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Analysis of Multiliteracy-Based Inquiry Learning Vs. Guided Discovery: Impact on Indonesian History Learning Outcomes

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ABSTRACT

Purpose- This research aims to determine the differences in Indonesian history learning outcomes between students taught with the multiliteracy-based inquiry and guided discovery learning models and the influence of prior knowledge on these learning outcomes.

Methodology-This research uses an experimental design with a quantitative approach. The research sample consisted of 50 high school students divided into two groups: the group taught using the Multiliteracy-Based Inquiry model, and the group taught using the Guided Discovery model. The instruments used were initial knowledge tests and Indonesian History learning outcomes tests. Data were analyzed using a two-way analysis of variance.

Findings- The research results show significant differences in Indonesian history learning outcomes between the two learning model groups, with the group using the multiliteracy-based inquiry model showing higher results. In addition, there are significant differences between students with high and low prior knowledge, with students with high initial knowledge having better learning outcomes. However, no significant interaction effect was found between the learning model and previous knowledge of Indonesian History learning outcomes.

Significance-The conclusion of this research shows that the Multiliteracy Inquiry learning model is more effective in improving student learning outcomes than the Guided Discovery learning model. This research implies that this learning model can be implemented to enhance Indonesian history learning in high school. This research can be helpful for educators and researchers who are interested in developing more effective learning methods.

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INTRODUCTION

One of the teacher's main tasks is to organize students' learning experiences so that learning objectives are achieved optimally. In learning Indonesian history, teachers must be able to choose and apply learning models that suit the characteristics of this subject. Even though there are many learning models available, errors in choosing or applying them often result in less-than-optimal learning results. The learning model is a structured framework to support students in achieving specific learning goals (Ariani, 2023). Teachers

must choose a model that encourages students to seek and discover knowledge independently through scientific steps. This approach is based on 21st-century learning priorities, which emphasize the development of critical competencies such as critical thinking, creativity, conceptual understanding, collaboration, and communication (Rosnaeni, 2021).

However, history learning in Indonesia faces several main challenges, such as students' low historical thinking abilities (Basri & Hastuti, 2020) and the perception that history learning is boring and only focuses on memorization (Saidillah, 2018). Another obstacle is the lack of teacher innovation in developing higher-level thinking, learning, and assessment (Pi'i, 2016). Learning is often limited to memorizing facts without relating the material to everyday life, as observed in one of the state high schools in Kupang City. History learning focuses on memorizing facts without connecting them to everyday life, which can make students' learning experiences less meaningful (Amalia et al., 2024). Meaningful learning positively impacts learning by increasing student motivation and involvement (Iwani, 2022). Research reveals that meaningful and enjoyable learning experiences can produce maximum results by actively involving students in building their understanding (Dewi, 2020). Implementing learning models can achieve effective learning outcomes (Akbar et al., 2023).

One learning model that can improve learning outcomes uses a constructivist approach (Antika, 2023). In constructivism-based learning, students must be actively involved in building their knowledge through direct experience (Anjelita & Supriyanto, 2024). According to Mauli and Aziziy (2023), inquiry learning is one of the current learning paradigm's superior methods. The Inquiry learning model is an approach that emphasizes the use of critical and analytical thinking in finding solutions to problems (Akbar et al., 2023). This model encourages students to ask questions, conduct investigations, analyze information, and draw conclusions, thereby increasing their understanding of historical concepts and analytical skills (Pratama et al., 2023). The inquiry model involves students in exploring contextual problems through scientific activities. This model also trains science process skills, which enable students to build knowledge, solve problems, and formulate conclusions (Erlina et al., 2022). In inquiry learning, students focus on activities such as observation and looking for evidence to answer their questions so that inquiry becomes the primary tool in the learning process (Feyzioğlu, 2019).

