AL-IRFAN: Journal of Arabic Literature and Islamic Studies
P-ISSN: 2622-9897 E-ISSN: 2622-9838

Vol. 8, No. 2, 2025, 226-246
DOI: https://doi.org/10.58223/al-irfan.v8i2.458

The Flipped Classroom Model as a Pedagogical Innovation to Enhance Mufradat Mastery at the Elementary Level

Narul Hasyim Muzadi
Maulana Malik Ibrahim State Islamic University, Indonesia
hasyimnarul@gmail.com

Ahmad Mubaligh
Maulana Malik Ibrahim State Islamic University, Indonesia
abaelma@gmail.com

Laily Fitriani
Maulana Malik Ibrahim State Islamic University, Indonesia
laily@bsa.uin-malang.ac.id

Keywords: Flipped Classroom, Mufradat, Arabic Learning.

Abstract

Mufradat mastery is a very important basic component in Arabic learning. However, mufradat learning at the Madrasah Ibtidaiyah level still faces various obstacles, such as low student absorption and the use of conventional approaches that do not involve active student participation. This study aims to measure the effect of the Flipped Classroom model in improving the mufradat mastery of fifth-grade students at MIN 1 Karanganyar. The research method employed a quantitative approach with a pre-experimental design (one-group pretest-posttest design). The research subjects consisted of 27 fifth-grade students selected through purposive sampling. Data were collected using multiple-choice tests before and after the intervention, then analyzed using normality, homogeneity, and paired sample t-tests with the assistance of SPSS version 26. The results of the study showed a significant increase in mufradat mastery after the implementation of the Flipped Classroom, as indicated by the statistically significant difference between the pretest (M = 29.63) and posttest (M = 77.04) scores (p = 0.000). This study contributes theoretically by reinforcing previous findings on the effectiveness of the Flipped Classroom in language learning, but with a specific focus on mufradat mastery at the elementary

madrasah level, which has been relatively understudied. In practical terms, this study provides a reference for teachers, madrasahs, and parents to optimize mufradat learning through the synergy of pre-class stages, class discussions, and integrated evaluation-reflection with technological support. Thus, this study confirms that the Flipped Classroom can be a relevant, innovative, and applicable alternative learning model to improve the quality of students' mufradat mastery from the elementary level.

Abstrak

Kata Kunci: *Flipped Classroom, Mufradat, Pembelajaran Bahasa Arab.*

Penguasaan mufradat merupakan komponen dasar yang sangat penting dalam pembelajaran Bahasa Arab. Namun, pembelajaran mufradat di tingkat Madrasah Ibtidaiyah masih menghadapi berbagai kendala, seperti rendahnya daya serap siswa dan penggunaan pendekatan konvensional yang kurang melibatkan partisipasi aktif siswa. Penelitian ini bertujuan untuk mengukur pengaruh model Flipped Classroom dalam meningkatkan penguasaan mufradat siswa kelas V MIN 1 Karanganyar. Metode penelitian menggunakan pendekatan kuantitatif dengan desain pre-eksperimental (one-group pretest-posttest design). Subjek penelitian terdiri atas 27 siswa kelas V yang dipilih melalui purposive sampling. Data dikumpulkan menggunakan tes pilihan ganda sebelum dan sesudah perlakuan, lalu dianalisis melalui uji normalitas, homogenitas, dan paired sample t-test dengan bantuan SPSS versi 26. Hasil penelitian menunjukkan adanya peningkatan signifikan penguasaan mufradat setelah penerapan Flipped Classroom, ditunjukkan oleh perbedaan skor pretest (M = 29,63) dan posttest (M = 77,04) yang signifikan secara statistik (p = 0,000). Penelitian ini memberikan kontribusi teoretis dengan memperkuat temuan sebelumnya mengenai efektivitas Flipped Classroom dalam pembelajaran bahasa, namun dengan fokus khusus pada penguasaan mufradat di jenjang madrasah ibtidaiyah yang selama ini relatif kurang dikaji. Secara praktis, penelitian ini memberikan rujukan bagi guru, madrasah, dan orang tua untuk mengoptimalkan pembelajaran kosakata melalui sinergi tahapan pra-kelas, diskusi kelas, serta evaluasi dan refleksi yang terintegrasi dengan dukungan teknologi. Dengan demikian, penelitian ini menegaskan bahwa Flipped Classroom dapat menjadi model pembelajaran alternatif yang relevan, inovatif, dan aplikatif untuk meningkatkan kualitas penguasaan mufradat siswa sejak tingkat dasar.

