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Available at:

<https://journal.nahnuinisiatif.com/index.php/ARJI>

Volume 7 Number 3 Year 2025

 DOI : 10.61227

 E-ISSN : 2775-0787

 P-ISSN : 2774-9290



1628 – 1645

Implementing the MEA Learning Model to Foster Meaningful Learning: An Evaluation of Its Effectiveness on Student Achievement

Article Submitted :


2025-05-02

Article Received :

2025-05-22

Article Published :

2025-07-01

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Keywords:

Learning Models, MEA, Learning Outcomes, Islamic Education (PAI)

Abstract: This study was conducted because many students still face difficulties in learning, as the instructional methods used have not yet been implemented in ways that facilitate student understanding. Therefore, the Means-Ends Analysis (MEA) learning model was employed to guide students through a step-by-step thinking process, aiming to make it easier for them to achieve their learning goals and improve their academic performance. The purpose of this study was to examine the effect of the Means-Ends Analysis (MEA) learning model on students' learning outcomes in Islamic Religious Education (PAI) at SMA Negeri 10 Bandar Lampung. The research employed a quantitative method with a quasi-experimental design. The sample was selected randomly, with class X.5 assigned as the experimental group and class X.1 as the control group, each consisting of 30 students. The instrument used was a multiple-choice test. The data analysis began with tests for normality and homogeneity, followed by hypothesis testing using the Independent Samples T-Test if the data were normally distributed and homogeneous, or the Mann-Whitney U Test if the data were not normally distributed, to determine the effectiveness of the MEA learning model on student learning outcomes. The normality test results indicated that the data were not normally distributed (sig. 0.000 < 0.05), so the Mann-Whitney U Test was used, yielding a value of 347.500. The homogeneity test showed that the data were homogeneous (sig. 0.309 > 0.05). The hypothesis test results revealed a significance value of 0.757 (> 0.05), indicating that there was no significant difference between the experimental and control groups.

Therefore, the MEA model has not been proven effective in improving learning outcomes in Islamic Religious Education. Other contributing factors, such as student motivation and the teacher's instructional approach, also need to be considered. The research findings suggest that the implementation of the Means-Ends Analysis (MEA) learning model did not significantly influence the improvement of students' academic performance. This may be due to several factors, including students' limited understanding of the steps involved in the MEA model, restricted instructional time, or suboptimal implementation by the teacher. It is suspected that the application was either not optimal or not well aligned with students' characteristics. Therefore, it is recommended that teachers adopt instructional models that are better suited to students' needs and engage in evaluation and training efforts to enhance the quality of instruction.

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INTRODUCTION

Education plays a vital role in enhancing human capabilities to survive and compete in facing various challenges, both individually and collectively (Ferdiyansyah, 2024). Education is a process of shaping individuals to become qualified and strong in character, enabling them to face the challenges of the times and contribute to the progress of the nation (Nabila, 2021; Pristiwanti et al., 2022; Putra Aryana, 2021; Rasyid et al., 2023; Somad, 2021). According to Article 3 of Law No. 20 of 2003 of the Republic of Indonesia, the goal of national education is to develop students' potential to become individuals who are faithful, devoted, morally upright, healthy, intelligent, skilled, independent, and creative, as well as democratic and responsible citizens. (Darmawan Harefa, 2023). Education is a conscious and planned effort to help students actively develop their potential, both spiritually, personally, morally, and intellectually. (Warni, 2023). Learning is a system designed to support and facilitate students' internal learning processes. (Sipayung et al., 2023). To ensure effective learning, strategies are needed that can actively engage students in the learning process (Rusadi, 2025). Many teachers still focus solely on delivering the material during the learning process. (Rahman, 2021).

