



# Unlocking Minds: Innovative Approaches to Thematic Subject Mastery at MI Muhammadiyah Jagalan through Creative Learning Strategies

Aulia Puspita Saputri, Ahwy Oktradiksa <sup>(✉)</sup> and Norma Dewi Shalikhah

Education Teacher of Madrasa Ibtidaiyah, Muhammadiyah University of Magelang, Central Java 56172, Indonesia  
ahwy@unimma.ac.id

**Abstract.** The purpose of this study is to ascertain the best ways to apply Creative Thinking learning methodologies in order to enhance theme learning results. Experiments are being used in this quantitative study. A sample of 23 students was taken using the census method, and the participants of this study were class V students at MI Muhammadiyah Jagalan, which had a population of 135 pupils. The findings of the pretest and posttest are used in the data collection process, together with the results of the normality test and the t test for hypothesis testing. According to the study's findings, 19 students scored higher on the pretest than the KKM 75. After applying the Creative Thinking Learning Strategy and taking a post-test with the same questions, 23 students scored higher than the KKM 75. The Pretest and Post Test scores are normally distributed since the results of the normality test,  $L_o = 0.809$  for the Pretest and  $L_o = 0.133$  for the Post Test, are smaller than the L table value of 0.175. Based on the data processing results with SPSS version 26.0 df, it was possible to determine that  $H_a$  was accepted and  $H_o$  was rejected with a t table value of  $2.093 > 10.924$ , a degree of freedom of 0.05, and a df value of 22. Thus, it seems sense that learning strategies involving creative thinking have a big impact on theme learning outcomes.

**Keywords:** Creative Thinking, Learning Result, Thematic Lesson

## 1 Introduction

According to Ki Hajar Dewantara, education is an endeavour to develop a child's character, mind, and body in order to help them achieve life's ultimate goal, which is to raise children who are in harmony with the natural world and society Merging Citations. An educational institution must be able to oversee and manage the curriculum's implementation as well as enhance and develop the professional skills it contains in order to achieve these learning objectives [5, 6]. The curriculum in Indonesia has changed multiple times along its evolution to better meet the demands of raising the country's educational standards.

Since 2013 until now, in 2023, most educational institutions in Indonesia have updated the curriculum under the names Curriculum 2013 and Curriculum for Independent Learning and Independent Campus [7]-[8]. With the implementation of K-13, subjects emerged that combined several subjects and combined aspects of knowledge and skills which were called thematic learning. Thematic learning emphasizes students' active participation in the learning process more than other learning approaches [9]. The relationship between a subject and other subject is important in learning.

The application of this thematic learning has the characteristics of learning by implementing student-centered learning or student-centered learning [9]. In this case, students are expected to be able to prove directly what they have learned. For this reason, techniques are needed that are designed by a teacher to be able to help students in learning activities to achieve effective and efficient learning outcomes or what are called learning strategies. Although they are not the sole element influencing learning performance, learning techniques play a significant part in the learning environment. A learning strategy is a method for figuring out how to accomplish all of the things that go into reaching learning objectives, like preparation, execution, and evaluation [10]. The actual issue is that not all educational establishments have adopted instructional and technical solutions that comply with these regulations. This occurred at MI Muhammadiyah Jagalan, when pupils became disinterested in the ways the lecturers were presenting the curriculum. Even when they present the material, teachers fail to implement efficient learning techniques. Other than that, pupils have not demonstrated their originality or engagement with the material. due to the fact that teachers' methods of instruction are not as engaging.

## **2 Method**

This study employs a quantitative methodology [11]. A total of 135 students from MI Muhammadiyah Jagalan made up the population for this study [12]– [13]. Of those students, 23 individuals from class V at MI Muhammadiyah Jagalan served as the samples for this study. approaches for gathering data that include tests, observations, documentation, and interviews [14]. Instrument test analysis procedures, including validity, reliability, normalcy, and t-tests, are used in this study.

## **3 Result and Discussion**

### **3.1 Result**

The teacher's role in delivering the material—namely, the ability to think fluently—and the application of the Creative Thinking Learning strategy are inextricably linked. During each meeting, the teacher works to inspire students to generate a lot of ideas, answers, and solutions to problems or questions in order to help them develop their ability to think fluently during the learning process. Following instruction using a creative thinking learning strategy, students in class V at MI Muhammadiyah Jagalan took a post-test. The average score was 82.83; 17 students received a score higher than the

KKM and were deemed passed, or 82.6%, while the remaining students received an 82.6%. With the greatest score being 100 and the lowest being 50, 4 pupils, or 17.4% of the class grade V MI Muhammadiyah Jagalan students, scored below the KKM 75, demonstrating an improvement in learning methodologies.

