



## Improving Fiqh Learning Outcomes Through a Mind Mapping-Based Flipped Classroom

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**Abstract:** The learning outcomes of Grade VIII students in the Fiqh subject at MTsN 6 Kerinci remain relatively low. This is due to the use of conventional teaching models that fail to facilitate students' engagement actively in the learning process. To address this issue, a flipped classroom model integrated with mind mapping techniques was implemented to enhance students' understanding and academic performance. This study aims to determine the effect of the flipped classroom model based on mind mapping on students' learning outcomes in Fiqh. The method used is quantitative with a quasi-experimental approach, employing a Pretest-Posttest Control Group Design. The research sample consisted of 30 students divided into two classes: an experimental class that received the flipped classroom model based on mind mapping, and a control class that used a conventional teaching model. Data were collected through pretest and posttest assessments and analyzed by using a t-test. The results of the partial statistical analysis (t-test) showed that the flipped classroom model based on mind mapping had a positive and significant effect on students' learning outcomes in the Fiqh subject for Grade VIII at MTsN 6 Kerinci. This is evidenced by the hypothesis test result of  $t_{count} > t_{table} = 2.463 > 1.771$ , with a significance value of  $0.02 < 0.05$ , indicating that  $H_a$  is accepted and  $H_o$  is rejected. This confirms that the flipped classroom model based on mind mapping significantly and positively influences the improvement of Fiqh learning outcomes among Grade VIII students at MTsN 6 Kerinci.

**Abstrak:** Hasil belajar siswa kelas VIII pada mata pelajaran Fiqh di MTsN 6 Kerinci masih tergolong rendah. Hal ini disebabkan oleh penggunaan model pembelajaran konvensional yang belum mampu mendorong keterlibatan aktif siswa dalam proses belajar. Untuk mengatasi permasalahan tersebut, diterapkan model flipped classroom yang dipadukan dengan teknik mind mapping guna meningkatkan pemahaman dan prestasi belajar siswa. Penelitian ini bertujuan untuk mengetahui pengaruh model flipped classroom berbasis mind mapping terhadap hasil belajar siswa pada mata pelajaran Fiqh. Metode yang digunakan adalah metode kuantitatif dengan pendekatan kuasi-eksperimen, menggunakan desain Pretest-Posttest Control Group Design. Sampel penelitian terdiri dari 30 siswa yang dibagi ke dalam dua kelas: kelas eksperimen yang menerima perlakuan model flipped classroom berbasis mind mapping, dan kelas kontrol yang menggunakan model pembelajaran konvensional. Pengumpulan data dilakukan melalui tes awal (pretest) dan tes akhir (posttest), kemudian dianalisis menggunakan uji-t. Hasil analisis statistik

*parsial (uji-t) menunjukkan bahwa model flipped classroom berbasis mind mapping memberikan pengaruh positif dan signifikan terhadap hasil belajar siswa pada mata pelajaran Fiqh kelas VIII di MTsN 6 Kerinci. Hal ini dibuktikan dengan hasil uji hipotesis yaitu  $t_{hitung} > t_{tabel} = 2,463 > 1,771$ , dengan nilai signifikansi  $0,02 < 0,05$ , yang berarti  $H_a$  diterima dan  $H_o$  ditolak. Temuan ini mengonfirmasi bahwa penerapan model flipped classroom berbasis mind mapping secara signifikan dan positif meningkatkan hasil belajar Fiqh siswa kelas VIII di MTsN 6 Kerinci*

**Keywords:** *Flipped Classroom Model, Mind Mapping.*

## INTRODUCTION

**F**iqh is one of the Islamic religious education subjects that aims to prepare students to know, understand and practice the provisions of Islamic law, especially in daily worship, then become the basis for the rules of life (way of life) of a student (Kurniawati, Tamyiz and Sarpendi, 2021: 53). So that, in the implementation or application of these objectives, the right learning strategies, models, methods, techniques and approaches are needed.