Received: 04-07-2025, Revised: 20-08-2025, Accepted: 08-09-2025

Introduction

Vocabulary *(mufradat)* instruction is one of the crucial aspects in mastering the Arabic language. *Mufradat* serves as the foundational element that students must acquire before progressing to the comprehension of grammatical structures *(naḥwu)*, sentence construction *(taṣrīf)*, as well as oral and written communication skills (Kharisma & Hasan, 2025). In the context of Arabic education, mastering *mufradat* is not merely about recognizing the meaning of individual words, it also involves understanding their usage within sentence contexts, distinguishing between singular and plural forms, and interpreting connotative meanings across both classical and modern Arabic varieties (Al-kaosari et al., 2025). Therefore, effective *mufradat* teaching strategies are essential to ensure that learners can absorb, comprehend, and use vocabulary accurately and appropriately.

Nevertheless, in practice, *mufradat* instruction continues to face various challenges. According to Maulana, one of the main difficulties in learning *mufradat* is students' low retention and their limited ability to recall and apply vocabulary repetitively and contextually (Maulana, 2023). Most teachers still rely on conventional methods such as lecturing and providing word lists, without reinforcement through meaningful, applicable learning activities (Mardiyah & Sofa, 2025). Moreover, the lack of active student engagement and minimal contextualization in delivering *mufradat* contribute to weak vocabulary retention and limited transfer to real-life use (Ramadhan et al., 2024). These challenges are further compounded by the absence of innovative and interactive teaching media and strategies.

At MIN 1 Karanganyar, similar problems were also identified. Based on preliminary observations and interviews with Arabic teachers, it was found that the majority of students experienced difficulties in remembering and using *mufradat* within sentence contexts. Although students had been taught a number of *mufradat*, they tended to memorize them verbally without gaining a deep understanding of their meanings. This led to low proficiency in constructing

simple sentences and comprehending Arabic reading texts. Several factors contributed to this issue, including the dominance of one-way instructional approaches, the lack of interactive learning media, and the students' low motivation toward Arabic subjects. Therefore, a learning approach is needed that actively involves students and enables them to construct their understanding independently before the formal classroom sessions begin.

One such learning approach that has recently gained significant attention in modern education is the flipped classroom model. This concept represents a pedagogical innovation that reverses traditional instructional patterns (Petandean & Indrajit, 2021). Whereas in conventional models the teacher serves as the central source of knowledge and delivers content in class, the flipped classroom shifts content delivery to outside the classroom, typically via digital media such as instructional videos, podcasts, e-modules, or other interactive formats (Strelan et al., 2020). Meanwhile, in-class time is allocated for more applied and collaborative activities, such as discussions, problem-solving, presentations, simulations, or in-depth exploration through question-and-answer sessions (Qi et al., 2024). Consequently, the flipped classroom transforms students from passive listeners into active participants in the learning process (Herlambang et al., 2024).

This instructional approach is grounded in constructivist learning theory, which asserts that knowledge is actively constructed by learners through their personal experiences and engagement in the learning process (Robertson, 2022). The flipped classroom model offers students the opportunity to build foundational understanding independently prior to face-to-face instruction (Joy et al., 2023). The materials studied at home serve as cognitive scaffolding, enabling students to engage more meaningfully in classroom discussions (Brame, 2019). Rather than entering the classroom with no prior knowledge, students arrive with an initial conceptual framework that can be further developed and refined through collaborative activities (Dominguez, 2021).

According to Bergmann and sams the originators of the flipped classroom model, this approach allows learners to access instructional content at their own pace and convenience (Bergmann & Sams, 2012). They emphasize that the model fosters cognitive preparedness prior to in-class sessions, thereby enhancing students' engagement and participation during synchronous learning (Samadi et al., 2024). Moreover, the model facilitates increased teacher-student interaction, as teachers are afforded more time for individualized guidance and formative assessment (Sahudra et al., 2023). Pedagogically, the flipped classroom aligns with the principles of active learning, differentiated instruction, and the development of higher-order thinking skills (Ma'ruufah et al., 2024).

Within the context of Arabic education particularly in teaching *mufradat* the flipped classroom demonstrates considerable potential to improve students' lexical acquisition. By providing *mufradat* materials in the form of interactive videos, animations, and digital quizzes for pre-class engagement, learners are encouraged to construct preliminary understanding autonomously (Mahyudin et al., 2025). In-class sessions then reinforce this knowledge through task-based activities, including discussions, language games, peer dialogues, and sentence construction exercises. This dual-phase model not only enhances vocabulary retention but also promotes the contextualized and functional use of *mufradat* in authentic language situations (Firdausih et al., 2025). Accordingly, the flipped classroom presents itself as a viable pedagogical strategy for addressing persistent challenges in Arabic vocabulary instruction, especially at the primary education level.

