The Effect of Critical Multiliteracy Learning Model on Students' Reading Comprehension

Siti Maesaroh[1], Mumu Muzayyin[2]
[1]PGMI, IAIN Syekh Nurjati Cirebon
[2]Universitas Nahdlatul Ulama Cirebon

Article Info	ABSTRACT
  How to cite this article: Maesaroh, S. ., & Muzayyin, M. . (2022). The Effect of Critical Multiliteracy Learning Model on Students' Reading Comprehension. *International Journal of Educational Qualitative Quantitative Research*, *1*(1), 28–33. **Read online:** *Scan this QR code with your smart phone or mobile device to read online.*	This study aims to determine the influence of the Critical Multiliteracy model on the reading comprehension ability of fifth graders at State Elementary School (SDN) 1 Majasem. The approach used in this research is quantitative. The research design used was a one-group pretest-posttest design. The population was the fifth-grade elementary school at SDN 1 Majasem. The sample of this research is 24 students. The data collection technique in this study used a test in the form of multiple choice questions and a description of 20 questions. The research data were analyzed using normality, homogeneity, and t-test. Based on the study's results, it is known that the multiliteracy learning model has a significant effect on students' reading comprehension skills. This result can be seen from the significance value is $0.013 < 0.05$. Thus, the critical multiliteracy learning model positively impacts students' reading comprehension skills. **Keywords:** Reading Comprehension Skills, The Critical Multiliteracy Learning Model, Elementary School
Corresponding Author: Siti Maesaroh Email: maesarohalfarahby@gmail.com	
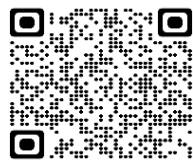
1. INTRODUCTION

The basis of literacy is related to language skills (Weigel et al., 2006). Still, this ability does not stand alone because it only makes sense if it intersects with specific contexts and cultures. It makes sense in some communication mediums and not in others. The intersection between literacy and context, culture, and communication media has given rise to the term "multi-literacy" (McShane, 2011). So, what is meant by multi-literacy is language skills related to context, culture, and media (Kalantzis & Cope, 2008; Mills, 2009; Warner & Dupuy, 2018).

The topic of discussion is not a form of gossip that has the nuances of entertainment but contains scientific insights that can be explained in an intellectual, cultural, and media context. Speaking is not solely based on the ability to imagine (Manalu & Situmorang, 2021) but on thinking critically and creatively, considering ethical and aesthetic values. In process review, reading can be defined as a complex information processing process (Wickens & Carswell, 2021). Consistent with that view (Duke & Cartwright, 2021). Reading is a set of thinking skills that explore the meaning of reading (Nation, 2019). The reader must be able to encode the symbols of written language and understand what he is reading. Both are essential level competencies; if the reader cannot encode the written language symbols in the text he reads, then understanding cannot be formed. Reading comprehension is part of the silent reading activity that relies only on visual abilities, cognition, and memory when processing reading, without making a sound or moving lips, aiming to learn and gain broader insights (Ehri, 2020; Hillesund et al., 2022; Tunmer & Hoover, 2019).

Reading is divided into reading comprehension, extensive reading, and speed reading according to the reader's ability (Abd. Syakur et al., 2020; Liu & Zhang, 2018; Mangen et al., 2019). Reading can be divided into oral reading and silent reading (Akyol & Ketenoğlu Kayabaşı, 2018; Brysbaert, 2019). Dafit's research (2017) entitled "Implementation of the Multiliteration Model in the Learning Process of Reading

Comprehension of Grade IV Elementary School Students". Obtaining student information cannot be understood just by reading. Students reopen the text they read and answer when asked according to the answers to reading material questions. Based on reading the text without using his own words. Because the teacher only assigns students to read, the teacher must also emphasize the students' understanding of reading a book. The creativity and knowledge of teachers in such learning models are still not enough; even while learning to read, teachers usually do not use learning models. Teachers only make textbooks as learning resources using the ability learning model to improve students' reading. Such things have an impact on non-compliance with the best learning objectives.

The learning model used by the teacher is sometimes not following the target. The target of the learning process is not achieved effectively. One way to improve students' ability to read and understand reading content is the multiliteracy model (Abidin, 2017; Kumagai & López-Sánchez, 2015; Lee et al., 2021). Understanding must exist in every reading activity, which is that reading activities without understanding the contents are not reading activities. Reading comprehension activities is not easy (Satriani, 2018). The student's reading comprehension ability is still low. The learning process cannot be a routine operation without using media or methods. A learning model is a pattern that describes a systematic, organized procedure. Learning and operational experience as a guide for planning and conducting learning activities. Learning to read is not just for students to be able to read.