One example of this model is the flipped classroom learning model. This is confirmed by Qory, et al (2022: 89-90) who describe flipped classroom as a type of learning model which is oriented towards independence so that it is very suitable for use in an independent curriculum where all activities are student-centered and students are asked to be independent, creative, and critical. In line with this, Masripah, Wiganda and Fatolah (2019: 236-238) assert that the educational process is imaginative and inventive, enhancing students' preparedness within the context of teaching and learning processes, as exemplified by the implementation of the flipped classroom model. The Flipped Classroom model has become a highly significant approach in the teaching of *Fiqh* as it provides students with the opportunity to build understanding independently before participating in active classroom learning. Through the Flipped Classroom model, students are given access to foundational materials such as videos, modules, or presentations prior to entering the classroom. This allows face-to-face learning time to be focused on discussion, in

depth exploration of material, worship practice, case studies, and the resolution of contemporary religious issues. Bergmann and Sams (2012) explain that the Flipped Classroom enables teachers to shift from one-way lecturing to more meaningful two-way interaction, as students come to class with prior knowledge ready to be developed.

In the context of *Fiqh* learning, this approach is especially effective because it encourages students to think critically about legal sources (*dalil*), legal principles, and their application in real life. Munir (2020), in his study on the implementation of the Flipped Classroom in Islamic Religious Education, states that this model promotes active student engagement and enhances the effectiveness of the learning process. Furthermore, Herreid and Schiller (2013) emphasize that the Flipped Classroom helps overcome the limitations of classroom time and allows for more in-depth exploration of the material. In *Fiqh* learning, which requires time for discussion and practical simulation (such as how to perform prayer, ablution, or almsgiving), this model provides strong support.

In addition, Zainuddin and Halili (2016) note that this model fosters student learning independence and increases their responsibility in the learning process goals that are closely aligned with the aims of *Fiqh* education, which include developing devout, independent, and ethical Muslim individuals.

The choice of the Flipped Classroom model is also driven by its ability to facilitate learning that accommodates diverse student learning styles and paces. Karabulut Igu, Jaramillo Cherez, and Jahren (2018), in

their research review, reveal that the Flipped Classroom supports differentiated and flexible learning, where students can access materials according to their own time and needs. In today's educational context, which demands the use of technology and digital learning approaches, the Flipped Classroom is considered both relevant and innovative. Therefore, this model is chosen for *Fiqh* learning because it enhances the quality of interaction, depth of understanding, and the internalization of religious values in a more contextual and applicable manner aligned with national education goals and the characteristics of 21st-century learning.

Based on data collected through observations and interviews conducted by the researchers at MTsN 6 Kerinci on July 22, 2024, with Mrs. Suraida, Mrs. Desmita, and Mrs. Bastina Jaya, valuable insights were obtained concerning the implementation and dynamics of the learning process within the institution, it is known that teachers still use conventional learning where the teacher plays an active role while students are passive. it could be seen from the learning process occurs. First, when teacher explains, students often seem distracted, talk to their classmates, disturb their friends, and do other activities that are not related to the lesson. Secondly, during the discussion in one group, there were 1-2 people out of 8 who worked, while the other students just waited for the answers from their friends. Third, when presenting the results of the discussion, there were also 1-3 people who understood the material or answered questions from the speaker. According to Aditomo, et al (2024: 18-20) regarding the principles of independent curriculum design, which is explained that the purpose of the independent curriculum idea is to realize meaningful and effective learning and is oriented towards understanding and application in everyday life so that in the learning process, students are encouraged to participate actively in the learning process, think creatively, and demonstrate independence.

The results of the researchers' subsequent observations indicate that throughout the learning process, the students appear unprepared. This can be seen from the lack of students' activeness, laziness in expressing opinions during discussions, if asked about the subject matter students look anxious and confused, do not understand the material explained and rely on the answers of smart friends. In addition, if they are given homework, only a few students do it at home, then some other students do homework at school cheating their friend.

These challenges within the educational process have contributed to low academic achievement among students, particularly noticeable in knowledge achievement results. Data indicate that over 60% of students' score below the established Minimum Completion Criteria (KKM). At MTsN 6 Kerinci, the KKM for *Fiqh* subject is set at 70, underscoring a significant gap between expected and actual student achievement.

