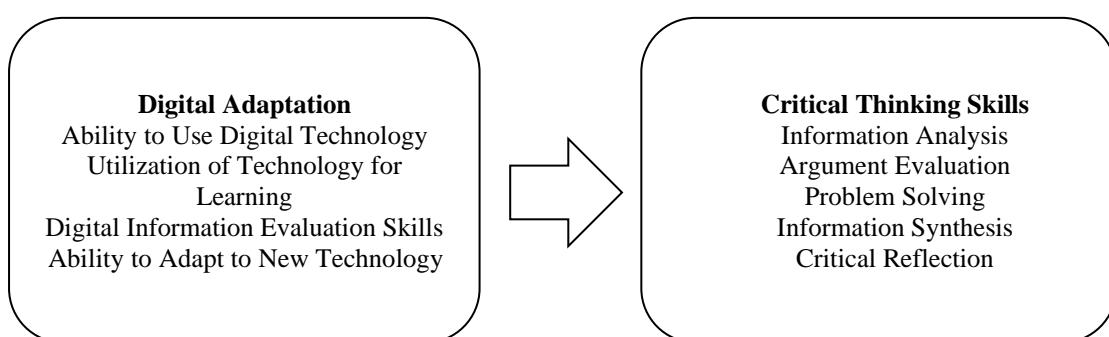
In addition, the uniqueness of digital adaptation lies in digital interaction and collaboration, which are increasingly becoming an integral part of the learning process. According to the OECD (2022), students with high digital adaptation skills find it easier to interact in online learning environments and utilize technology to collaborate with peers and teachers. This shows that digital adaptation is not only individual-oriented, but also has a social dimension that encourages cooperation, communication, and problem-solving skills in a digital environment. Furthermore, digital adaptation is also related to digital literacy and ethics, which distinguishes it from merely technical skills in operating devices. According to Robbani (2025), individuals with high digital literacy are not only able to search for information online, but also have the ability to evaluate the accuracy and credibility of information sources. This is important in today's digital age, where misinformation and hoaxes are increasingly easy to spread. Good digital adaptation enables students to think critically in selecting information and using it ethically in the learning process [11].

The relationship between digital adaptation and critical thinking is becoming increasingly relevant in the digital age because the two influence each other in the learning process. According to Paul & Elder (2019), individuals with high digital adaptation are more likely to use technology to access broader information, conduct in-depth analysis, and develop data-based arguments. In other words, digital adaptation

enables students to think more critically because they have access to a variety of information sources and analytical tools that can support more rational decision-making [12]. In the digital era of the 21st century, learning should make optimal use of technology to improve students' critical thinking skills. Good digital adaptation allows students to access, analyze, and evaluate information in depth, so that they can develop a more logical, reflective, and data-driven mindset (OECD, 2022).

By integrating technology into the learning process, students can develop the ability to sort credible information, analyze various perspectives objectively, and evaluate the validity of an argument based on empirical evidence. Good digital adaptation also allows students to engage in technology-based discussions, use data analysis tools, and utilize artificial intelligence in information processing to improve decision-making accuracy. In addition, an interactive and collaborative digital learning environment encourages students to think more reflectively, ask critical questions, and connect cross-disciplinary concepts more systematically. Thus, optimal digital adaptation not only increases learning efficiency but also shapes individuals who are capable of complex reasoning and problem-solving in the real world [13]. However, the main challenge in the relationship between digital adaptation and critical thinking is how to ensure that students actually use technology to think analytically, not just as passive consumers of digital information. Many students use technology only to passively consume content without evaluating the accuracy of the information they receive. Therefore, an educational approach that emphasizes the development of digital-based critical thinking strategies is needed so that students are not only accustomed to using technology but are also able to think deeply in every use of that technology [14].