Learning outcomes are one of the measures used to assess how well students have mastered the material delivered by the teacher (Nada et al., 2024; Zai et al., 2023). Learning outcomes are changes in student behavior that indicate the success of the learning process, yet they are still influenced by the students' own learning efforts. (Irawati et al., 2021; Ndraha et al., 2022; Yandi et al., 2023). Learning outcomes can also be interpreted as a scope that can be observed in the short, medium, and long term. The short-term outcomes align with the achievement of specific indicators, the medium-term outcomes relate to the attainment of subject targets, and the long-term outcomes are reflected in how students apply their learning when they integrate into society (Sudarman & Linuhung, 2021). Learning outcomes are related to students' efforts and what they achieve, including their ability to understand the material being studied, which is reflected in their academic performance (Silvia & Ilyani Ropida, 2022).

Based on the conditions in Grade 10 at SMA Negeri 10 Bandar Lampung, students' understanding of Islamic Education (PAI) material is still low. Students have difficulty relating Islamic teachings to daily life, are less active in thinking, and easily forget material such as faith in Allah, the obligatory attributes of the prophets, the procedures of prayer, and the contents of the Qur'an and Hadith. The teacher has also not used an appropriate teaching model. Through the MEA model, it is expected that students will become more active, focused in solving religious problems, and improve their practice of Islamic values (Utomo et al., 2023). To improve learning outcomes, the learning process needs to be made enjoyable and able to encourage students to be active and creative throughout the learning activities (Setiawati et al., 2024). Several factors contribute to low student learning outcomes, including internal factors such as lack of interest and motivation, and external factors such as the inappropriate use of teaching models by teachers. One way to address these issues is by using more creative teaching methods so that learning activities

become more enjoyable and less boring (Hidayati et al., 2024). To address this issue, teachers need to use teaching methods that can motivate students to be more enthusiastic about learning and help achieve the desired outcomes (Khadriah & Azizah, 2025). Therefore, the researcher chose the Means Ends Analysis (MEA) learning model with the hope that this model will have a positive impact on students' learning outcomes

Based on initial observations and several interviews at SMA Negeri 10 Bandar Lampung, several problems related to low student learning outcomes in Islamic Education (PAI) were identified. These problems include: (1) There is a difference in students' understanding of the material, which is likely a major cause of low academic performance (2) The use of traditional teaching methods, which causes students to become easily bored and less active in learning (3) Low student motivation, causing them to lack enthusiasm (4) Ineffective classroom management, causing students to lose focus and some even feel sleepy during lessons.

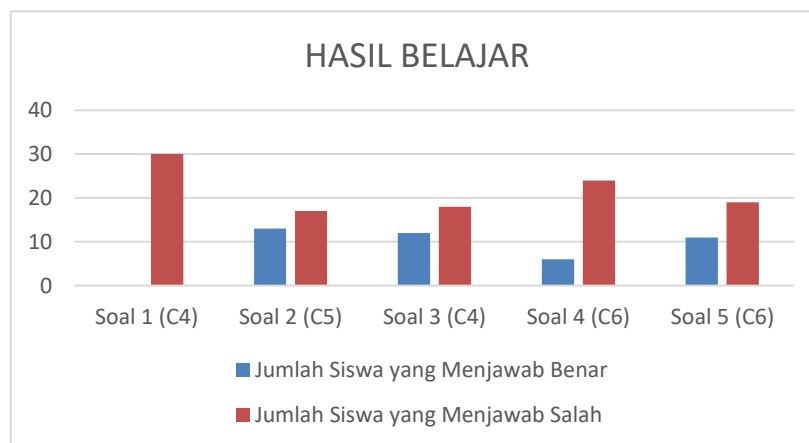


Figure 1.
Bar Chart of Student Learning Test Results

Based on the previously explained findings, student achievement in Islamic Education (PAI) remains relatively low and has not yet met the Minimum Mastery Criteria (KKM). According to Bloom's Taxonomy, cognitive skills are categorized into six levels: C1 (remembering), C2 (understanding), C3 (applying), C4 (analyzing), C5 (evaluating), and C6 (creating) (Mahmudi et al., 2022; Nani Widiyawati, 2019; Rofiq, 2024). At SMA Negeri 10 Bandar Lampung, students are expected to attain higher-order cognitive skills and achieve scores above the KKM. However, in the PAI subject, students' cognitive abilities, particularly at the higher-order levels (C4–C6), are still low. One contributing factor is the continued use of conventional teaching methods. This condition indicates the need for more interactive learning models to make the learning process more engaging and encourage greater student participation. Interactive teaching methods are believed to enhance the quality of learning and positively impact students' academic achievement.