Previous studies have reported positive outcomes regarding the implementation of the flipped classroom model in Arabic instruction. A study conducted by Hukom demonstrated that the flipped classroom model had a significant positive impact on students' Arabic learning achievement, with an effect size of 0.97, categorized as high (Hukom et al., 2024). Similarly, study by Akhiridin found that the flipped classroom model was effective in enhancing Arabic speaking skills among students at MAN 2 Wonosobo in the post-

pandemic period (Akhirudin et al., 2024). This model fostered independent and interactive learning while providing opportunities for personalized instruction. In addition, Rufaida and Muassomah showed that the flipped classroom was effective in improving students' reading skills. Students were able to comprehend, translate, and retell the content of Arabic texts, indicating that this model contributes significantly to reading comprehension development (Rufaida & Muassomah, 2021).

Despite these findings, the existing literature reveals a notable gap in research specifically examining the effect of flipped classroom implementation on *mufradat* acquisition at the elementary madrasah level, particularly within the context of MIN 1 Karanganyar. Most previous studies have concentrated on secondary or tertiary education, leaving the primary education context underexplored. This is particularly concerning, given that the elementary *(madrasah ibtidaiyah)* phase is a critical period in developing foundational language skills, including *mufradat* mastery. Therefore, this study occupies a strategic position in expanding the scope of flipped classroom research to a more specific and practical context in early stage Arabic learning.

Therefore, the aim of this study is to measure the effect of the Flipped Classroom model in improving the *mufradat* mastery of fifth-grade students at MIN 1 Karanganyar. This study is expected to provide empirical insights into the application of the Flipped Classroom model as an alternative teaching model to improve *mufradat* mastery, as well as serve as a practical reference for Arabic teachers in designing more effective and interesting teaching strategies.

Method

This study employed a quantitative approach with a pre-experimental design. The quantitative approach was selected because this research aimed to objectively measure the effect of the flipped classroom instructional model on students' *mufradat* mastery in Arabic learning. The pre-experimental design was chosen since the study involved only a single group without a control group for comparison. The design applied in this research was a one-group pretest-posttest

design, in which measurements were conducted before and after the intervention was given to the experimental group to observe any changes resulting from the treatment (Arib et al., 2024). This design allowed the researcher to compare students' scores before (pretest) and after (posttest) the implementation of the flipped classroom model, in order to determine whether there was a significant improvement in learning outcomes.

The subjects of this study were 27 fifth-grade students at MIN 1 Karanganyar in the 2024/2025 academic year. The sampling technique used was purposive sampling, where the selection was based on specific considerations relevant to the research objective namely, a class that had previously received instruction in Arabic vocabulary *(mufradat)* and was prepared to participate in the flipped classroom intervention. The data collection technique involved a test instrument consisting of multiple-choice questions, constructed according to the indicators of competency in *mufradat* acquisition. The test was administered twice, before the treatment (pretest) and after the treatment (posttest), in order to assess the effect of the instructional model.

The data analysis technique used in this study was the paired sample t-test. This test was employed to determine the mean difference between the pretest and posttest scores within the same group, in order to assess whether the difference was statistically significant. Before to conducting the t-test, an assumption test was carried out in the form of a normality test using the Shapiro–Wilk method, as the sample size was fewer than 50 participants. All statistical analyses were performed with the assistance of statistical data processing software, specifically SPSS version 26.0.

Result and Discussion

Description of Pretest and Posttest Data

To determine the effect of the Flipped Classroom model on improving Arabic *mufradat* mastery, the researcher first measured the students' abilities through a pretest before the treatment was given and a posttest after the

treatment was carried out. These two data sets were then analyzed descriptively using SPSS version 26 to obtain a more comprehensive picture of the development of students' *mufradat* mastery. The descriptive analysis included the mean, minimum, and maximum scores on the pretest and posttest, allowing for a more detailed comparison of learning outcomes. The results of this analysis were then presented in tables and graphs generated directly by SPSS, making it easier to read the trends in differences in student learning outcomes before and after the implementation of the Flipped Classroom model.