Critical thinking skills are one of the essential competencies that students must have in today's global and digital era. These skills enable students to analyze information, evaluate arguments, and make rational decisions based on data and logic [15]. However, preliminary observations conducted at Xaverius 1 Junior High School in Bandar Lampung, particularly in Buddhist Religious Education classes, show that students' critical thinking skills are still relatively low. This is reflected in the tendency of students to only be able to answer questions textually and to be unable to relate the



**Figure 1.** Constellation Model Research

learning material to real-life contexts. Based on the results of observations made during the learning process, it appears that most students tend to be passive, accepting information from teachers without asking critical questions, and rarely engaging in analytical discussions. When given tasks that require reflective thinking or decision-making based on specific reasons, students show difficulty in presenting logical and in-depth arguments. For example, in discussions about moral values in Buddhist teachings, many students simply repeat the content of the text without providing personal interpretations or expressing critical views on the application of these values in everyday life. The following is explained in the form of a framework for examining the impact of Digital Adaptation on Critical Thinking Skills [16].

## 2. Method

This study used a quantitative approach with a survey method to examine the effect of Digital Adaptation on students' Critical Thinking. The research location was Xaverius 1 Junior High School in Bandar Lampung, with a population consisting of 50 students in grades VII to IX in the 2025/2026 academic year. A sample of 50 students was taken from the entire population as research subjects without using a sampling method. Data were collected through a questionnaire with 75 items, which were compiled based on a 5-point Likert scale (1-5). This questionnaire instrument aimed to measure the research variables, namely Digital Adaptation and Critical Thinking among students.

Data analysis was performed using simple regression statistics to determine the extent of the influence of Digital Adaptation on students' Critical Thinking. Data processing was carried out using Statistical Program for the Social Sciences (SPSS) version 27 software to ensure the reliability and validity of the analysis results. The analysis results were then presented descriptively, followed by a discussion and conclusions from this study.

## 3. Results

The instrument trial involved 40 students with a total of 80 statement items consisting of 40 Digital Adaptation variable items and 40 Critical Thinking items. The results for the digital adaptation variable showed that 37 items were valid and 3 items were invalid. The invalid items were number 18 with a rhitung value of -0.0159, number 24 with a rhitung value of 0.1666, and number 31 with a rhitung value of -0.0123. In the critical thinking variable, there were 38 valid items and 2 invalid items. The invalid items were number 55 with a rhitung value of 0.0789 and number 72 with a rhitung value of -0.3390. These items were declared invalid by comparing the rtabel of 40 respondents with a significance level of 0.05, which is 0.312. If  $rhitung \leq rtabel$ , the item is declared invalid. The invalid statement items were removed by the researcher because other item numbers could already represent each statement indicator, so that out of 80 statement items, there were still 75 statement items used in the study. Instrument Reliability Test Results.

**Table 1.** Reliability of Variable X

Reliability Statistics		
Variable	Cronbach's Alpha	Number of Items
Digital Adaptation	.888	37
Critical Thinking	.731	38

Source: results of data processing in 2025 using SPSS 27.0

The results of the reliability test of the instrument measuring the influence of Digital Adaptation on Critical Thinking using SPSS Version 27 are reliable. This is because the Cronbach's alpha value for the Digital Adaptation variable is 0.888 and for Critical Thinking is 0.731, which is greater than 0.5. Thus, it can be concluded that the Digital Adaptation and Critical Thinking instruments that have been tested have high reliability. Therefore, these instruments can be used in research.

**Table 2.** Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
	N	50
Normal Parameters <sup>a,b</sup>	Mean	.000000
	Std. Deviation	9.80270607
Most Extreme Differences	Absolute	.087
	Positive	.072
	Negative	-.087
	Test Statistic	.087
	Asymp. Sig. (2-tailed) <sup>c</sup>	.200 <sup>d</sup>
	Sig.	.447
Monte Carlo Sig. (2-tailed) <sup>e</sup>	99% Confidence Interval	Lower Bound
		.434
		Upper Bound
		.460

a. Test distribution is Normal.

b. Calculated from data.