Inquiry learning characteristics encourage students to actively learn independently, with the teacher acting as a facilitator. The answers assess inquiries that help students understand the meaning of the phenomena being studied and develop knowledge to apply. This learning model encourages students to discover concepts independently through problem-solving (Hulu et al., 2023). In addition, through this model, students are directed to conduct their experiments within clear boundaries to develop a deeper understanding of the learning material (Fitriani et al., 2023). According to Polyium et al. (2018), inquiry skills are tools students use to explore their understanding of the surrounding environment. This is supported by Kazeni et al. (2018), who state that the ability to inquire enables a person to plan and carry out scientific research to develop the best solution to overcome problems when interacting with the surrounding environment. Therefore, the inquiry learning model can improve students' understanding of historical concepts and analytical skills by encouraging them to engage with real-world connections.

Maximizing the learning potential of inquiry can be done by applying multiliteracy skills through activities such as reading, writing, discussing, and using information technology. McQuiggan et al. (2015) define multiliteracy learning as a learning process that involves various modes or communication channels. Multiliteracy skills include several things: (1) Reading with high understanding. Inquiry-based learning develops students' reading proficiency by engaging them with complex texts and practicing all levels of comprehension. This approach activates students' prior knowledge and aligns the inquiry process with reading comprehension tasks (Ermawati, 2018). Apart from that, Ramasari's (2020) findings show that implementing the Inquiry learning approach effectively improves students' reading comprehension abilities. (2) Writing skills that build and appreciate meaning. Writing skills are complex language skills that require understanding and practice (Amilia, 2018). Writing is not only copying words but also developing ideas in an orderly structure (3) speaking skills are carried out through discussion activities to make students

understand reading, and (4) skills in mastering information technology (digital media). Information technology makes it easier for students to understand information and form the necessary knowledge.

Guided Discovery Learning is a method in which the teacher guides students in actively building knowledge through exploration and investigation activities (Aningsih & Wolosah, 2022). This approach involves students in a structured, critical, and logical investigation process to understand concepts independently while still receiving direction from the teacher (Vita et al., 2022). This method encourages students to interpret, group, summarize, and explain learning material to increase their understanding of scientific concepts (Aningsih & Wolosah, 2022). Guided discovery involves students' mental processes to assimilate concepts and principles with instructions from the teacher. This model is expected to enable students to understand the knowledge they find themselves in more depth and retain it for a long time (Mukherjee, 2015). The main characteristic of Discovery learning is that it allows students to expand their learning while the teacher guides the process according to learning objectives (Cheng & Wan, 2017). Guided discovery supports mastery of cognitive processes by helping students explore concepts independently. Research reveals that students who apply this method experience improvement in higher-order thinking skills Tsania et al. (2023) and are also prepared for future learning by building independent learning habits, which help them adapt to various learning situations and challenges (Ahmad et al., 2023).

Students' success in learning history through the learning model used can be seen from the results obtained. Learning outcomes are changes in behavior that students obtain after participating in learning activities, which are reflected in their grades or achievements (Sunarti & Novitasari, 2021). Effective learning models are designed to achieve specific learning goals. This includes selecting methods, strategies, and approaches appropriate to the historical material and students' needs. Internal and external factors have a crucial role in the learning process. One of the internal elements that can influence student learning outcomes is prior knowledge (Taçgın, 2020). Prior knowledge plays an important role in student learning processes and outcomes. This knowledge is defined as a combination of understanding and skills that students have before engaging in the learning process, as well as their ability to predict and anticipate problems in the future (Chang et al., 2020). According to Dong et al. (2020), the level of prior knowledge influences cognitive load, which in turn influences the level of engagement in learning.