Statistics

		Pretest	Posttest
N	Valid	27	27
	Missing	0	0
Mean		29.63	77.04
Median		30.00	80.00
Mode		20[a]	90
Std. Deviation		13.150	13.535
Range		50	50
Minimum		10	50
Maximum		60	100
Sum		800	2080

a. Multiple modes exist. The smallest value is shown

Table 1. Average pretest posttest score

Based on the results of descriptive analysis using SPSS version 26, the average pretest score was 29.63 and increased to 77.94 on the posttest. The minimum score on the pretest was 10 and increased to 50 on the posttest, while the maximum score on the pretest was 60 and reached 100 on the posttest. The increase in the average score, accompanied by an increase in the minimum and maximum scores, indicates a significant positive change in *mufradat* understanding after the implementation of the Flipped Classroom learning model. However, to obtain more accurate and scientifically valid conclusions, further analysis was conducted through normality tests, homogeneity tests, and

paired sample t-tests to ensure that the differences observed were statistically significant and truly caused by the learning intervention provided.

Statistical Test Analysis

After obtaining the pretest and posttest data, the next step is to perform inferential analysis to determine whether there is a significant difference between the two results. In this study, the Paired Sample t-Test was used because the data came from two measurements taken on the same group, namely fifth-grade students at MIN 1 Karanganyar. This test aims to test the hypothesis regarding the effect of implementing the flipped classroom model on *mufradat* enhancement.

Before conducting the t-test, there are two prerequisite tests that must be met in order for the t-test results to be interpreted validly, namely:

1. **Normality Test**

The normality test was conducted to determine whether the pretest and posttest data were normally distributed. In this study, the normality test was conducted using the Shapiro-Wilk method. If the significance value (Sig.) was > 0.05, the data was declared to be normally distributed.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.192	27	.012	.925	27	.052
Posttest	.164	27	.060	.934	27	.086

a. Lilliefors Significance Correction

Table 2. Normality test

Based on the analysis results, the significance value (Sig.) for the pretest data was 0.52, and for the posttest data it was 0.86, both of which are greater than the alpha value (α = 0.05). This indicates that the distributions of both the pretest and posttest data are normal. Since the assumption of normality is met, the data are suitable for analysis using parametric statistical techniques.

2. Homogeneity Test

The homogeneity test is used to determine the similarity of variances between two groups of data, namely the pretest and posttest. This analysis is performed using the Test of Homogeneity of Variances. If the significance value (Sig.) > 0.05, then the data has a homogeneous variance, thus fulfilling the assumption of variance equality.

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Hasil Belajar Mufradat	Based on Mean	.442	1	52	.509
	Based on Median	.250	1	52	.619
	Based on Median and with adjusted df	.250	1	51.923	.619
	Based on trimmed mean	.389	1	52	.536

Table 3. Homogeneity test

Based on the analysis results, a significance value based on the mean of 0.509 was obtained, which is greater than the value of $\alpha = 0.05$, meaning that the variance between the two data groups is homogeneous or not significantly different. This conclusion reinforces the validity of using parametric tests, as the homogeneity requirement has been met.

3. Paired Sample t-Test

After determining that the data was normally distributed and homogeneous, a paired sample t-test was conducted to determine whether there was a significant difference between the pretest and posttest scores. This test was used because both data sets came from the same subjects, namely students who participated in the Flipped Classroom model, but at two different times (before and after the treatment). If the significance value (Sig. 2-tailed) ≤ 0.05, then there is a significant difference between the pretest and posttest scores.

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-47.407	9.443	1.817	-51.143	-43.672	-26.086	26	.000

Table 4. Paired sample t-test

Based on the analysis results, a significance value (Sig. 2-tailed) of 0.000 was obtained, which is greater than the α value of 0.05. This value indicates a statistically significant difference between the pretest and posttest scores. In other words, there was an increase in *mufradat* comprehension after the implementation of the Flipped Classroom model. This increase indicates that the learning model had a significant effect on student learning outcomes in *mufradat* mastery.

The findings of this study indicate a significant increase in *mufradat* comprehension after the implementation of the Flipped Classroom model, as evidenced by the difference in pretest and posttest scores (p = 0.000). These results are consistent with the findings of Hukom, which show that the implementation of this model has a significant positive impact on Arabic learning achievement with a high effect size (0.97) (Hukom et al., 2024). However, unlike the study by Akhirudin, which focused on improving speaking skills at the high school level (Akhirudin et al., 2024), this study provides empirical evidence that the Flipped Classroom model is also effective when applied at the elementary school level for mastering basic *mufradat*. These findings expand the scope of previous research, which has largely focused on students with higher cognitive levels.