Source: results of data processing in 2025 using SPSS 27.0

This normality test was conducted using the One Sample Kolmogorov Smirnov method. The sample data is considered to come from a normally distributed population if the significance level is 0.05 or 5%. Based on the normality test results for 50 respondents, a significance value (2-tailed) of 0.447 was obtained. Since this value is greater than 0.05 ( $0.447 > 0.05$ ), it can be concluded that the data is normally distributed. The results of the normality test using the One Sample Kolmogorov-Smirnov method are presented in the table above.

**Table 3.** Homogeneity Test

		Tests of Homogeneity of Variances			
X to Y		Levene Statistic	df1	df2	Sig.
	Based on Mean	.360	1	98	.550
	Based on Median	.034	1	98	.854
	Based on Median and with adjusted df	.034	1	83.243	.854
	Based on trimmed mean	.193	1	98	.661

Source: results of data processing in 2025 using SPSS 27.0

The homogeneity test was conducted as a prerequisite in the independent sample analysis using the Compare Means One Way ANOVA method. The basic assumption in ANOVA analysis is that the population variance must be the same. The test criterion is that if the significance value is greater than 0.05 or 5%, then the variance of the two data groups is considered to be the same. Based on the results of the homogeneity test, the significance value of the Digital Adaptation variable on Critical Thinking obtained from the variance homogeneity test output was 0.550. Because 0.550 is greater than 0.05, it can be concluded that the two data groups are homogeneous. More detailed results can be seen in the table above.

The homogeneity of variance test was conducted using Levene's test to ensure the equality of variance between groups in the variable of mindfulness-based social emotional learning on learning focus. Based on the results obtained, Levene's Statistic value for all approaches (mean, median, median with adjusted degrees of freedom, and trimmed mean) showed a p-value of 0.05. The highest significance value was found in the median approach with a p-value of 0.854, while the lowest value in the mean approach obtained a p-value of 0.550. Since all p-values are greater than 0.05, it can be concluded that the variance between groups is homogeneous. This fulfills the assumption of variance homogeneity required for further analysis.

**Table 4.** Regression Equation Test

Model	Coefficientsa				
	Unstandardized		Standardized		
	Coefficients	B	Std. Error	Coefficients	Beta
(Constant)	39.027	9.061			4,307 .000
	.707	.070		.824	10,064 .000
1 Digital Adaptation					
a. Dependent Variable: Critical Thinking					

Source: SPSS 27.0 Data Output Results

Based on the output results in the coefficient table, the constant value is 39.027. The regression coefficient of the Digital Adaptation variable (X) is 0.707, which indicates that every increase in Digital Adaptation will result in an increase in the Critical Thinking variable (Y) of 0.707. The resulting regression equation is  $Y = 39.027 + 0.707X$ .

Hypothesis Testing Criteria The hypothesis testing criteria in this study are: Reject  $H_0$  if the t-value is greater than the t-table value or the significance value is less than 0.05. Based on the data analysis results, the following values were obtained: Count value = 10.064 The table value with degrees of freedom ( $df = n - 2 = 50 - 2 = 48$ ) at a significance level of 5% ( $\alpha = 0.05$ ) is 1.677, Significance value (Sig.) = 0.000. Because the t-value (10.064) is greater than the t-table value (1.677) and Sig. (0.000) is less than 0.05, the decision made is to reject  $H_0$  and accept  $H_a$  based on the following table criteria.

**Table 5.** ANOVA Analysis

ANOVAa						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9934.721	1	9934.721	101,277	.000b
	Residual	4,708.559	48	98,095		
	Total	14,643.280	49			

a. Dependent Variable: Critical Thinking  
b. Predictors: (Constant), Digital Adaptation

Source: 2025 data analysis results using SPSS 27.0

From the ANOVA analysis output, the F-value was 101.277 with a significance of 0.000, so there was no need to match the F-table because SPSS already provided the significance value. A significance of  $0.000 < 0.05$  indicates that  $H_0$  is rejected and  $H_a$  is accepted. This shows that Digital Adaptation has an effect on Critical Thinking Skills.