Many studies have examined the effect of guided discovery on learning outcomes. Several research results positively influence student learning outcomes (Marlina, 2021; Assidiqi, 2019; Lestari, 2017); (Samudera et al., 2022). Meanwhile, research examining multiliteracy-based inquiry is shown by several studies that reveal that implementing multiliteracy-based inquiry is recommended for teachers to use to improve critical thinking skills, increase questioning skills, and improve students' scientific literacy skills. (Julianda et al., 2018; Windi, 2018; Gandari, 2018). The results of research exploration that has been carried out previously show that multiliteracy-based inquiry in History learning is still very rarely carried out, especially research that compares the two different models (Multiliteracy-Based Inquiry Versus Guided Discovery) by considering students' prior knowledge as an important factor in history learning to date. This has never been done. Thus, the research that will be carried out is relatively new and has not been carried out by many previous researchers. Therefore, the research aimed to determine: (1) Is there a significant difference between the Indonesian History learning outcomes obtained by students through the application of Multiliteracy-based Inquiry and Guided Discovery learning models? (2) Are there significant differences in Indonesian History learning outcomes between students with high and low prior knowledge in high school? Moreover, (3) Does the learning model and prior knowledge influence Indonesian History learning outcomes?

METHODOLOGY

Research Design

The research design used is quasi-experimental. The quasi-experimental research design used was posttest-only in two groups. The experimental group was treated with a multiliteracy-based inquiry learning model, and the control class was treated with the Guided discovery model. The posttest-only design quasi-experimental research design is presented in Table 1.

Table 1. Posttest-Only Quasi-Experimental Research Design

Subject	Pretest	Treatment	Learning outcomes
Experiment class	-	X_1	O_1
Control class	-	X_2	O_1

Description :

X_1: Experimental class treatment using Multiliteration-based Inquiry

X_2: Control class treatment using Guided discovery

O_1: Post-tests were conducted in the experimental class to measure learning outcomes.

O_2: A post-test was carried out in the control class to measure learning outcomes.

Experimental group subjects were treated for four weeks, with each group taught using a different learning model. After the treatment was completed, the dependent variable from both groups was measured to determine the effect of the learning model.

Sample and Population

Population in research refers to all data or objects of interest in a study within a particular scope (Suriani et al., 2023). The population of this study was all students in class XI of SMAN 5 Kupang, consisting of 125 students. School selection is based on problems in history learning, such as lack of student involvement, methods that focus too much on memorization, and minimal connections between historical material and everyday life. Apart from that, students have various levels of ability and initial knowledge background, which makes it possible to see how the learning model affects groups of students with different levels of knowledge.

The sample for this study consisted of two classes selected randomly from five classes XI using simple random sampling techniques. This technique was chosen because it ensures that each class has an equal chance of being selected so that the sample can represent the population fairly and without bias. The research samples were divided into two groups, each comprising 25 students with high prior knowledge and students with low prior knowledge. This group division is based on a standard score or z-score (Arikunto, 2010). The Z-score is calculated by subtracting the individual student's pretest score from all students' average (mean) pretest score and then dividing it by the standard deviation of the pretest score. A z-score greater than or equal to +0.5 indicates high prior knowledge, while a z-score less than or equal to -0.5 is categorized as low prior knowledge.

Instruments and Data Collection

The research instrument is a test of initial knowledge and a test of learning outcomes in Indonesian history subjects created by researchers and history subject teachers. Research instruments must have sufficient reliability and validity to ensure that the data collected is accurate and consistent. Before use, a trial was conducted to test its validity and reliability. The initial knowledge test and learning outcomes of Indonesian history use content validity. Content validity testing is carried out by asking for opinions or considerations from experts regarding the instruments that have been prepared to ensure their suitability to relevant theories and their relationship to the specified indicators. The assessment results from the validators are then processed by calculating the percentage to determine the instrument's validity level. The formula used to calculate the percentage of instrument validity is:

$$\% \text{ Validity of instrument content} = \frac{Number\ of\ assesor\ score}{Maximum\ number\ of\ score} x100\%$$

The instrument's validity is interpreted based on the criteria listed in Table 2 below. These criteria evaluate the extent to which the instrument accurately measures what it is intended to measure, thereby providing a reliable indication of the validity of the data obtained from this study. The table presents detailed criteria used to assess validity statistically and based on relevant theoretical considerations.