Stages of the Flipped Classroom Model and Factors Affecting Student Mastery

The impact of the Flipped Classroom model as a pedagogical innovation to enhance *mufradat* mastery is fundamentally determined by the synergy

between the instructional design of the model and the external factors surrounding the learning process. The success of this model cannot be judged solely based on its instructional structure but must be examined within the context of how each stage is mediated by variables such as student learning motivation, teacher pedagogical competence, and the availability of digital technology, particularly in elementary *madrasah* education, which has unique characteristics in terms of students and the educational ecosystem. The Flipped Classroom model, as designed by Bergmann and Sams, consists of several main steps: (1) providing material in advance of face-to-face sessions (usually through videos or online modules), (2) active group discussion activities, and (3) joint evaluation and reflection (Bergmann & Sams, 2012).

The initial stage in implementing the Flipped Classroom model is the provision of material prior to face-to-face sessions. At this stage, researchers prepared a *mufradat* learning video containing explanations of *mufradat*, pronunciation, and examples of usage, which students were required to access independently at home. During the study, students were asked to watch the video and write down the meanings of the *mufradat* in a special notebook. Observation results indicate that students who receive parental support and are accustomed to using digital media are more active in learning the material, while some students with low motivation or insufficient guidance tend not to access the material and ultimately fall behind during class discussions. This situation underscores that the success of the initial stage is crucial to the effectiveness of learning, as students who utilize the pre-learning material are more prepared and find it easier to understand new *mufradat*. This finding aligns with Bandura's self-regulated learning theory, which emphasizes the importance of internal motivation, external support, and the ability to regulate the learning process in achieving optimal results (Listianti & Astuti, 2025).

The second stage is group discussion in class, where teachers organize students to construct their understanding of vocabulary through collaborative practice. During the study, these discussions involved matching words with

pictures, constructing simple sentences from the *mufradat* learned, and conveying the meaning of *mufradat* in everyday contexts. The effectiveness of this stage is highly dependent on the teacher's ability to design and facilitate classroom interactions. Arabic teachers in elementary *madrasahs* are not only required to prepare video-based materials but also to create a learning environment that encourages students to speak up, ask questions, and connect *mufradat* with relevant meanings. In line with the views of Bergmann and Sams, in the Flipped Classroom model, the teacher acts as a learning architect, not merely a presenter of material (Bergmann & Sams, 2012). Teachers who lack mastery of active learning strategies, dialogue-based approaches, and educational games risk failing to optimize student participation, resulting in one-sided discussions and inadequate development of *mufradat* understanding (Sanulita et al., 2024).

The next stage, evaluation and reflection, is a crucial phase in the Flipped Classroom model. It not only serves as a tool to measure students' understanding of *mufradat*, but also as a means of strengthening memory and internalizing meaning. In this study, this phase is implemented through various activities, such as *mufradat* quizzes, reading practice, group pronunciation exercises, and individual reflection sessions where students are encouraged to identify their favorite *mufradat* words and explain their reasons for choosing them. These activities are designed to activate both the cognitive and affective aspects of students, which are essential in Arabic learning at the elementary school level. However, the effectiveness of reflection is highly dependent on the implementation of the previous stages. Students who did not watch the instructional videos or were passive during discussions tend to struggle with constructing meaning comprehensively, thereby facing obstacles in conducting meaningful reflection.

This shows that each stage in the Flipped Classroom is interdependent, where weaknesses in one phase will affect the results in the next phase. This concept aligns with Piaget's constructivist theory, which posits that understanding is built through a gradual and integrated process (Nurhasnah et

al., 2024) and is further supported by Flavell's metacognitive theory, which emphasizes the importance of learning awareness in controlling and evaluating acquired knowledge (Frima Asda, 2024). Therefore, the evaluation and reflection stages are not merely final tools but the core of the active, reflective, and independent learning process that forms the primary foundation of the Flipped Classroom approach.

Beyond the technical aspects of learning, digitization plays a very significant role in the smooth implementation of the Flipped Classroom model, especially in *madrasahs* that still face various infrastructure challenges. Although most students have access to devices through their parents facilities, the success of the independent learning stage is highly dependent on the quality of the internet connection, the level of digital literacy of parents, and the madrasah's policies in supporting the structured use of educational technology. This disparity in access often becomes a source of disparity in learning outcomes between individuals. In practice, students from areas with limited internet networks or who do not receive technology-based learning assistance at home experience obstacles in optimally accessing video materials and digital modules (Aziza et al., 2025). As a result, the pre-face-to-face stage, which is the main foundation of the Flipped Classroom model, becomes uneven and uneven. Additionally, the low ability of parents to guide the use of educational technology also hinders the functionality of this model as learning based on prior readiness. This reinforces Vygotsky's perspective in social constructivism theory, that the effectiveness of learning is not determined solely by methods and content, but also by the social context and learning environment surrounding the students (Wibowo et al., 2025).