The students' low achievement in learning outcomes is one of the results of students' lack of understanding of core concepts in the subject matter. This is thought to be because students are still unprepared when taking lessons and still use the memorization method. In accordance with the need of independent curriculum, students must understand and analyze critically when engaging the material. One solution to overcome these problems is to use supportive assignments such as creating mind mapping before the application of flipped classroom.

Flipped classroom is a learning model that makes students learn the material that the teacher will teach outside the classroom and deepen the material in the classroom. This learning model is divided into 3 stages, namely First, the class begins (pre-class), students have learned the material discussed. Second, in-class, students apply and analyze the material with interactive activities. Third, after class ends (out-class), evaluate and follow-up (Qory, et al., 2022: 92). Affida and Zainiyati (2022: 91-93) stated that the flipped classroom model makes students

more active, enthusiastic in learning, strengthens team performance and brings teachers closer to students. However, Murtiasih (2022: 1021-1023) states that the flipped classroom model requires supporting devices that make students interested in understanding the concept of learning materials at home.

Mar'ah, (2021: 4-5) states that there are several shortcomings in the flipped classroom learning model, namely that it requires adaptation in its application, it takes time to include interesting learning materials and trigger stress in students. Thus, to apply this learning model, innovative summarization innovations are needed that make students interested in learning the material at home (Gumelar, 2015: 275-277). One of the author's efforts in this study to overcome this is to provide mind mapping assignments before the application of the flipped classroom model. Mind mapping is a way to acquire information in a fun way. This technique makes students learn to visualize an object in the form of diverse concept roots (Usman, Amri, and Haeril, 2019: 61). The application of mind mapping in implementing the flipped classroom model is expected to contribute to make students active and minimize the weaknesses of the flipped classroom model.

Mind mapping, as an educational strategy, offers significant benefits by helping learners visualize and organize complex information in a structured yet creative way, thereby simplifying the comprehension of difficult concepts (Usman, Amri, and Haeril, 2019). When combined with the flipped classroom, mind mapping serves as a valuable enhancement, addressing some of the flipped model's limitations by aiding in content summarization and sparking student interest during independent study. However, the effective use of mind mapping demands certain competencies from both teachers and students; without these, it might increase cognitive strain and hinder the learning process.

This study undertakes a critical examination of both methods to explore how their respective strengths and weaknesses might complement one another. The goal is to provide empirical support that either confirms or challenges the notion that integrating flipped classroom models with mind mapping can significantly elevate students' achievement in Fiqh studies.

This investigation is particularly crucial given the current unsatisfactory student achievement in Fiqh at MTsN 6 Kerinci, which underscores the urgent need for a more effective instructional model. Traditional teaching methods have often led to passive learning behaviors and insufficient engagement, resulting in lower academic outcomes. By applying a flipped classroom approach integrated with mind mapping, this research aims to foster greater students' autonomy, creativity, and active participation. Moreover, the study intends to contribute novel insights into innovative pedagogical practices aligned with the independent curriculum framework and enrich the body of knowledge concerning flipped classroom applications in Islamic education. Ultimately, the findings are anticipated to guide educators and policymakers in enhancing educational quality and improving students' learning results substantially.

Considering the information provided earlier, the researchers aim to explore research on "The Effect of Using the Mind Mapping-based Flipped Classroom Learning Model on Student Learning Outcomes in Fiqh Subjects at MTSN 6 Kerinci".

## **METHOD**

Quantitative experimental study was categorized in this research. Experimental research aims to find out if a certain "factor" has an impact on the subject being studied. In simpler terms, it seeks to understand if there is a cause-and-effect connection (Andriani, 2015 ): 201-202 . As according to Ibrahim et al (2018: 55)

Experimental research refers to investigation

s designed to assess the impact of a treatment that the researcher deliberately administers. Therefore, it can be stated that experimental research serves as a method for examining the effects of specific treatments on subjects under regulated circumstances.