The MEA (Means-Ends Analysis) learning model encourages students to actively construct their own understanding through structured steps, while also fostering critical

thinking, communication, and problem-solving skills (Hosaini & Kamiluddin, 2021; Margarita et al., 2021). The MEA model can help address students' low problem-solving abilities by promoting active engagement, systematic thinking, and the habit of expressing ideas independently and creatively (Cahya et al., 2024; Karolina et al., 2022; Permana, 2023; Saskia Yusrahma, 2021; Sudarman & Linuhung, 2021). In other words, MEA supports the development of critical thinking by presenting students with problems that must be solved using their critical thinking skills (Latri et al., 2022). The advantages of the MEA model include helping students become accustomed to solving problems, being more active and confident in expressing ideas, utilizing knowledge and skills, responding to challenges in their own way, gaining experience through discussion, and simplifying complex problems by breaking them into more manageable sub problems (Daud, 2021; Sukawati et al., 2022) From there, the gap between the current state and desired outcomes can guide the selection of appropriate steps or procedures (Asmedy, 2021).

The MEA learning model helps students understand content, discover concepts independently, cultivate critical and creative thinking, and improve learning outcomes through collaborative group work (Fadila & Rahayu, 2023). Many students struggle to retain information because the material is perceived as difficult and overly reliant on memorization. Therefore, a learning model that enhances memory retention enabling students not only to memorize but also to understand and apply what they've learned is necessary (Rusadi, 2025). Learning outcomes can improve when teaching is conducted effectively using engaging models and methods. Students become more active and enthusiastic when teachers can spark their interest in learning (Dakhi, 2020) For this reason, the researcher chose the Means-Ends Analysis (MEA) learning model in the hope that it would positively impact students' academic performance.

Previous studies have shown (Noviyanti et al., 2021), (Fitrianna & Dahlan, 2022), (Giawa, 2024), (Abdullah, 2023), and (Widjaja, 2021) that the MEA learning model and problem-solving approaches are effective in improving students' learning outcomes. However, the application of MEA has rarely been explored specifically within Islamic Education (PAI). To date, MEA has mostly been applied in mathematics instruction and has focused on problem-solving skills. Therefore, this research aims to expand the knowledge base by examining the application of MEA to improve students' learning outcomes in PAI. This study not only focuses on cognitive aspects but also encompasses attitudes and skills aligned with Islamic values. By implementing the MEA model, this research aims to broaden perspectives in PAI instruction and contribute to the development of more innovative teaching methods. In addition to complementing previous studies, this research offers a new perspective on the use of innovative learning models in PAI to enhance educational quality in schools.

This study presents a novelty through the application of the Means-Ends Analysis (MEA) strategy as a learning model aimed at creating meaningful learning experiences and improving students' academic performance. The main novelty lies in the integration of MEA into the learning process, wherein students are guided to systematically identify

learning goals and design concrete steps to achieve them. This approach enables students to actively engage in logical and reflective thinking, shifting the focus from merely achieving outcomes to understanding the processes involved. In this context, the MEA learning model functions as a strategic tool to strengthen students' problem-solving abilities and learning independence. Furthermore, this study empirically tests the effectiveness of the MEA model on learning outcomes, a practice that has been rarely applied in school-level education. As such, this research contributes new insights into the development of process-oriented, meaningful, and applicable instructional models for improving classroom learning quality.