Table 2. Test Validity Criteria

Percentage	Criteria
81- 100	Very high
61-80	Tall
41-60	Currently
21- 40	Low
0-20	Very low

(Source: Arikunto, 2010)

The research instrument validation results showed that the content validity percentage for the initial knowledge test and student learning outcomes reached 90.26% and 93.5%, respectively. Therefore, both instruments have content validity, which is classified as very high. Meanwhile, adapting the Cronbach's Alpha technique determined the reliability of the initial knowledge test instrument and learning outcomes. Test reliability criteria are based on Table 3.

Table 3. Instrument Reliability Categories

Cronbach's Alpha Coefficient	Test Instrument Reliability Category
0,86–100	Very high
0,66–0,85	Tall
0,36–0,65	Low
0,20–0,35	Very low
0,00–0,19	Not reliable

(Source: Creswell, 2015)

Reliability measurements show that the initial knowledge test instruments and student learning outcomes are reliable, with Cronbach's Alpha values of 0.719 and 0.779, respectively. Both test instruments are included in the high category and meet the requirements for use in research.

Data Analysis

Research data was analyzed using two-way ANOVA statistics at a significance level of 0.05 to test the research hypothesis. Analysis was carried out with the help of SPSS software. The steps taken include data input, selection of dependent variables (learning outcomes), and independent variables in the form of learning models (multiliteracy-based inquiry and guided discovery) and initial knowledge (high and low). The results of the two-way ANOVA analysis will be used to see the influence of each independent variable on learning outcomes, as well as the interaction between the two. Before data analysis is carried out, analysis prerequisites, which include normality tests and homogeneity tests, are carried out to determine the type of hypothesis test used. The normality test used the Kolmogorov-Smirnov test to test whether the data follows a normal distribution. Meanwhile, the homogeneity test was carried out using Levene's test to check whether the variance between the groups being compared was the same.

FINDINGS

Description of research data

The data in this research are divided into two categories: Prior knowledge and learning outcomes. The initial knowledge data consists of two (1) obtained by the group treated with the multiliteracy-based inquiry learning model and (2) obtained by the group treated with the Guided discovery model. The results of the statistical analysis of initial knowledge data are contained in Table 4.

Table 4. Descriptive Analysis of Prior Knowledge Data

No	Prior Knowledge	N	Mean	Median
1.	Multiliteracy-based inquiry	25	36,92	38
2.	Guided Discovery	25	36,84	38
	Sum	50		

(Source: Data Processing Results)

In Table 4, the initial knowledge data for both groups (Multiliteracy-Based Inquiry and Guided Discovery) shows that both groups have similar means (36.92 for the experimental group and 36.84 for the control group), with a median for both groups of 38. Scores above the median indicate high prior knowledge, while scores below the median indicate low prior knowledge. After the data was analyzed, students were grouped based on their initial level of understanding into two categories: high and low. This grouping process is carried out by considering the data distribution and using the median as the dividing boundary between the two groups. This grouping aims to facilitate further analysis regarding the effect of treatment on learning outcomes for students with different levels of initial knowledge. Thus, analysis can provide deeper insight into the effectiveness of the learning model in improving learning outcomes, both for students with high and low prior knowledge, so that learning strategies can be designed more optimally. Prior knowledge data is contained in Table 5.

Table 5. Prior Knowledge Data of Research Subjects of Each Group

Model Prior Knowledge	Multiliteracy-Based Inquiry	Guided discovery	Total
High	13	13	26
Low	12	12	24
Sum	25	25	50

(Source: Data Processing Results)

Description of Post-test Data on Research Subject Learning Results

Post-test data on Indonesian History learning outcomes were divided into two groups. The first group, treated with the Multiliteracy Based Inquiry learning model, had the following results, as seen in Table 6.

Table 6. Post-test Data on Learning Results of Research Subjects

Group	Sum	Mean	Median	Variant	Standard Deviation
Multiliteracy-based inquiry	1062	42,48	43	6,927	2,631
Guided Discovery	1023	40,92	41	4,160	2,039

(Source: Data Processing Results)

Table 6 shows that the group that used the Multiliteracy-Based Inquiry learning model had higher average learning outcomes than the group that used the Guided Discovery model. This means the multiliteracy-based inquiry learning method is more effective in improving student learning outcomes.