The research framework employed in this study is a True Experimental Design, specifically the Pretest-Posttest Control Group Design. The pretest and posttest instruments consisted of 20 multiple-choice items. According to Sugiyono (2022: 76), this design involves randomly selecting two groups, both of which are given a pretest by using the same instrument to determine any initial differences between the experimental and control groups. Following the pretest, the experimental group received treatment in the form of a mind mapping-based flipped classroom instructional model, while the control group was taught by using conventional teaching methods. Upon completion of the treatment, both groups were administered the same posttest. The posttest results were then analyzed and compared to the pretest scores to assess the effect of the treatment.

**Research Design Framework Pretest-Posttest Control Group Design**

<i>Group</i>	<i>Pretest</i>	<i>Treatment</i>	<i>Posttest</i>
<i>Experimental group (R)*</i>	O1	X	O2
<i>Control group (R)</i>	O3	-	O4

Population refers to a broad category that includes: objects or individuals which possess specific traits and features defined by researchers for studying and formulating the conclusions (Sugiyono, 2022 :80). The population in this research comprised all eighth-grade students of MTSN 6 Kerinci for the academic year 2024/2025. The total students were 45students.

In taking the sample, this study employed purposive sampling, a technique

where samples are selected based on specific criteria. The total sample consisted of 30 students, divided equally into two classes VIII A as an experimental group and VIII B as a control group. Each of class consists of 15 students.

In this study, the research instrument used is a questionnaire employing a Likert scale, presented in the form of statements. This questionnaire is distributed to Grade VIII A students in the experimental class at MTsN 6 Kerinci. To ensure the quality of the instrument, a validity test is conducted. According to Slamet and Wahyuningsih (2022: 51–52), the validity test is carried out to determine whether an instrument—such as a questionnaire—accurately measures the intended research variable. The test assesses the extent to which the instrument is valid or invalid in representing the concept being studied.

Data analysis serves three primary purposes: to comprehend the data, to evaluate its quality, and to test the research hypotheses. The tasks involved in data analysis include categorizing data according to specific variables, showcasing the data for each variable analyzed, conducting computations to resolve formulas and executing calculations to verify proposed hypotheses (Sudaryono, 2016: 197).

## RESULTS AND DISCUSSION

### Results

This study employed a quantitative experimental design to investigate the impact of a mind mapping-based flipped classroom learning model on student learning outcomes in the Fiqh subject in fasting theme for grade VIII students at MTSN 6 Kerinci. Data collection methods included pretests, posttests, and questionnaires, facilitating thorough data analysis and enabling the researchers to draw valid conclusions. The sample consisted of 30 students, divided into two groups: 15 students from class VIII A served as the experimental group, which received instruction through the mind mapping-based flipped classroom model,

while 15 students from class VIII B functioned as the control group, experiencing conventional teaching methods.

Table 4.3 Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Control Pre-Test	15	30	30	60	46.67	11.598
Control Post-Test	15	25	40	65	59.00	7.121
Valid N (listwise)	15					

Based on table 4.3 obtained for control class data, the initial learning outcomes (*pretest*) had an average of 46.67 with scores obtained 30-60 (minimum score 30 and maximum 60). Then for the final learning outcomes (*post-test*) has an average of 59.00 with scores obtained 40-65 (minimum score 40 and maximum 65). So, it may be inferred that the learning achievements of students assigned to the control class are still below the KKM (70), including in the low category. This is due to the lack of preparation of students in learning. Consequently, students reveals the lower levels of engagement during the learning process, learning is still teacher-cantered. Thus, it affects the low students' understanding of learning material.

Table 4.5 Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Experiment Pre-Test	15	35	30	65	49.67	12.169
Experiment Post- Test	15	25	75	100	86.67	8.591
Valid N (listwise)	15					

As evidenced by the table 4.5 for obtained experimental class data, on the initial learning outcomes (*pretest*) before the use of the *mind mapping-based flipped classroom* learning model has an average of 49.67 with scores obtained 30-65 (minimum score 30 and maximum score 65). Then for the final learning outcomes (*post-test*) after being given treatment by using the *mind mapping-based flipped classroom* learning model, it is known that the students' learning outcomes have increased which has an average of 86.67 with scores obtained 75-100 (minimum score 75 and maximum score 100). This study concludes that by applying the *flipped classroom model integrated with mind mapping* led to improve students' learning outcomes. The results above the KKM (70) and students were in the high category. This can be seen from the learning

outcomes of students in Fiqh subjects, the overall average of students has increased.