Twenty-first century education demands learning approaches that go beyond cognitive achievement, fostering critical, reflective, and independent thinking among students. However, the reality in schools still shows that many learning processes remain teacher-centered, emphasizing rote memorization and offering limited opportunities for students to engage actively in problem-solving or understanding the connections between learning objectives and the steps to achieve them. This has led to learning experiences that lack meaningfulness and result in low conceptual and applied learning outcomes. In this context, there is a need for innovative instructional models that can bridge the gap between learning goals and their systematic and targeted attainment. The MEA learning model is particularly relevant as it emphasizes analyzing the relationship between desired goals and the steps needed to achieve them. By applying MEA, students are encouraged to think strategically, recognize obstacles, and determine alternative solutions independently. The urgency of this study lies in the need to develop learning models that focus not only on academic outcomes but also on meaningful learning processes for students. Active, problem-solving-oriented learning such as that promoted by the MEA model can foster greater student engagement and a deeper understanding of the connection between goals and means. Therefore, this research is essential to examine the effectiveness of the MEA model in improving student learning outcomes through a more systematic and reflective approach.

The implication of this study is the development of the MEA learning model, which can be widely applied to enhance student engagement in the learning process and sharpen their critical thinking skills. If proven effective, this model could serve as an alternative for teachers to design more structured, problem-solving-oriented instruction that ultimately improves student achievement. Additionally, the findings of this study are expected to offer practical guidance for teachers in creating more meaningful and contextual learning experiences that can be adapted across educational levels. More broadly, this research has the potential to enrich Indonesia's educational literature with a more innovative and applicable approach.

METHODOLOGY

This study employs a quantitative method with a quasi-experimental design, quasi-experimental research involves two groups: an experimental group that receives the treatment and a control group that does not. Both groups are given a pretest before

the treatment and a posttest afterward. The purpose is to identify differences in learning outcomes and compare the effects of the treatment between the groups. Specifically the posttest-only control group design.

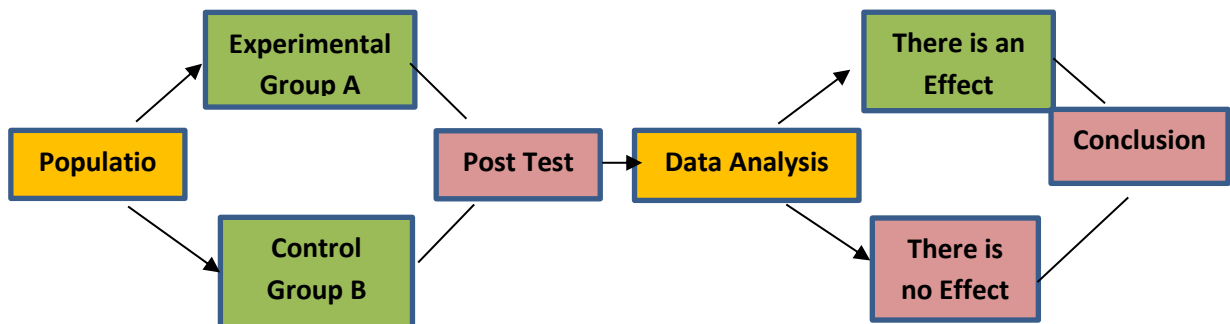


Figure 2.
Quasi Experimental Design

The research was conducted during the odd semester of the 2024/2025 academic year at SMA Negeri 10 Bandar Lampung. Since it utilizes numerical data and statistical analysis, this study falls under the category of quantitative research. In this study, the MEA learning model serves as the independent variable, which is the method being tested. Meanwhile, students' learning outcomes function as the dependent variable, representing what is measured after the implementation of the MEA learning model in the experimental class. The experimental quantitative approach was used because it allows researchers to objectively measure the effect of a treatment. This approach enables the observation of changes in learning outcomes before and after the treatment, as well as comparisons between classes. The data obtained are numerical, making them easy to analyze statistically in order to draw clear conclusions.