Test Requirements Analysis

According to Usmadi (2020), statistical testing based on parametric data must fulfill the requirements: normal distribution of data, homogeneity of variance, and interval data. Test the analysis requirements in this research, namely (1) data normality test and (2) variance homogeneity test. The normality test is used to ensure the data comes from a normally distributed population and is tested using the Kolmogorov Goodness of Fit Test. If the probability value is smaller than 0.05, the data is declared not customarily distributed; conversely, if the probability value is more significant than 0.05, then the data is declared normally distributed (Santoso, 2012). The results of the normality test can be seen in Table 7.

Table 7. Research Data Normality Test Results

Variable	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Multiliteracy-based inquiry	.108	25	.200*	.973	25	.732
Guided discovery	.124	25	.200*	.975	25	.773
Prior knowledge* inquiry	.148	25	.162	.945	25	.190
Prior knowledge* Discovery	.158	25	.108	.929	25	.081

(Source: Data Processing Results)

Table 7 shows that the data on student learning outcomes on Indonesian History material obtained from the four groups showed significant results, confirming that the four data groups are normally distributed. The homogeneity of variance test tests whether a data group has the same variance among group members. The test criteria are if Probability (SIG) = > 0.05, then H_0 is accepted, and if Probability (Sig.) = < 0.05, then H_0 is rejected (Santoso, 2012). This analysis is essential to ensure the validity of the data before continuing to test the hypothesis using statistical methods appropriate to the available data's characteristics. Homogeneity testing is carried out to determine whether the variance between groups is consistent enough so that subsequent statistical analysis can be carried out with the correct assumptions. The results of the variance homogeneity test obtained are shown in the data contained in Table 8.

Table 8. Test Results of Homogeneity Variance of Research Data

Variable		Levene Statistic	df1	df2	Sig.
Learning outcomes	Based on Mean	1.284	1	48	.263
	Based on Median	1.107	1	48	.298
	Based on the median and with adjusted df	1.107	1	43.69	.299
	Based on trimmed mean	1.291	1	48	.261

(Source: Data Processing Results)

Table 8 shows that the learning outcomes of the four groups have a number (SIG) > 0.05, so all H_0 is accepted. This means that the four groups come from a population that has homogeneous variance.

Research Hypothesis Testing

This research uses numerical variables with two factors that we want to know: the difference in the mean score of Indonesian History learning outcomes for students at SMAN 5 Kupang according to the group treated with the Multiliteracy-Based Inquiry and Guided Discovery learning models. Hypothesis testing uses a Two-Way Analysis of Variance.

The hypotheses proposed in this research are 1) H_0: there is no significant difference in learning outcomes of Indonesian history in high school between research subjects taught using the Multiliteracy-Based Inquiry and Guided Discovery models, 2) H_0: there is no difference in learning outcomes for Indonesian history in high school between students with high and low prior knowledge, 3) H_0: there is no interaction between using learning models (Multiliteracy-Based Inquiry and Guided Discovery) and students' initial knowledge of Indonesian History learning outcomes in high school.

According to (Latan, 2019), the essential criteria for decision-making (basic probability) are as follows: If the probability > 0.05, then H_0 is accepted. If the likelihood < 0.05, then H_0 is rejected. The results of the research data hypothesis test are contained in Table 9.