The collected data indicate that the experimental group exceeded the control group in terms of average scores. The experimental class demonstrated a mean improvement of 37 points from pretest to posttest, in contrast to the control class, which showed a gain of only 12.33 points. Specifically, the experimental group recorded an average pretest score of 49.67, slightly higher than the control group's 46.67, yielding a pretest difference of 3 points. In the posttest, the experimental group achieved a significantly higher mean score of 86.67, compared to 59.00 in the control group, resulting in a posttest difference of 27.67 points. This substantial improvement in the experimental group, which was instructed by using a mind mapping-based flipped classroom model, suggests that the enhanced learning outcomes can be attributed to the effectiveness of the instructional approach, as opposed to the conventional methods used in the control group.

To assess how the *Mind Mapping-based Flipped Classroom* Learning Model (X) influences Learning Outcomes (Y), researchers conducted statistical tests, the following results were obtained:

Table 4.6 Variable Validity Test Results X  
(*Mind Mapping-based Flipped Classroom Model*)

Statement	R Count	R Table	Description
P1	0,688	0,514	Valid
P2	0,570	0,514	Valid
P3	0,667	0,514	Valid
P4	0,623	0,514	Valid
P5	0,607	0,514	Valid
P6	0,748	0,514	Valid
P7	0,779	0,514	Valid
P8	0,677	0,514	Valid
P9	0,625	0,514	Valid
P10	0,572	0,514	Valid
P11	0,766	0,514	Valid
P12	0,595	0,514	Valid
P13	0,791	0,514	Valid
P14	0,844	0,514	Valid

Table 4.7 Y Variable Validity Test Results  
(Learning Outcome)

Statement	R Count	R Table	Description
P1	0,643	0,514	Valid
P2	0,613	0,514	Valid
P3	0,552	0,514	Valid
P4	0,534	0,514	Valid
P5	0,784	0,514	Valid
P6	0,653	0,514	Valid
P7	0,581	0,514	Valid
P8	0,768	0,514	Valid
P9	0,526	0,514	Valid
P10	0,548	0,514	Valid
P11	0,630	0,514	Valid
P12	0,828	0,514	Valid

The table reveals that the entire table of the variables studied has a score greater than the r-table score of 0.514. This means that the questionnaire statement items obtained are valid and can be tested further.

Data reliability was evaluated by using the Cronbach's Alpha method. An instrument is deemed reliable if it attains a reliability coefficient of 0.6 or above; conversely, a low alpha value may suggest that certain items lack consistency. The outcomes of the reliability analysis are summarized in the table below:

Table 4.8 Reliability Test Results

Variables	Cronbach's Alpha	Description
X	0,903	Reliable
Y	0,863	Reliable

The data presented in the above table indicate that all variables have *Cronbach's Alpha* > 0.6. The *mind mapping-based flipped classroom model* variable (X) obtained *Cronbach's Alpha* = 0.903 indicates that the data is reliable. Then, the reliability test of the learning outcomes variable (Y) obtained *Cronbach's Alpha* = 0.863. This means that the instruments in this study are reliable, thus, all statement items can be trusted and can be used for further research.

Table 4.9 Normality Test Results

Asymp. Sig	Alpha	Description
0,200	> 0,05	Normally Distributed Data

Based on Table 4.9, the Asymp. Significance value exceeds the alpha threshold ( $p > 0.05$ ). Consequently, it can be concluded that the data related to the implementation of the mind mapping-based flipped classroom learning model on students' learning outcomes in Fiqh subjects at MTSN 6 Kerinci by using *Kolmogorov Smirnov* are normally distributed.