Based on field findings, it appears that variations in *mufradat* comprehension outcomes are not solely determined by the application of the Flipped Classroom model, but also by how this model interacts with student characteristics, teacher readiness, and the available technological ecosystem support. These results align with the findings of Rufaida and Muassomah, who

emphasize the importance of student readiness and the teacher's role in supporting the effectiveness of Flipped Classroom-based reading instruction (Rufaida & Muassomah, 2021). The study by Akhirudin also indicates that the success of this model is significantly influenced by the teacher's ability to facilitate speaking activities through collaborative and creative approaches (Akhirudin et al., 2024). Additionally, the study by Hukom found that limited access to technology and insufficient parental involvement can reduce the effectiveness of this model in Arabic learning (Hukom et al., 2024).

These research findings reinforce previous results while emphasizing that the successful implementation of the Flipped Classroom model at the elementary *madrasah* level requires an adaptive implementation approach tailored to the social, cultural, and religious conditions of the students. In other words, the effectiveness of this model can only be achieved if learning strategies, technological support, and teacher and parental guidance are aligned with the context of the students in the *madrasah* environment.

Implications of the Research Findings

The results of this study indicate that the implementation of the Flipped Classroom model has a positive impact on improving students' *mufradat* comprehension at the elementary *madrasah* level. Therefore, there are several practical implications that can be applied:

For Arabic Teachers: a) Design interactive digital content in the form of educational videos, online quizzes, and simple activity sheets that are appropriate for the cognitive abilities of elementary *madrasah* students. b) Utilize face-to-face time for collaborative activities such as discussions, *mufradat* games, sentence construction, and contextual use of *mufradat*. c) Participate in technology-based pedagogical training to improve competence in managing interactive learning.

For Madrasah Administrators: a) Provide supporting infrastructure, such as internet access, projectors, and digital learning devices. b) Provide technical assistance to teachers and students to ensure optimal use of pre-class materials.

For Parents: a) Support students in accessing and utilizing pre-class materials by supervising the use of digital media at home. b) Build collaboration with teachers to monitor student engagement in the independent learning process.

With the support of teachers, madrasahs, and parents, the implementation of the Flipped Classroom model can be optimized to increase student engagement, strengthen *mufradat* comprehension, and foster independent learning from an early age.

Conclusion

This study concludes that the Flipped Classroom model significantly improves students' mastery of mufradat in madrasah ibtidaiyah. The increase from the pretest average of 29.63 to the posttest average of 77.04 demonstrates the effectiveness of combining pre-class digital modules and videos with in-class discussions, practice, and reflection. The findings confirm that the Flipped Classroom does not only enhance vocabulary memorization but also supports students' ability to apply mufradat in constructing simple sentences, which aligns with constructivist principles of active learning.

One surprising finding of this research is the extent to which non-pedagogical factors—such as parental involvement, digital infrastructure, and students' access to technology—shape the effectiveness of the Flipped Classroom. While the instructional design itself was proven effective, students with strong home support and sufficient internet access achieved better outcomes compared to peers with limited technological resources. This indicates that the success of this learning model is highly dependent on systemic support, not just the classroom methodology.

Despite its promising results, this study has limitations that should be acknowledged. The research was conducted in a limited sample of madrasah ibtidaiyah, which may not represent the diverse conditions of schools across different regions. Additionally, the study focused primarily on short-term

outcomes of mufradat mastery without exploring long-term retention or transfer to broader language skills. Future studies should expand the scope to larger samples, include longitudinal measurements, and examine the interplay between socio-economic backgrounds, digital literacy, and the sustainability of the Flipped Classroom model.

Acknowledgment

The authors would like to express their deepest gratitude to the leadership and teachers of Madrasah Ibtidaiyah who warmly welcomed and facilitated this research. Special thanks are extended to the participating students and their parents, whose active engagement and support made this study possible. The authors are also grateful to colleagues from the Faculty of Tarbiyah and Teacher Training, Maulana Malik Ibrahim State Islamic University, for their valuable insights and constructive feedback during the research process.