Table 9. Summary of Two-Line Variance Analysis Test Results

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared	Consent. Parameter	Observed Power
Corrected Model	204.750[a]	25	8.190	2.142	.033	.691	53.559	.913
Intercept	61009.406	1	61009.406	1.5964	.000	.998	15958.864	1.000
Learning model	31.659	1	31.659	8.281	.008	.257	8.281	.788
Prior Knowledge	132.731	14	9.481	2.480	.024	.591	34.720	.893
Learning model * Prior Knowledge	32.886	10	3.289	.860	.580	.264	8.602	.332
Error	91.750	24	3.823					
Total	87241.000	50						
Corrected Total	296.500	49						

a. R Squared = .691 (Adjusted R Squared = .368)

b. Computed using alpha = .05

(Source: Data Processing Results)

The results of hypothesis testing in this study show that there is a significant difference in the learning outcomes of Indonesian history in high school between students who are taught using the Multiliteracy Skills-Based Inquiry model and the Guided Discovery model, with students who use the Multiliteracy Skills-Based Inquiry model showing better results. In addition, there are significant differences in learning outcomes between students with high prior knowledge and students with low prior knowledge, where students with high prior knowledge tend to achieve better learning outcomes. However, no significant interaction effect was found between the learning model and prior knowledge ($p = 0.580$). This shows that the influence of the learning model on student learning outcomes is consistent for students with high and low prior knowledge.

DISCUSSION

The Influence of Learning Models on Indonesian History Learning Outcomes

Based on research findings, applying the multiliteracy-based inquiry learning model has a more significant positive impact on student learning outcomes in Indonesian History subjects than the Guided discovery model. The multiliteracy-based Inquiry Model offers a more profound and integrated learning experience, allowing students to develop multiliteracy skills while understanding the historical context more comprehensively (Julianda et al., 2018). This research shows that this model can stimulate student interest, encourage active involvement, and increase understanding of Indonesian History concepts, which ultimately contributes positively to student learning outcomes. This aligns with the opinion of Akbar et al. (2023), who state that student learning outcomes are greatly influenced by the learning model applied.

Applying the multiliteracy-based inquiry learning model allows students to develop their intellectual abilities through organizing activities and actively seeking and building understanding. This approach helps knowledge last a long time in memory and improves the learning process compared to the Guided discovery model. Abdulrahman et al. (2020) stated that inquiry-based learning could increase material retention. Apart from that, this approach has also proven effective in improving student activity, as reported in a study that showed an increase in student activity of up to 78.67% and improved test scores (Wijaya, 2020). Multiliteracy skills play an essential role in the success of inquiry learning because they allow students to explore information from various sources. One form of multiliteracy activity is reading, which opens access to new knowledge and increases understanding of relevant concepts, facts, and ideas. This activity has a positive effect on learning outcomes, according to research by Prakoso et al. (2019), which shows that reading has a significant relationship with learning outcomes, where students with high interest in reading tend to achieve better learning outcomes. Another multiliteracy activity is discussion, which encourages students to think

critically, ask questions, provide arguments, and respond to classmates' ideas. These skills enable students to analyze information more deeply and develop a more complex understanding, positively affecting learning outcomes. Thus, applying the Inquiry learning model, integrated with multiliteracy activities, produces more optimal learning outcomes than the Guided discovery model.

The Influence of Prior Knowledge on Indonesian History Learning Outcomes

Prior knowledge affects improving student learning outcomes. The average learning outcomes for Indonesian history in the group with high prior knowledge were better than those with low prior knowledge. This is because students with prior knowledge can more easily relate new material to what they have already learned, making it easier to understand, remember, and apply. Strong prior knowledge of key concepts in Indonesian history provides an advantage in understanding the material and developing analytical and historical problem-solving skills. Research by Dong et al. (2020) shows that prior knowledge has a positive relationship with student engagement in learning. Students with good prior knowledge tend to be more engaged in learning, which positively impacts learning outcomes and experiences. This happens because students with prior knowledge feel more confident, comfortable facing new material, and less anxious (Witherby & Carpenter, 2022). (Yang & Quadir, 2018) research shows that prior knowledge has a positive relationship with learning performance and a negative relationship with student anxiety. In addition, prior knowledge positively and significantly affects students' listening and reading comprehension abilities (Hasan et al., 2018). Other research also shows that students with high prior knowledge excel in critical thinking compared to students with lower prior knowledge (Aprilia et al., 2021).