Table 4.10 Linearity Test Results  
ANOVA Table

			Sum of Squares	Df	Mean Square	F	Sig
Flipped learning model classroom based on mind mapping* Learning outcomes	Between Groups	(Combined)	254.567	10	25.457	.732	.687
		Linearity	125.288	1	125.288	3.601	.131
		Deviation from Linearity	129.279	9	14.364	.413	.876
	Within Groups		139.167	4	34.792		
	Total		393.733	14			

As shown in the table above, the importance value for the Deviation from Linearity is 0.876, which exceeds the alpha threshold of 0.05 ( $0.876 > 0.05$ ). This suggests that there is no substantial deviation from linearity, and therefore, the relationship between the variables—namely, the influence of the mind mapping-based flipped classroom learning model (X) and student learning outcomes (Y)—can be considered linear

Table 4.11 Partial Hypothesis Test Results (t Test)

No.	Variables	$t_{\text{count}}$	$\times$	$t_{\text{table}}$	Sig	$\times$	Alpha	Description
1.	Mind Mapping-based Flipped Classroom Model	2,463	>	1,771	0,02	<	0,05	Ha accepted

The table above shows that the calculated t-value of 2.463 surpasses the critical value of 1.771 ( $t_a > t_t$ ), with a

significance level of 0.02, which is below the standard alpha level of 0.05 ( $p < 0.05$ ). These results lead to the acceptance of the alternative hypothesis ( $H_a$ ) and the rejection of the null hypothesis ( $H_o$ ). Therefore, it can be concluded that the mind mapping-based flipped classroom learning model exerts a statistically significant and positive impact on students' learning outcomes in the Fiqh subject for Grade VIII students at MTsN 6 Kerinci.

## Discussion

A discussion section addresses the implications of the research findings presented as follows:

### **Students' Learning Outcomes without the Use of the Mind Mapping-Based Flipped Classroom Learning Model in Fiqh Subjects for Class VIII at MTsN 6 Kerinci**

In the control group, where the mind mapping-based flipped classroom model was not implemented, students achieved an average pretest score of 46.67, with scores ranging from 30 to 60. The posttest average score in this group was 59.00, with a minimum of 40 and a maximum of 65. Based on these results, the average learning outcomes in Fiqh for this group fall within the low category.

Regarding to researchers' observation, when using *conventional* learning models, in the learning process, the teacher actively facilitates, guides, and supports students to enhance their understanding and engagement, while the students are only passive (students only receive from one direction only, namely from the teacher without any feedback). Thus, the students do not develop their thinking and affect students' limited comprehension of the instructional material presented by the teacher. This can be seen in the learning process: when the teacher explains they do not pay attention, are lazy to express opinions if asked, rely on the answers of smart friends and the lack of active students because they seem lack of preparation in the learning process.

This aligns with the findings of Saputra, et al (2019: 14) who argue that in *conventional* learning models the teacher is active and students only play a passive role, where the teacher provides oral lighting to a number of students who act as listeners and take notes as necessary while students only accept what is explained by the teacher. So, that learning tends to be monotonous resulting in a lack of motivation and boredom among students during learning activities and ultimately impacts their academic performance negatively; low learning outcomes of students.

The achievement levels of students in the experimental group by implementing the mind mapping-based flipped classroom model, showed an average pretest score of 49.67, with scores ranging from 30 to 65. An improvement was observed in the average posttest results significantly to 86.67, with a minimum of 75 and a maximum of 100. These results indicate that students' learning outcomes in Fiqh improved from the pretest to the posttest, reaching a high-performance category.

In reference to the average score of the experimental class, it is evident that integrating mind mapping assignments within the flipped classroom learning model positively influences students' learning achievement. Suardianti (2014: 3-4) emphasizes that employing diverse learning models and media can enhance students' interest, thereby facilitate easier comprehension of the material and improve learning outcomes. Furthermore, Robbins (2007: 5-4) asserts that learning creativity is influenced by both student interest and teacher creativity. When students demonstrate high interest and teachers effectively support and nurture this interest, the learning objectives are more likely to be successfully achieved.