### Question Item Validity Test Results.

The validity test findings are derived from the thematic subject question validity results. Using a comparison of  $>r$  table 0.41 for items with a total of 30 question items, it can be inferred that 10 question items are invalid and 20 question items are considered valid and can be continued with good quality. Test of Reliability is shown in Table 1.

**Table 1.** Reliability Test Results for thematic subject questions

Reliability Statistics		
Cronbach's Alpha	N of Items	Recommendation
0.767	30	Reliable

### Pre-Test.

This test aims to determine students' abilities before implementing creative thinking learning strategies.

From the Pretest results can be concluded that of the 19 children who were given the Pretest questions, there were 5 students or 21.7% who got a score above the KKM and were declared passed, while the remaining 18 students or 78.3% of students got a score below the KKM 75 with the student's average score being 57.83 with the highest score being 80 and the lowest score being 25. This shows that the learning strategies implemented are not yet effective in improving class grade V thematic learning outcomes.

### Post-Test.

This test aims to determine students' abilities after applying creative thinking learning strategies.

Based on the Post Test results, it can be inferred that out of the 23 kids that took the test, 17 of them scored higher than the KKM and were deemed to have passed, accounting for 82.6% of the total. The other 4 pupils, or 17.4%, were in class V. MI Muhammadiyah Jagalan's score was lower than the 75 KKM. The aforementioned table also shows that students' average score is 82.83, with 100 representing the greatest score and 50 representing the lowest. This illustrates how adopted learning strategies outperform earlier teaching techniques in terms of helping students achieve better learning results.

### Normality Test.

The student pretest score data is sorted from the smallest value to the largest value and the Xi value obtained is shown in the following Table 2.

**Table 2.** Creative Thinking Learning Strategy Pretest Normality Test Results

No	Y1	Z	F(Zi)	S(Zi)	Absolute (Fzi-Szi)
1	25	-2.04167	0.0207	0.043478	0.022778
2	35	-1.41978	0.0793	0.086957	0.007657
3	40	-1.10883	0.1357	0.130435	-0.00527
4	40	-1.10883	0.1357	0.173913	0.038213
5	40	-1.10883	0.1357	0.217391	0.081691
6	45	-0.79789	0.2148	0.26087	0.04607
7	45	-0.79789	0.2148	0.304348	0.089548
8	45	-0.79789	0.2148	0.347826	0.133026
9	50	-0.48694	0.3156	0.391304	0.075704
10	55	-0.176	0.4325	0.434783	0.002283
11	60	0.13495	0.5517	0.478261	-0.07344
12	60	0.13495	0.5517	0.521739	-0.02996
13	65	0.445896	0.6700	0.565217	-0.10478
14	65	0.445896	0.6700	0.608696	-0.0613
15	65	0.445896	0.6700	0.652174	-0.01783
16	65	0.445896	0.6700	0.695652	0.025652
17	70	0.756841	0.7734	0.73913	-0.03427
18	70	0.756841	0.7734	0.782609	0.009209
19	75	1.067786	0.8554	0.826087	-0.02931
20	75	1.067786	0.8554	0.869565	0.014165
21	80	1.378731	0.9147	0.913043	-0.00166
22	80	1.378731	0.9147	0.956522	0.041822
23	80	1.378731	0.9147	1	0.0853
Total		1330			
Rates		57.83			
Variant		258.696			
Deviation		16.08			

From these results, the average value = 57.83 and the standard deviation is 16.08 and the calculated L value taken is the highest value in the  $F_i(Z_i) - S(Z_i)$  column so that the calculated L value or  $L_o = 0.133$  and the L table value with the number of respondents was 23 respondents and obtained a value of 0.175. From these results, a comparison was made between  $L_o$  and L tabel and obtained  $L_o = 0.133 < L \text{ tabel} = 0.175$ . Compute each question in the  $F_i(Z_i) - S(Z_i)$  column table to determine the L value. The student pre-test data is regularly distributed since  $L_o < L \text{ tabel}$ , according to these findings. Following the application of creative thinking learning strategies to the learning process, the following phase involves testing the normality of the Post Test data. based on the Post Test score computation findings shown in Table 3.