The multiliteracy model is learning the place to read, write, listen and speak effectively, the possibility of improving thinking skills, including critical, analytical, and evaluation of various sources, disciplines, and competencies in conveying that information (Ahmadi & Ibda, 2019; Hermawati et al., 2021). With the multiliteracy model, students can optimize language skills that manifest abilities through critical thinking, conceptual understanding, collaboration, and communication (Alghamdi & El-Hassan, 2016; Cope & Kalantzis, 2013). Students can produce products in production, creating a learning environment and helping create conditions for inquiry learning and integrated subject learning for elementary school students. Susilo and Garnisya's research (2018) entitled "Application of Multiliteracy Models to Improve Reading Comprehension Skills of Elementary School Students". This study shows the Multiliteracy model's success in improving the reading comprehension skills of fifth-grade students at SDN Trajaya III, Palasa District, Majalengka Regency, in 2017. Based on these conclusions, the researcher submits suggestions based on the study's results, and it turns out that there are still many other factors that have not been studied. Therefore, recommendations for other researchers to continue research on these factors. In addition, the multiliteracy model is considered a new model in Indonesia. Other researchers should examine various factors that become weaknesses in learning to use this multiliteracy model.

Students who study with the multiliteracy learning model positively respond to the learning model that has affected their reading and writing skills (Irianto et al., 2020; Usanova & Schnoor, 2021). Teachers who use multiliterate learning models in the learning process also give a positive response (Kangas & Rasi, 2021). The results of Rahmah et al.'s research (2021) entitled "Qualitative Analysis of Students' Reading Comprehension in Grades 1-3". This study states that there are already many elementary school students in grades 1-3 who can understand the contents of the reading, quite capable of solving the problems contained in it, and there are various ways to improve student's reading skills.

Based on the results of preliminary studies through tests and interviews, many students can understand the contents of the readings they have read even though it takes a long time to understand them. The ways to improve reading skills are almost the same: by repeating what they have read and reading diligently. Such as reading books, story books, fairy tales or other picture books, and magazines can make informants like reading. By reading, informants can know, have broad knowledge, understand the reading content, and become intelligent people. Informants can be stupid, challenging to learn, difficult to understand, and difficult to interact with others if they cannot read.

The difference between previous studies and my research is that previous studies considered the multiliteracy model to be a new model in Indonesia. Most elementary schools in Indonesia are primarily using the lecture method (Sarwanto et al., 2021). Students are not actively involved in learning and only receive knowledge from the teacher, especially understanding of reading is also still lacking (Fatimah et al., 2022; Kintsch, 2009). However, this problem can be overcome by engineering literacy learning based on the concept of Multiliteracy, Integrative, and Differentiating (MID) in elementary schools, which significantly impacts students' reading skills in elementary schools (Abidin, 2017).

2. METHOD

This study aims to determine the influence of the critical multiliteracy learning model on the reading comprehension ability of the fifth-grade students of SDN 1 Majasem. The approach used in this research is quantitative. The research design used was one group pretest-posttest. The population of this study was the fifth-grade elementary school. The sample of this research is 24 students. The research used was a test in the form of multiple choice and mixed questions, with as many as 20 questions.

The test will be meaningful if the test consists of items that test important objectives and represent the domain of knowledge, abilities, and skills in a usual manner. Therefore, planning in testing plays an important role. Without a clear plan and can be equipped, the test becomes useless. It may even interfere with the goal process. The selection of items is based on the importance of the concept, generalization, or theory being tested using the study. Usually, the field of study is divided into several subjects and sub-subjects. There is no limit to the number of items for one topic or sub-topic, but the number of items is proportional to the area and importance of the subject.

There are six levels of ability: knowledge, understanding, application, analysis, synthesis, and evaluation, generally labeled C1, C2, C3, C4, C5, and C6. The test results are oriented to knowledge, understanding, and application, so the number of questions represents the first three levels. The research data were analyzed using normality, homogeneity, and t-test.

The procedure of this research firstly gives a pretest to determine the student's reading comprehension ability before treatment. Secondly provides treatment by applying a critical multiliteracy learning model. Third, post-test to assess the effect of the critical multiliteracy learning model on students' reading comprehension.