Author Contribution Statement

NHM contributed to the conceptualization of the study, research design, and overall supervision of the project. AM was responsible for data collection, statistical analysis, and drafting the results section. LF contributed to the literature review, critical revisions, and final editing of the manuscript. All authors have read and approved the final version of this article and agree to be accountable for all aspects of the work.

References

Akhirudin, A., Rahman, R. A., Annas, A., & Syakir Hidayat, A. F. (2024). Model Pembelajaran Flipped Classroom Berbasis Language Activity: Studi Evaluatif Pembelajaran Maharah Kalam. *Lisanan Arabiya: Jurnal Pendidikan Bahasa Arab*, *8*(1), 70–93. https://doi.org/10.32699/liar.v8i1.7019

Al-kaosari, M., Al-kaosari, M., & Al-kaosari, M. (2025). Kesalahan Berbahasa Dalam Pembelajaran Bahasa Arab (Kajian Literatur). *AL-AFKAR : Journal for Islamic Studies Analisis*, *8*(2), 2090–2102. https://doi.org/10.31943/afkarjournal.v8i2.2246.Analysis

Arib, M. F., Rahayu, M. S., Sidorj, R. A., & Afgani, M. W. (2024). Experimental Research Dalam Penelitian Pendidikan. *INNOVATIVE: Journal Of Social Science Research*, *4*(1), 5497–5511. https://doi.org/https://j-innovative.org/index.php/Innovative

Aziza, A. N., Mohzana, Fahrurrozi, M., Wihardjo, E., Laksono, R. D., Finasim, Werdiningsih, R., Niron, Y. M. L., Rukmini, A., Arini, D. U., & Mardikawati, B. (2025). *PERAN TEKNOLOGI DALAM MENINGKATKAN AKSES PENDIDIKAN DI DAERAH TERPENCIL*. CV Rey Media Grafika.

Bergmann, J., & Sams, A. (2012). *Flip Your Classroom: Reach Every Student in Every Day*. International Society for Technology in Education.

Brame, C. J. (2019). Flipping the Classroom. In *Science Teaching Essentials* (pp. 121–132). Elsevier. https://doi.org/10.1016/B978-0-12-814702-3.00009-3

Dominguez, H. G. (2021). Flipped Classroom in the Educational System: Trend or Effective Pedagogical Model Compared to Other Methodologies? *Educational Technology & Society*, *24*(3), 44–60. https://doi.org/https://www.jstor.org/stable/27032855

Firdausih, I., Travelancya DP, T., & Ali, M. (2025). Implementasi Pembelajaran Berbasis Audio Visual Dalam Meningkatkan Konsentrasi Belajar Anak Usia 5-6 Tahun Di Ra Nurul Islam. *IJIGAEd: Indonesian Journal of Islamic Golden Age Education*, *6*(1), 13–21. https://doi.org/10.32332/g27efq57

Frima Asda, E. (2024). LITERATUR REVIEW : KESADARAN METAKOGNISI

MENGGUNAKAN MODEL PEMBELAJARAN GUIDED INQUIRY DI INDONESIA. *Jurnal Media Akademik (JMA)*, *2*(2). https://doi.org/10.62281/v2i2.157

Herlambang, A. D., Ririn, R., & Rachmadi, A. (2024). The flipped-classroom effect on vocational high school students' learning outcomes. *International Journal of Evaluation and Research in Education (IJERE)*, *13*(3), 1807. https://doi.org/10.11591/ijere.v13i3.26757

Hukom, J., Perdana, D. A., Kholida, M. T., & Lailaa, H. (2024). Efektivitas Metode Flipped Classroom Terhadap Prestasi Belajar Bahasa Arab: Studi Meta-Analisis. *Urnal Ilmu Pendidikan Nasional (JIPNAS)*, *2*(2), 65–69. https://doi.org/https://doi.org/10.59435/jipnas.v2i2.457

Joy, P., Panwar, R., Azhagiri, R., Krishnamurthy, A., & Adibatti, M. (2023). Flipped classroom – A student perspective of an innovative teaching method during the times of pandemic. *Educación Médica*, *24*(2), 100790. https://doi.org/10.1016/j.edumed.2022.100790

Kharisma, C., & Hasan, I. (2025). Implementasi Program Hafalan Mufradat dalam Peningkatan Pemahaman Bacaan Bahasa Arab Siswa Pondok Pesantren. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, *8*(4), 4533–4540. https://doi.org/10.54371/jiip.v8i4.7778

Listianti, T., & Astuti, D. P. (2025). Pengaruh Motivasi Belajar Belajar dan Efikasi Diri terhadap Kemandirian Belajar dengan Dukungan Keluarga sebagai Variabel Moderasi. *Business and Accounting Education Journal*, *6*(1), 202–221. https://doi.org/10.15294/baej.v6i1.13769