**Table 3.** Post-Test Normality Test Results for Creative Thinking Learning Strategy

No	Y1	Z	F(Zi)	S(Zi)	Absolute (Fzi-Szi)
1	50	-2.40616	0.0082	0.043478	0.035278
2	60	-1.67375	0.0475	0.086957	0.039457
3	60	-1.67302	0.0475	0.130435	0.082935
4	60	-1.67375	0.0475	0.173913	0.126413
5	75	-0.57331	0.2843	0.217391	-0.06691
6	80	-0.20748	0.4207	0.26087	-0.15983

7	80	-0.20674	0.4207	0.304348	-0.11635
8	80	-0.20748	0.4207	0.347826	-0.07287
9	80	-0.20674	0.4207	0.391304	-0.0294
10	85	0.159091	0.9441	0.434783	-0.50932
11	85	0.159824	0.9441	0.478261	-0.46584
12	85	0.159091	0.9441	0.521739	-0.42236
13	85	0.159824	0.9441	0.565217	-0.37888
14	90	0.52566	0.6985	0.608696	-0.0898
15	90	0.526393	0.6985	0.652174	-0.04633
16	90	0.52566	0.6985	0.695652	-0.00285
17	95	0.892962	0.8133	0.73913	-0.07417
18	95	0.892229	0.8133	0.782609	-0.03069
19	95	0.892962	0.8133	0.826087	0.012787
20	95	0.892229	0.8133	0.869565	0.056265
21	95	0.892962	0.8133	0.913043	0.099743
22	<b>95</b>	<b>0.892229</b>	<b>0.8133</b>	<b>0.956522</b>	<b>0.143222</b>
23	100	1.259531	0.8944	1	0.1056
Total		1095			
Rates		82.83			
Variant		185.968			
Deviation		13.64			

From these results, the average value = 82.83 and the standard deviation is 13.64 and the calculated L value taken is the highest value in the  $F_i(Z_i) - S(Z_i)$  column so that the calculated L value or  $L_0 = 0.143$  and the L value are obtained. table with a total of 23 respondents obtained a value of 0.175. From these results, a comparison was made between  $L_0$  and  $L_{table}$  and obtained  $L_0 = 0.143 < L_{table} = 0.175$ . For the L value, calculate each question item presented in the  $F_i(Z_i) - S(Z_i)$  column table. and obtained the  $L_0$  value = 0.143 and the L table value = 0.175. From these results, it can be concluded that  $L_0 \leq L_{table}$ , so the students' Post Test data is normally distributed.

### Uji t

In this study, the Paired Sample Test—a component of the Comparative Hypothesis Test or Comparison Test—is used for hypothesis testing in the form of a t test. The purpose of this test is to determine whether the average of two matched or related samples/groups differs. Pretest and posttest results for a paired sample test are shown in Table 4.

**Table 4.** Paired Sample Test Pretest and Post test

Respondent	Pretest	Post test
Respondent-1	65	85
Respondent-2	25	50
Respondent-3	70	90
Respondent-4	40	60
Respondent-5	60	85
Respondent-6	80	90
Respondent-7	80	95
Respondent-8	75	100



The descriptive statistical findings of the two samples under study—the Pretest and Post Test scores—are summarised in this output. The average score for the Pretest was 57.82. In the meantime, the average learning outcome score for the Post Test results was 82.82. There were twenty-three pupils utilised as study samples or responders. The pretest's standard deviation number was 16,084, and the posttest's was 13,637. Mean error for the post-test is 2.843 while the pretest is 3.353. There is a descriptive difference in the average learning results between the Pretest and Post Test findings because the average value of the Pretest learning results is  $57.82 < \text{Post Test } 82.82$ . Next, an interpretation of the results presented in Table 8 is required to demonstrate whether or not the difference is actually real and significant.

**Table 8.** Paired Samples Correlations

	N	Correlation
Pretest and Post Test	23	0.739

The correlation test findings, the relationship between the two sets of data, or the relationship between the pretest and posttest variables are displayed in the output above. The correlation coefficient value is 0.739 with a significance value (Sig.) of 0.000, as can be determined from the output above. According to the statistics, there is a link between the pretest and posttest variables because the Sig value of 0.000 is less than the probability of 0.05.

**Table 9.** Paired Sample Test

	Mean	Std.De- viation	Std Error Mean	95% Confidence In- terval of the Differ- ence		T	df	Sig(2.tailed)
				Lower	Upper			
Pair 1 Pre Test Post Test	- 25.00000	10.97518	2.28848	- 29.74602	- 20.25398	- 10.924	22	.000

In the third part of the output, this is the most important output, because in this part the answer will be found to the question in this research, namely whether or not there is an influence of the use of creative thinking learning strategies on student learning outcomes in mathematics subjects for class grade V MI Muhammadiyah Jagalan students.