To select the sample, a simple random sampling technique was used, which involved randomly choosing classes without distinguishing their levels. The classes selected as samples were Class X.1 with 30 students (using conventional learning) and Class X.5 with 30 students (using the MEA learning model). The research instrument consisted of 15 multiple-choice questions. Before the test was administered to the experimental and control classes, the items were first validated by experts and then tried out in a different class that was not included in the research sample. Based on the trial results, 10 valid items were identified and subsequently used in the study. An instrument is considered reliable if it is capable of producing consistent results. The reliability coefficient typically ranges from 0 to 1, with values closer to 1 indicating greater reliability. In general, a value above 0.70 is considered acceptable. One of the most commonly used methods to test reliability, especially for Likert scale instruments, is Cronbach's Alpha. If the alpha value exceeds this threshold, the instrument is deemed suitable for research purposes. In this study, the Cronbach's Alpha value was 0.731, which

is higher than the standard value of 0.60. This indicates that all items in the instrument are trustworthy and appropriate for data collection

After students in both the experimental and control classes completed the test, the results were analyzed using a normality test. However, since the data were not normally distributed, a non-parametric test the Mann-Whitney U test was employed. A homogeneity test and a hypothesis test using the Independent Sample T-Test were also conducted. Data analysis was carried out with the help of IBM SPSS Statistics 22, as this software was deemed suitable for the research needs and user-friendly.

The MEA model involves several instructional steps: (1) The teacher delivers instruction using a discovery-based problem-solving approach; (2) Students identify the conditions necessary to achieve the stated goals; (3) Students break down a complex problem into smaller components; (4) Students identify differences and establish connections among the smaller parts of the problem to ensure coherence; (5) Students analyze the methods required to reach the objective; (6) Students select the most effective strategy to solve the same problem; (7) Students conduct a review and re-evaluation.

RESULTS AND DISCUSSION

Research Results

Before proceeding with further data analysis, a reliability test was conducted to ensure that the research instrument demonstrated good internal consistency. The reliability test was applied to the items used to measure the research variables, aiming to determine the extent to which the instrument could produce stable and trustworthy results. The following presents the results of the reliability test, which were analyzed using Cronbach's Alpha coefficient.

Table 1. Reliability Test Results

Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .731 | 15 |

The reliability test was conducted using the Cronbach's Alpha formula to determine the level of internal consistency of the research instrument. In this study, the reliability test results showed that all instrument items had an alpha value of 0.731, which is greater than 0.60. This indicates that the instrument is reliable and suitable for data collection. Therefore, it can be concluded that the instrument possesses a high level of reliability in measuring the intended variable.

This study was conducted at SMA Negeri 10 Bandar Lampung and involved two classes as the research sample. Class X.1 was designated as the conventional class, while class X.5 served as the experimental class implementing the MEA learning model. To assess students' learning outcomes, the average scores from the tests they completed were used. The tests were in the form of multiple-choice questions and covered three

cognitive skill indicators: C4 (analysis), C5 (evaluation), and C6 (creation). Based on data analysis of students from grade X at the school, the research findings are presented as follows.

1. Normality Test

The normality test was conducted to determine whether the obtained data followed a normal distribution. The data are considered normally distributed if the significance value (sig.) is greater than 0.05. The learning outcomes in Islamic Education (PAI) for Grade X students are presented in Table 2.

Table 2. Normality Test Results

| Kelas | | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|-------|---|---------------------------------|----|------|--------------|----|------|
| | | Statistic | df | Sig. | Statistic | df | Sig. |
| Hasil | 1 | .320 | 30 | .000 | .723 | 30 | .000 |
| | 2 | .320 | 30 | .000 | .548 | 30 | .000 |

a. Lilliefors Significance Correction

Based on the SPSS output, the significance (Sig.) values can be observed. The normality test using the Shapiro-Wilk method shows that the significance values for both the experimental class (1.00) and the control class (2.00) are 0.000. Since the Sig. values for both classes are less than 0.05 ($0.000 < 0.05$), it can be concluded that the data from both the experimental and control classes are not normally distributed.