In this study, the digital adaptation variable has four indicators, namely: 1) Ability to Use Digital Technology, 2) Utilization of Technology for Learning, 3) Digital Information Evaluation Skills, 4) Ability to Adapt to New Technology. The critical thinking ability variable has five indicators, namely: 1) Information Analysis; 2) Argument Evaluation indicator; 3) Problem Solving indicator; 4) Information Synthesis; 5) Critical Reflection.

This study explains that the average score for the digital adaptation variable was 2.74, with 55% falling into the sufficient category. The highest score was for the Digital Information Evaluation Skills indicator, with 76% falling into the high category, and the lowest score was for the Use of Technology for Learning indicator, with 57% falling into the sufficient category. This condition shows that students at Xaverius 1 Junior High School in Bandar Lampung have a low focus on the Use of Technology for Learning. Meanwhile, in the Critical Thinking variable, it is explained that the average value of the critical thinking ability variable was 3.46 with a percentage of 69% in the high category. The highest score was in the Problem Solving indicator with 76% in the high category and the lowest score was in Argument Evaluation with 57% in the sufficient category. This condition shows that students at SMP Xaverius 1 Bandar Lampung have a low focus on Argument Evaluation.

The results of this study are in line with a study conducted by (Dwanda Putra et al., 2023), which found that the application of digital technology in religious education can improve students' critical thinking skills. The use of interactive digital media helps students explore religious teachings in greater depth, analyze their meanings, and relate

them to the context of everyday life. This supports the research findings that good digital adaptation can encourage the development of higher-order thinking skills. Another study by [17] also shows that the integration of technology in religious education increases learning motivation and trains students to think analytically and reflectively about spiritual values.

This concept of digital adaptation has its roots in Buddhist teachings, particularly in the Pada Tevijja Sutta (D.I.13.), which teaches that true knowledge does not only come from theory but must be practiced, tested, and experienced directly. In the context of digital adaptation in learning, this principle emphasizes the importance of choosing credible learning sources, not just passively consuming information, but also applying it in real experiences, which is in line with digital adaptation. Meanwhile, in the Kalama Sutta (A.I,188), the Buddha teaches that one should not accept a teaching based solely on authority, tradition, rumor, or master. Instead, they are taught to investigate and test for themselves whether a teaching or piece of information leads to goodness and does no harm. The principle in this Sutta encourages independent thinking, avoiding authoritative opinion, and using wisdom in accepting or rejecting something, which is also in line with critical thinking.

**Table 6. R Square Coefficient Values**

Model Summary					
Model	R	R-Squared	Adjusted R-Square	Standard Error of the Estimate	
1	.824a	.678	.672	9.904	
a. Predictors: (Constant), Digital Adaptation					

Source: 2025 data analysis using SPSS 27.0

The coefficient of determination in the Model Summary Table shows an R Square value of 0.678. This means that 67.8% of the critical thinking variables of students in Buddhist studies at SMP Xaverius 1 Bandar Lampung are influenced by digital adaptation. Meanwhile, the remaining 32.2% is influenced by other variables not included in this study, such as environmental factors, student background, parental support, or other pedagogical approaches. The quantitative analysis results also show that the residual data obtained has met the classical assumptions in linear regression, including normality and homogeneity. The significance value of the residual normality test is 0.200, which is greater than 0.05, indicating that the residual data is normally distributed. Thus, this regression model is suitable for statistical analysis and conclusion drawing.

In addition, based on the t-test results, the t-value obtained was 10.064, with a significance level of 0.000. When compared to the t-table at a significance level of 0.05 and a number of respondents (n) of 50, it is known that the significance value is < 0.05, so it can be concluded that  $H_a$  is accepted. This means that there is a significant effect between digital adaptation and students' critical thinking skills. The regression model resulting from this analysis can be formulated in the form of an equation:  $Y = 39.027 + 0.707 X$ , which means that every one-unit increase in the application of digital adaptation will increase students' critical thinking scores by 0.707 units. These findings show that

the use of digital technology in Buddhist education has a real contribution to improving students' reasoning, analysis, and critical reflection on religious material.