Students with good prior knowledge find it easier to understand new information and relate it to their existing knowledge (Liu et al., 2017). This happens because prior knowledge activates the forming of new associative memories and enriches interactions between parts of the brain involved in cognitive processes. Grenell and Carlson (2021) reveal that prior knowledge plays a vital role in learning and memory throughout life. A holistic understanding of the role of prior knowledge in learning includes student engagement, awareness, confidence, performance, and anxiety (Istiqlal et al., 2024; Nasution et al., 2023; Safitri et al., 2023, 2024; Safitri & Ansyari, 2024; Uswatun Hasanah et al., 2023). These factors shape students' learning experiences and outcomes. This research's findings align with the research expressed by Payung et al. (2016) and Dengel & Magdefrau (2020) that prior knowledge can significantly influence student learning outcomes. A similar thing was expressed by Mbah (2015): using students' prior knowledge can increase achievement to achieve instructional goals.

The Influence of Interaction Between Learning Models and Prior Knowledge on Indonesian History Learning Outcomes

This study's findings indicate no interaction between learning models (multiliteracy-based inquiry and guided discovery) and initial knowledge (high and low) on learning outcomes in Indonesian history. Complete data is contained in Table 10.

Table 10. The Interaction of Learning Models and Early Knowledge on Learning Outcomes

Prior Knowledge	Learning Models		Mean	N
	Multiliterate-Based Inquiry	Guided discovery		
High	39,69	39,46	39,57	26
Low	33,91	34,00	33,95	24
Mean	36,92	36,84	36,76	50

(Source: Data Processing Results)

Table 10 shows the mean Indonesian History learning outcomes achieved by the group with high initial knowledge of 39.57, which is different from the mean score achieved by the group with low initial knowledge of 33.95. This research shows that prior knowledge alone or separately makes a significant difference in acquiring Indonesian History learning outcomes without paying attention to the learning

model. The learning model has an essential influence on learning outcomes in Indonesian history. This can be seen in the mean score for Indonesian History learning outcomes in the Multiliteracy-Based Inquiry learning model, which is 36.92, more significant than the mean score for the Guided discovery learning model, 36.84.

This shows that the independent learning model makes a significant difference in acquiring Indonesian History learning outcomes without paying attention to prior knowledge. The learning model (independent variable) and prior knowledge (moderator variable) have a separate and significant influence on Indonesian History learning outcomes (dependent variable). When the learning model and prior knowledge interact, there is no significant influence on learning outcomes in Indonesian history. This shows that the learning model variables and prior knowledge have the same strong influence. In the context of a factorial design, the influence of each treatment is independent, meaning that the influence of the learning model and prior knowledge on learning outcomes do not influence each other. Prior knowledge moderates how students engage with new content but does not interact significantly with the learning model. Research shows that students' prior knowledge can improve their understanding of complex historical concepts, but the effect does not depend on the learning model used (Sitanggang et al., 2024). The findings of this research align with research by Iktafiyah et al. (2018) and Thoyib et al. (2021), which state that there is no interaction between learning models and prior knowledge on student learning outcomes.

CONCLUSION

Based on the results of the research that has been conducted, there are significant differences in Indonesian History learning outcomes between students who are taught using the Multiliteracy-Based Inquiry and Guided Discovery models. Students taught using the Multiliteracy Inquiry model show higher learning outcomes than those who use the Guided Discovery model. In addition, there are significant differences in Indonesian History learning outcomes between students with high and low prior knowledge, where students with high prior knowledge have higher average learning outcomes than students with low prior knowledge. However, this research found no interaction effect between learning models (Multiliteracy-Based Inquiry and Guided Discovery) and prior knowledge (high and low) on Indonesian History learning outcomes. This shows that the influence of each learning model on learning outcomes does not depend on the student's initial level of knowledge.

Limitations in this research include students' unfamiliarity with the Multiliteracy-Based Inquiry and Guided Discovery models, which require extra adjustments. In addition, learning models may be less effective if students do not understand relevant concepts sufficiently. Researchers should consider additional variables influencing learning outcomes and try similar research at different educational levels.

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