The Sig value is known based on the output table shown above in Table 9. If the two-tailed value is  $0.000 < 0.05$ ,  $H_0$  is not accepted and  $H_a$  is. The use of Creative Thinking Learning learning strategies has an impact on students' learning outcomes in thematic subjects for class V MI Muhammadiyah Jagalan students, as indicated by the average difference between the results of the Pretest and Post Test [15]. The t count is known to have a negative value of -10.924. Because the average value of the Pretest results is less than the average value of the Post Test results, the t count is negative. A negative t value can signify anything positive in this situation. The computed t value therefore becomes 10.924. The next step involves searching for the t table using the significance value ( $\alpha/2$ ) and the df value (degree of freedom) as criteria. The result

above indicates that the value  $0.05/2$  is  $0.025$  and that the  $df$  value is  $22$ . In order to find the  $t$  table in the distribution of statistical  $t$  table values, this value is used as a guide, and  $2.093$  is the result. Therefore, based on the above-mentioned foundation for decision-making, it may be determined that  $H_0$  is rejected and  $H_a$  is accepted because the calculated  $t$  value is  $10.924 > t$  table  $2.093$ . Thus, it can be said that applying creative thinking learning strategies enhances the effectiveness of thematic learning compared to not applying them.

### 3.2 Discussion

#### **Application of Creative Thinking Learning in Thematic Learning at MI Muhammadiyah Jagalan.**

The implementation of Creative Thinking learning begins with the teacher's efforts to stimulate students' creativity during learning [16]. Followed by providing fun and interesting learning. The third thing is that teachers always respect the ideas expressed by students. Class grade V students at MI Muhammadiyah Jagalan have different characteristics. Every child has their own characteristics or uniqueness. So that in generating different ideas and opinions according to their respective characteristics [17]. Fourth, develop creativity in learning. Teachers need to provide a platform for each student to develop their creativity. The next step is that the teacher provides a good response to questions and answers from students.

#### **3.3 Effective Creative Thinking Learning Strategy to Improve Learning Outcomes at MI Muhammadiyah Jagalan.**

It is evident from the preceding Paired Sample Test output table that the computed  $t$  value, which is  $-10,924$ , is negative. Because the average value of the pre-test results is lower than the average value of the post-test results, the  $t$  count has a negative value. A negative  $t$  value in this kind of situation can have a positive mean-ing. The computed  $t$  value therefore becomes  $10.924$ . Subsequently, compare the values in the  $t$  table with the computed  $t$ . The  $t$  table is searched using the significance value ( $\alpha/2$ ) and the  $df$  value (degree of freedom). It is clear from the result above that the  $t$  table value is  $2.093$ , the  $df$  value is  $22$ , and the value of  $0.05/2$  is equivalent to  $0.025$ . Therefore, based on the above-mentioned foundation for decision-making, it may be determined that  $H_0$  is rejected and  $H_a$  is accepted because the calculated  $t$  value is  $10.924 > t$  table  $2.093$ . Thus, it seems sense that learning strategies based on creative thinking have a big impact on theme learning outcomes [18].

Similarly, based on test and analysis results, Alberth Supriyanto Manurung's research from 2020, *The Influence of Creative Thinking Abilities to Improve Mathematics Learning Outcomes in Elementary Schools*, demonstrates that creative thinking abilities influence mathematics learning outcomes [19]. The hypothesis testing results show that the linear regression equation for the creative thinking ability variable with mathematics learning outcomes is  $\hat{y} = -8.739 + 0.231X$ . Following testing, the regression equation model is shown to be linear and significant at the  $\alpha = 0.05$  level. This indicates that a rise in one creative thinking ability score is accompanied by an increase in the



mathematics learning accomplishment score of 0.231, with a constant of -8.739. The contribution between the creative thinking ability variable and mathematics learning outcomes, the coefficient of determination is 0.1672, indicating that 16.72% of the variance in the mathematics learning outcome variable is explained or determined by creative thinking abilities.

## 4 Conclusion

Based on the results of the research discussion, it can be concluded that the application of creative thinking learning in class grade V can provide a stimulus for creativity, attract learning, and improve learning outcomes for students. Teachers using this strategy always respect the ideas submitted by students by providing a platform for each student to develop their creativity.

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