Ma'ruufah, M. A., Triyanto, & Riyadi. (2024). Student Perspectives About the Flipped Classroom Model That Used to Improve Civic Literacy. *Pegem Journal of Education and Instruction*, *14*(2), 275–280. https://doi.org/10.47750/pegegog.14.02.31

Mahyudin, E., Safitriani, I., Fahrurrozi, Choliliyah, I., Hidayah, N., Maula, S. Z. H., Yuliasari, Fatihah, A., Puspita, E., Rohmah, A. A., Adiebah, M. H., & Iqbal, M. (2025). *Strategi Mengembangkan Keterampilan Berbahasa Arab Aktif*

Produktif dan Reseptif. Publica Indonesia Utama.

Mardiyah, A., & Sofa, A. R. (2025). Strategi Pengembangan Mufradat Bahasa Arab dalam Pembelajaran Kontemporer. *Jurnal Pendidikan Dan Bahasa*, *2*(2), 364–373. https://doi.org/https://doi.org/10.62383/dilan.v2i2.1605

Maulana, A. (2023). *Strategi Pembelajaran Bahasa Arab*. Bumi Aksara.

Nurhasnah, N., Sepriyanti, N., & Kustati, M. (2024). Learning Theories According to Constructivism Theory. *Journal International Inspire Education Technology*, *3*(1), 19–30. https://doi.org/10.55849/jiiet.v3i1.577

Petandean, Y. R., & Indrajit, R. E. (2021). *Flipped Classroo: Membuat Peserta Didik Berpikir kritis, Kreatif, Mandiri, dan Mampu Berkolaborasi dalam Pembelajaran yang Responsif*. ANDI (Anggota IKAPI).

Qi, P., Jumaat, N. F. B., Abuhassna, H., & Ting, L. (2024). A systematic review of flipped classroom approaches in language learning. *Contemporary Educational Technology*, *16*(4), ep529. https://doi.org/10.30935/cedtech/15146

Ramadhan, A. R., Rasuna Said, U. M., Arsyad, H., & Ali, M. (2024). Eksplorasi Strategi Pembelajaran Kosakata Bahasa Arab: Studi Strategi Belajar Rebecca Oxford. *Ukazh: Journal of Arabic Studies*, *5*(2), 112–126. https://doi.org/10.37274/ukazh.v5i2.948

Robertson, W. H. (2022). The Constructivist Flipped Classroom. *Journal of College Science Teaching*, *52*(2), 17–22. https://doi.org/10.1080/0047231X.2022.12290644

Rufaida, K., & Muassomah, M. (2021). Model Pembelajaran Flipped Classroom Dalam Pembelajaran Ketrampilan Membaca di MTs Al-Hikmah Brebes. *Tarling : Journal of Language Education*, *5*(1), 93–108. https://doi.org/10.24090/tarling.v5i1.4369

Sahudra, T. M., Firdaus, C. R., Mutiaramses, & Kenedi, A. K. (2023). *Tpack dalam Strategi Pembelajaran Flipped Classroom*. Deepublish.

Samadi, F., Jafarigohar, M., Saeedi, M., Ganji, M., & Khodabandeh, F. (2024). Impact of flipped classroom on EFL learners' self- regulated learning and

higher-order thinking skills during the Covid19 pandemic. *Asian-Pacific Journal of Second and Foreign Language Education*, *9*(1), 24. https://doi.org/10.1186/s40862-023-00246-w

Sanulita, H., Lestari, S. A., Syarmila, S., Yustina, I., Atika, A., Nurillah, S., Iqbal, M., Elofhia, L., & Annisa, A. (2024). *Keterampilan Berbahasa Reseptif : Teori dan Pengajarannya*. Sonpedia Publishing Indonesia. https://doi.org/https://ejournal.as-salam.org/index.php/assalam/article/view/112

Strelan, P., Osborn, A., & Palmer, E. (2020). The flipped classroom: A meta-analysis of effects on student performance across disciplines and education levels. *Educational Research Review*, *30*, 100314. https://doi.org/10.1016/j.edurev.2020.100314

Wibowo, S., Wangid, M. N., & Firdaus, F. M. (2025). The relevance of Vygotsky's constructivism learning theory with the differentiated learning primary schools. *Journal of Education and Learning (EduLearn)*, *19*(1), 431–440. https://doi.org/10.11591/edulearn.v19i1.21197