#### 4. Discussion

From the validity test results on the digital adaptation variable from 40 statement items, 3 statement items were found to be invalid, while the remaining 37 items were valid. On the Critical Thinking variable from 40 statement items, 2 statement items were found to be invalid, while the remaining 38 items were valid. These items were declared valid because the calculated  $r$  value was  $\leq r$  table of 0.854 based on 40 respondents with a significance level of 0.05. The invalid items were excluded by the researcher because the other items sufficiently represented the statement indicators, so that out of 80 items, 75 items were still used in the study.

From the results of calculating the reliability of the instrument of the influence of digital adaptation on students' critical thinking on the Digital Adaptation variable, the Cronbach's alpha reliability value was 0.888 on 37 valid items. Meanwhile, for the Critical Thinking variable, the Cronbach's alpha reliability value was 0.731 for 38 valid items. Thus, it can be concluded that the tested instrument for the influence of Digital Adaptation on Critical Thinking has high reliability. Therefore, this instrument can be used in research.

From the quantitative analysis of the normality test, the residual significance value was 0.447. Because the residual significance value was greater than 0.05, it can be concluded that the data population was normally distributed. The homogeneity test results show a significance value of 0.550. Because the significance value is greater than 0.05, it can be concluded that the data on Digital Adaptation to Critical Thinking has the same variance.

The positive regression coefficient shows that Digital Adaptation has a positive effect on the Critical Thinking of students at Xaverius 1 Junior High School in Bandar Lampung. The magnitude of the effect can be seen from the R square value of 0.678, which means that 67.8% shows that Digital Adaptation affects critical thinking, while the remaining 32.2% is influenced by other factors outside the study. This shows that Digital Adaptation has an effect on the critical thinking of students at SMP Xaverius 1 Bandar Lampung. In other words, Critical Thinking can be influenced by Digital Adaptation by 67.8% through a linear relationship expressed by the equation  $Y = 39.027 + 0.707X$ .

Based on the results of data analysis and hypothesis testing, it is known that digital adaptation has a positive and significant influence on students' critical thinking skills in Buddhist studies at SMP Xaverius 1 Bandar Lampung. This means that the higher the quality of digital adaptation in learning, the more critical thinking skills students will develop. This includes the ability to analyze, evaluate, and conclude information logically and independently. In line with research [17], the use of a digital approach in pedagogy is able to stimulate students to not only passively accept material, but also to question and reflect on the information obtained.

The development of digital technology in the era of revolution has brought major changes in the world of education, including in the way students access, understand, and process information. This digital transformation requires adjustments in learning methods

to be able to respond to the challenges of the times, including in Buddhist Education. However, the reality in the field shows that not all students are able to adapt optimally to these digital changes. This is a particular concern, because good digital adaptation is believed to be able to encourage the improvement of higher-order thinking skills, one of which is critical thinking skills.

Critical thinking skills are very important in Buddhist education, because Buddhist teachings emphasize deep understanding, self-reflection, and rational freedom of thought, not just doctrinal acceptance. Therefore, students need to be trained not only to memorize teachings, but also to analyze, evaluate, and relate these teachings to the context of everyday life. In this case, the digitization of learning has the potential to be an effective tool to enrich the learning process, open access to various sources of teachings, and foster a more open and critical way of thinking. However, the extent to which digital adaptation actually contributes to improving students' critical thinking skills, especially in Buddhist education, has rarely been studied in depth. Most studies have focused more on general subjects such as science or language. In fact, religious education is also very important in shaping students' character and way of thinking as a whole. Therefore, this study was conducted to address the need for empirical evidence that can explain the relationship between digital adaptation and critical thinking skills in the context of Buddhist education.