The integration of mind mapping within the flipped classroom model can support students be independent, active, creative, critical and make students interested in understanding learning materials. This is in line with what is revealed by Safitri, Romli,



and Irawan (2022: 79) The implementation of the mind mapping-based flipped classroom is able to develop critical, active, creative, responsive, and collaborative thinking skills.

Masripah, Wiganda, and Fatonah (2019: 241) explain that the flipped classroom learning model involves providing teaching materials to students prior to in-class learning activities. This approach is designed to enable students to independently comprehend the material at home before the subsequent class session, thereby better preparing them to engage with the learning process during classroom instruction, while in-class activities to strengthen in the form of exercise questions with discussion and present it in front of the class.

However, Murtiasih (2022: 1021-1023) states that the *flipped classroom* model requires supporting devices that make it easy to facilitate students' understanding of learning concepts, this study employed a combination of the flipped classroom learning model and mind mapping strategies. According to Mitra et al. (2023: 91), mind mapping plays a significant role in helping students grasp and master concepts more effectively and with greater ease.

Based on observations when using the *mind mapping-based flipped classroom* learning model: At the initial meeting, the teacher administered a pretest to assess students' baseline learning outcomes prior to the implementation of the mind mapping-based flipped classroom learning model and also provided *mind mapping* simulations, so the students knew how to make *mind mapping* properly and correctly in order to make the students during the learning process in summarizing the material independently at home they were not confused.

During the second meeting, the implementation of the mind mapping-based flipped classroom learning model was carried out, in the learning process students still looked confused and did not understand the *flipped classroom* learning model based on *mind mapping*, it was seen that some

students did not make *mind mapping*, then during the discussion process there were still some students who were not used to completing worksheets and still relied on the answers of smart friends, while what was expected was that students in each group played an active role when completing worksheets. Nevertheless, the researcher continued to revise and apply for the next meeting.

In the third meeting, students have begun to understand the *flipped classroom* learning model based on *mind mapping* that is applied, this can be seen in terms of *mind mapping* all students have done, have begun to actively discuss together in a group to complete the worksheet given by the teacher, but when presenting there are still some students who are still shy and lack confidence in conveying the results of group discussions regarding the tasks given by the teacher.

In the fourth meeting, students have begun to be comfortable with the *flipped classroom* learning model based on *mind mapping*, this can be seen from the students' *mind mapping* that has been creatively combined with attractive colours and the placement of data on each branch is correct, then when the worksheet group given by the teacher to students, students easily understand the direction and completion steps and all of them try to convey their opinions to complete the worksheet. However, when performing the discussion there were still mistakes, but these were corrected directly by the teacher.

In the fifth meeting, students felt very comfortable with the *mind mapping-based flipped classroom* learning model. This can be seen from making students' *mind mapping* more interesting than before and the placement of data on each branch is correct, besides that during group discussions students easily understand and quickly complete the worksheets given, then when performing discussions, they are confident in conveying the results of group work. And when they are asked by the teacher, they were very active in answering the questions

given. It is because the students are helped by the *flipped classroom* learning model based on *mind mapping* greatly.

In the sixth meeting, a post-test was administered to evaluate students' final learning outcomes following the implementation of the mind mapping-based flipped classroom learning model. Additionally, a questionnaire was distributed to gather students' responses and perceptions regarding the learning model that had been applied.

### **The Influence of the Flipped Classroom Learning Approach Utilizing Mind Mapping on Academic Performance in Fiqh Classes for Eighth Grade Learners at MTsN 6 Kerinci**

This research utilized a t-test to analyze the influence of the flipped classroom model, which is centered on mind mapping, on the educational achievements of students in Fiqh subjects at MTsN 6 Kerinci. The results indicate that the learning model contributes positively and significantly to student academic performance. Specifically, hypothesis testing revealed a calculated t-value of 2.463, which exceeds the critical t-value of 1.771, accompanied by a significance level of 0.02, which is below the 0.05 threshold ( $p < 0.05$ ). Thus, the evidence supports rejecting the null hypothesis ( $H_0$ ) and accepting the alternative hypothesis ( $H_a$ ). These findings support the conclusion that the implementation of the mind mapping-based flipped classroom learning model significantly enhances the learning outcomes of Grade VIII students in the Fiqh subject at MTsN 6 Kerinci.