3. RESULTS AND DISCUSSION

3.1 Reading Comprehension Ability through Critical Multiliteracy Learning Model

The students' reading comprehension ability through the implementation of the critical multiliteracy learning model is described in the section below as follows.

Pretest and Posttest Results

Based on the results of the study, data on student's initial ability in reading comprehension can be seen in the following table.

Table 1. Pretest and Posttest Results of Student's Reading Comprehension

Statistics		Pre-test	Post-test
N	Valid	24	24
	Missing	26	26
Mean		52.0833	65.0000
Std. Error of Mean		3.85325	3.50982
Median		50.0000	60.0000
Std. Deviation		18.87699	17.19454
Variance		356.341	295.652
Range		50.00	50.00
Minimun		30.00	40.00
Maximum		80.00	90.00
Sum		1250.00	1560.00

Based on table 1 above, the average pretest value is 52.0833, the minimum pretest value is 30.00, the maximum pretest value is 80.00, and the standard deviation value is 18.87699. The average posttest value is 65.0000, the minimum posttest value is 40.00, the maximum posttest value is 90.00, and the posttest standard deviation value is 17.19454. The data shows differences in the average results of the pretest-posttest after being given treatment by applying the critical multiliteracy learning model.

3.2 The Effect of the Critical Multiliteracy Model on Student's Reading Comprehension Abilities

To determine the influence of the critical multiliteracy learning model on students' reading comprehension abilities, in this case, the researcher presents the results of statistical tests.

Table 2. Normality test

One-Sample Kolmogorov-Smirnov Test			
		Pre-test	Post-test
N		24	24
Normal Parameters[a,b]	Mean	52.08333	65.0000
	Std. Deviation	18.87699	17.19454
Most Extreme Differences	Absolute	0.197	0.183
	Positive	0.197	0.183
	Negative	-0.180	-0.177
Test Statistic		0.197	0.183
Asymp. Sig. (2-tailed)		0.17[c]	0.036[c]

a. Test distribution is Normal
b. Calculated from data

c. Lilliefors Significant Correction

Based on table 2, the average standard deviation of the pre-test is 18.87699, and the post-test is 17.19454. The significance value is pre-test $0.017 < 0.05$, meaning that the data is not a normal distribution. The post-test results are analyzed, and the significance value is $0.036 < 0.05$, meaning that the data is not a normal distribution. After the normality test using the Kolmogorov-Smirnov test, the pre-test data on students' reading comprehension abilities with the critical multiliteracy learning model came from a population that was not normally distributed ($0.017 < 0.05$). Because the two data are not normal distributions, the researcher uses a non-parametric test with the Mann-Whitney test for the following statistical analysis.

Table 3. Mann-Whitney test

Test Statistics[a]	
	Class Value
Mann-Whitney U	169.000
Wilcoxon W	469.000
Z	-2.486
Asymp. Sig. (2-tailed)	0.013

a. Grouping Variable: Class

Based on table 3 shows the value of Mann-Whitney U of 169.000, Wilcoxon W value is 469.000, Z value is -2.486, then the significance value is $0.013 < 0.0$ class value n be concluded that the critical multiliteracy learning model has a significant effect on students' reading comprehension abilities. The Critical Multiliteracy Model positively impacts students through learning steps that require students to think scientifically. The impact of enriching multiliterate scientific thinking activities will strengthen students' knowledge and enable students to gain a high level of understanding (Allison & Goldston, 2018). Students' deep knowledge and understanding of texts and what they are learning can make it easier for students to translate their ideas into written form(Alexander et al., 2016)

The stages of the critical multiliteracy model begin with brainstorming (spending ideas) (Holloway, 2021; Menke & Paesani, 2019). Brainstorming activities are designed by understanding how well students understand what is happening. Brainstorming activities positively affect the development of students' skills, especially communication skills (Saravanapandian et al., 2019). Communication skills are essential skills that must be mastered in the 21st century.

4. CONCLUSION

The results showed that the increase in students' reading comprehension and concept mastery increased significantly after being given learning using the critical multiliteracy model. The critical multiliteracy learning model effectively improves the ability to read, understand, and know elementary school students. The critical multiliteracy learning model has implications for the learning process. Namely, it can encourage students to be more active in the learning process, develop the ability to explain to students in their language, train them to think critically and improve their reading habits. With the multiliteracy learning model, students can understand the reading well. Students responded positively to the learning model because it affected their reading and comprehension abilities. The teacher gave a positive response after teaching using the multiliteracy learning model.

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