In Buddhist teachings, adaptation is a manifestation of understanding Anicca (impermanence). The Buddha taught that all things are subject to change, whether physically, mentally, or socially. Therefore, someone who understands and accepts the principle of Anicca will be better prepared to face the dynamics of the times, including technological changes. By understanding impermanence, a person is encouraged to be open-minded, continue learning, and not cling to old ways, including in the use of technology. This underlies the importance of adaptability as part of the spiritual path. As explained in the Satipatthana Sutta (Majjhima Nikāya 10) Mindfulness "This is the only way to purify beings, to overcome sorrow and lamentation... namely through the Four Foundations of Mindfulness." Digital adaptation in learning requires mindfulness in using devices, filtering information, and managing time and emotions when learning online. This sutta reminds us to be fully present in every activity, including when learning to use technology [18].

The research focuses on how adaptation in digital pedagogy changes the approach to language learning in the technological era, with a descriptive qualitative approach that emphasizes the transformation of methods and the role of teachers in online learning. Meanwhile, this study specifically examines the influence of digital adaptation on students' critical thinking skills using a quantitative approach through regression analysis. In addition, this research integrates Buddhist values as a philosophical foundation for understanding critical thinking processes in the digital age, making it unique because it combines scientific and spiritual approaches. Thus, this research not only measures the relationship between variables empirically but also contributes to building an ethical and wisdom-based digital learning model [19].

With this adaptation, students can access a wide range of learning resources flexibly, whether through learning videos or other online platforms. In addition, digital adaptation encourages students to be more independent, creative, and critical in searching for and processing information. The use of technology also facilitates interaction between teachers and students, speeds up the learning administration process, and allows the learning process to continue in emergency situations such as a pandemic. Furthermore, digital adaptation equips students with 21st-century skills that are highly needed in the modern world of work, such as digital literacy, online collaboration, and effective communication [20].

The process of digital adaptation in Buddhist education at SMP Xaverius 1 Bandar Lampung cannot be separated from various factors that influence its effectiveness. These factors can be categorized into two types: supporting and inhibiting factors, which originate from aspects of human resources, infrastructure, and institutional policies. The supporting factors are teacher competence in educational technology, student motivation and independence, availability of basic facilities and infrastructure, and school policy support. The inhibiting factors are Limited Access to Technology at Home, Variations in Students' Digital Literacy Skills, Increased Teacher Workload and Limited Contextual Digital Content on Buddhism, and Lack of Digital-Based Evaluation of Students.

Through this research, it is hoped that the role of digital adaptation in supporting students' critical thinking skills in Buddhist education can be answered. This research also provides answers to the needs of teachers and schools to design learning that is not only informative and traditional, but also transformative and contextual. Teachers, as facilitators, have an important role in directing the use of technology so that it is not merely a medium of entertainment, but a means to build deep, analytical, reflective thinking skills that are in line with Buddhist values. In addition, the results of this study can make a real contribution to the development of curricula and learning models that support the achievement of religious education goals, namely to shape individuals with good character, wisdom, and critical thinking skills. With a good understanding of digital adaptation, schools can prepare students to become individuals who are not only able to keep up with technological developments but also have the wisdom to use these technologies for their own advancement and that of society. Ultimately, this research is expected to strengthen the theoretical and practical basis regarding the importance of digital adaptation in building critical thinking skills, especially among students at Xaverius 1 Junior High School in Bandar Lampung in the context of Buddhist education. These findings can be important input for policy makers, teachers, and religious education practitioners to continue developing more effective, relevant, and meaningful learning innovations in the digital age.

The significant influence of digital adaptation on students' critical thinking skills in Buddhist education can be seen from the results of the linear regression analysis used in this study. Critical thinking skills are an important competency in education, especially in the context of religious education, where students are required not only to understand teachings textually but also to be able to analyze and reflect on them deeply. In this study, digital adaptation, which includes the use of technological devices, online learning

platforms, and interactive teaching media, was applied as a learning strategy to increase student engagement in deep thinking processes [21].