According to Wulandari and Arifin (2018: 20), constructivist learning theory emphasizes that students actively their own knowledge through interaction with their environment. In line with this perspective, the implementation of the mind mapping-based flipped classroom learning model offers students opportunities to engage more deeply with learning materials, encouraging independent exploration and active

participation in the learning process to be independent in learning at home so that at school they are better prepared to learn, actively participate in the learning process, and also strengthen their understanding of the concepts of learning materials.

### **CONCLUSION**

Regarding to the research findings on the effect of using a *mind mapping-based flipped classroom* learning model on student learning outcomes in Fiqh subjects at MTsN 6 Kerinci, the conclusion can be drawn as follows:

Student learning outcomes in the control class, which did not utilize the mind mapping-based flipped classroom learning model, were measured in the Fiqh subject for Grade VIII at MTsN 6 Kerinci. The control group recorded an average pretest score of 46.67, with individual scores ranging from 30 to 60. Following the intervention period, the average posttest score increased to 59.00, with scores ranging between 40 and 65. Although there was an improvement from pretest to posttest, the average posttest score remained below the minimum competency criteria (KKM) of 70, placing the student performance in the "low" category.

Student learning outcomes by using a *mind mapping-based flipped classroom* learning model in fiqh class VIII MTSN 6 Kerinci in the experimental class obtained an average *pretest* score of 49, 67 (highest score 65 and lowest 30). As for the *posttest* with an average value of 86.67 (highest score 100 and lowest 75). For the average value of the *pretest* to the *posttest*, it increased with the *posttest* value above the KKM (70) and was in the "high" category.

The findings of the partial statistical test (t-test) conducted in this study indicate that the mind mapping-based flipped classroom learning model exerts a positive and statistically significant effect on student learning outcomes in the Fiqh subject among Grade VIII students at MTsN 6 Kerinci. This conclusion is substantiated by the hypothesis testing results, where the calculated t-value (2.463) exceeds the critical t-value (1.771),

and the significance level ( $p = 0.02$ ) is below the conventional alpha threshold of 0.05. Accordingly, the alternative hypothesis ( $H_a$ ) is accepted, while the null hypothesis ( $H_o$ ) is rejected. These results affirm that the application of the mind mapping-based flipped classroom learning model contributes meaningfully to improving student achievement in Fiqh at MTsN 6 Kerinci.

Theoretically, these findings enhance our understanding of how active learning approaches grounded in constructivist principles and cognitive load management can improve the efficiency of student learning processes. Practically, this study offers empirical support for educators and school administrators to adopt innovative teaching models that integrate technology with visual strategies, such as mind mapping, to boost student engagement and academic achievement.

However, this research has several methodological limitations that warrant consideration. First, the limited duration of the intervention may not fully capture the long-term effects of implementing this learning model. Second, external factors such as differences in teaching styles, student motivation, and learning environment were not entirely controlled, potentially influencing the learning outcomes. Third, the assessment relied solely on written tests, lacking in-depth qualitative evaluations to thoroughly gauge students' conceptual understanding.

In light of the research outcomes, the researcher suggests several things, namely: For school (madrasah), especially in this case the principal should encourage teachers to make innovations in learning. Such as models, methods, strategies or the use of appropriate media.

For educators, it is essential to implement a learning model that aligns with students' needs and conditions. Specifically, the application of a mind mapping-based flipped classroom learning model can facilitate the effective attainment of desired educational objectives. This approach better prepares students to actively engage in

classroom activities, fostering greater student participation, enhanced interaction between students and teachers, as well as increased peer-to-peer communication.

For students, it is recommended to utilize learning videos and mind mapping as tools for independent study, thereby optimizing their preparation for face-to-face learning sessions.

For future researchers, it is recommended to conduct further studies with a longer intervention duration, stricter control of variables, and the use of more comprehensive evaluation methods to obtain a deeper and more valid understanding of the effectiveness of this learning model.

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