Through linear regression analysis, a coefficient of determination (R Square) value of 0.678 was obtained. This figure shows that 67.8% of the increase in students' critical thinking skills was positively and significantly influenced by digital adaptation in learning. These findings prove that the integration of technology in Buddhist education is quite effective in shaping and developing students' critical thinking skills. This positive influence is an indicator that digital-based learning strategies can encourage more meaningful learning achievements, especially in higher-level cognitive aspects.

However, there is still 32.2% of other influences that come from factors outside this study, such as student background, family role, school policy, or teaching methods used by teachers. The success of digital adaptation in improving critical thinking skills also greatly depends on the readiness and creativity of teachers in managing technology, compiling contextual teaching materials, and creating a learning environment that encourages exploration and deep reflection.

Overall, the results of this study confirm that digital adaptation has a significant influence on the development of students' critical thinking skills in Buddhist education. Therefore, digital adaptation should be used as the main approach in learning strategies in the digital age, especially in religious education. For optimal results, the application of technology needs to be supported by continuous teacher training, strengthening school infrastructure, and active collaboration between teachers, students, and education policy makers.

## 5. Conclusion

Based on the results of this study, it can be concluded that there is a significant positive influence between Digital Adaptation and Critical Thinking among students at SMP Xaverius 1 Bandar Lampung. This influence can be seen from the results of a simple regression analysis which shows that Digital Adaptation contributes 67.8% to students' Critical Thinking, while the remaining 32.2% is influenced by other factors. There is a significant positive influence between digital adaptation and students' critical thinking skills. This shows that the better students' ability to adapt to digital technology, the higher their skills in analyzing, understanding, and evaluating Buddhist teachings in a deep and logical manner.

The magnitude of this influence can be seen from the analysis results, which show that digital adaptation plays an important role in supporting the improvement of critical thinking skills. This means that improving the quality of digital adaptation among students at SMP Xaverius 1 Bandar Lampung can be a major factor in fostering a critical, reflective, and more contextual mindset in understanding Buddhist teachings. Thus, efforts to strengthen digital adaptation must be a focus in the learning process so that students can use technology wisely, responsibly, and in accordance with Buddhist values. The results of the analysis show that digital adaptation has a significant influence on students' critical thinking skills. In other words, digital adaptation plays a major role in shaping critical, analytical, and deep thinking in students. Improving the quality of digital

adaptation is an important factor in encouraging students to be able to relate religious teachings to the context of everyday life, so that learning becomes more meaningful. This means that if digital adaptation continues to be developed and directed properly, students' critical thinking skills will also improve. Conversely, there are other factors outside of digital adaptation that also influence students' critical thinking skills, albeit with a smaller influence.

## References

- [1] K. Karim and N. Normaya, "Kemampuan Berpikir Kritis Siswa Dalam Pembelajaran Matematika Dengan Menggunakan Model Jucama Di Sekolah Menengah Pertama," *Edu-Mat: Jurnal Pendidikan Matematika*, vol. 3, no. 1, 2015, doi: 10.20527/Edumat.V3i1.634.
- [2] E. Syafitri, D. Armanto, and E. Rahmadani, "Aksiologi Kemampuan Berpikir Kritis (Kajian Tentang Manfaat Dari Kemampuan Berpikir Kritis)," *Journal of Science and Social Research*, vol. 4, no. 3, p. 320, 2021, doi: 10.54314/Jssr.V4i3.682.
- [3] R. E. Cynthia and H. Sihotang, *Melangkah Bersama di Era Digital: Pentingnya Literasi Digital untuk Meningkatkan Kemampuan Berpikir Kritis dan Kemampuan Pemecahan Masalah Peserta Didik*. 2023.
- [4] A. P. A. Fadilla, "Pemanfaatan Media Pembelajaran Digital Dalam Meningkatkan Minat Belajar IPS Di Sekolah Dasar," *Nusantara: Jurnal Ilmu Pengetahuan Sosial*, 2025, doi: 10.31604/Jips.V12i3.2025.
- [5] S. N. Azizah, "Diferensiasi Pembelajaran Pendidikan Agama Islam Dalam Meningkatkan Literasi Di Era Digital," 2025.
- [6] I. Sutisna and R. Safitri, "Adaptasi Guru Di Era Pendidikan Berbasis Digital," *Jurnal Ilmiah Profesi Guru (JIPG)*, vol. 3, no. 1, pp. 68–73, 2022, doi: 10.30738/Jipg.Vol3.No1.A11906.
- [7] L. D. Putra, S. Zhinta, and A. Pratama, "Pemanfaatan Media dan Teknologi Digital dalam Mengatasi Masalah Pembelajaran," *Journal Transformation of Mandalika*, vol. 4, no. 8, 2023, [Online]. Available: <http://ojs.cahayamandalika.com/index.php/jtm/issue/archive>
- [8] A. Setiawan, "Penerapan Model Inovasi Terbuka Dalam Meningkatkan Adaptasi Teknologi UKM," 2025, [Online]. Available: <http://ojs.stiami.ac.id>
- [9] D. N. Agnafia, "Analisis Kemampuan Berpikir Kritis Siswa Dalam Pembelajaran Biologi," *Journal of Wind Engineering and Industrial Aerodynamics*, vol. 26, no. 1, pp. 1–4, 2019, [Online]. Available: <https://doi.org/10.1007/s11273-020-09706-3>
- [10] S. Zubaidah, "Berfikir Kritis: Kemampuan Berpikir Tingkat Tinggi Yang Dapat Dikembangkan Melalui Pembelajaran Sains," in *Seminar Nasional Sains 2010 Dengan Tema "Optimalisasi Sains Untuk Memberdayakan Manusia,"* 2010, p. 11.
- [11] Robbani, *Pengembangan Keterampilan Berpikir Kritis Melalui Pembelajaran Berbasis Masalah*. 2025.

- [12] R. Paul and L. Elder, *Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life*. 2019.
- [13] K. P. Sagala, “Tantangan Pendidikan Karakter di Era Digital,” 2024.
- [14] M. Teräs, “Education and Technology: Key Issues and Debates,” *International Review of Education*, vol. 68, no. 4, pp. 635–636, 2022, doi: 10.1007/S11159-022-09971-9.
- [15] H. Saputra, “Kemampuan Berfikir Kritis Matematis,” *Perpustakaan IAI Agus Salim Metro Lampung*, vol. 2, pp. 1–7, 2020.
- [16] M. Marzuki, “Urgensi Manajemen Pendidikan Islam Dalam Pengembangan Lembaga Pendidikan Islam,” *Journal On Education*, vol. 6, no. 3, pp. 17435–17445, 2024.
- [17] D. Setiyawati, “Developing an Effective Team Work: The Effect of Collaborative Learning Strategies on Improving Team Work Abilities in Buddhist Sunday School,” in *International Journal of Science and Applied Science: Conference Series*, 2024, pp. 200–208.
- [18] M.I.18, *The Middle Length Discourses of the Buddha: A Translation of the Majjhima Nikāya*. Boston.
- [19] I. Gusmana, “Tantangan Dan Solusi Dalam Peningkatan Kualitas Guru Madrasah Ibtidaiyah Di Era Digital,” *Islamic Education Journal*, vol. 2, pp. 1–12, 2025.
- [20] N. V Mospan and S. O. Sysoieva, “Trends In Digital Adaptation Of Schools During The Covid-19 Pandemic,” *Information Technologies And Learning Tools*, vol. 91, no. 5, pp. 21–35, 2022, doi: 10.33407/Itlt.V91i5.5063.
- [21] C. Redecker and Y. Punie, *Digital Competence Of Educators DigCompEdu*. 2017.