2. Homogeneity Test

The homogeneity test is used to determine whether the data have equal variance. The data are considered homogeneous if the significance value (Sig.) is greater than 0.05.

Table 3. Homogeneity Test Results

| | | Levene Statistic | df1 | df2 | Sig. |
|-------|--------------------------------------|------------------|-----|--------|------|
| Hasil | Based on Mean | 1.054 | 1 | 58 | .309 |
| | Based on Median | .110 | 1 | 58 | .741 |
| | Based on Median and with adjusted df | .110 | 1 | 44.075 | .742 |
| | Based on trimmed mean | .599 | 1 | 58 | .442 |

Based on Table 3, the results of the homogeneity test show a significance value of 0.309, which is greater than 0.05. This indicates that the Islamic Education (PAI) learning outcome data for Grade X students at SMA Negeri 10 Bandar Lampung are homogeneous.

3. Hypothesis Test

The hypothesis test using the T-test is a statistical method employed to determine whether there is a significant difference between two data groups. This test is commonly used to compare results from the same group before and after treatment.

Table 4. Results of the Independent Sample T-Test

| | | Independent Samples Test | | | | | | | | | |
|-------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|-------|---|--|
| | | Levene's Test for Equality of Variances | | t-Test for Equality of Means | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper | |
| Hasil | Equal variances assumed | 1.054 | .309 | -.311 | 58 | .757 | -.133 | .428 | -.991 | .724 | |
| | Equal variances not assumed | | | -.311 | 50.828 | .757 | -.133 | .428 | -.994 | .727 | |

Based on Table 4, the results of the Independent Samples T-Test using SPSS show a significance value of 0.757, which is greater than 0.05. This means that the null hypothesis (H0) is accepted and the alternative hypothesis (Ha) is rejected. In other words, the MEA learning model does not have a significant effect on students' learning outcomes.

However, although the data from both groups are homogeneous, the data do not follow a normal distribution; therefore, the hypothesis test cannot use a parametric test such as the Independent Samples T-Test. Instead, a non-parametric test, the Mann-Whitney U Test, is used, as it does not require the data to be normally distributed. The Mann-Whitney test is used to determine whether there is a significant difference between two independent groups in relation to the measured variable (students' learning outcomes). Therefore, in this study, the Mann-Whitney test was chosen as the most appropriate hypothesis test, in accordance with the characteristics of the data obtained.

Table 5. Mann-Whitney Test Results

| Test Statistics ^a | |
|------------------------------|---------|
| | Hasil |
| Mann-Whitney U | 347.500 |
| Wilcoxon W | 812.500 |
| Z | -1.651 |
| Asymp. Sig. (2-tailed) | .099 |

a. Grouping Variable: Kelas

Based on the results of the Mann-Whitney U test, a p-value of 0.099 (> 0.05) was obtained, indicating that there is no significant difference between the two groups. The Mann-Whitney test is used to statistically examine the difference between two independent groups and is especially suitable when the data are measured on an ordinal or interval scale but are not normally distributed. Therefore, in this study, although the homogeneity test showed that the data were homogeneous, the Mann-Whitney U test was chosen as the main hypothesis test instead of the Independent Samples T-Test because it is more appropriate for the characteristics of the non-normal data.

Discussion

The purpose of this study is to examine the implementation of the MEA learning model in creating meaningful learning experiences for students. This research also aims to analyze the effectiveness of the MEA model on student learning outcomes and compare it with conventional teaching methods. Additionally, the study seeks to evaluate the extent to which the MEA model can enhance students' understanding and engagement in the teaching and learning process. The MEA learning model is applied to improve learning outcomes in Islamic Education (PAI) subjects, where students are encouraged to learn actively, skillfully, and creatively through a student-centered approach. Therefore, a high level of learning motivation is essential for students to participate actively in the learning process (Barus et al., 2021; Budiono, 2021).

Based on the results of the conducted and analyzed research, the normality test for both the experimental and control groups showed a significance value of 0.000, which is less than 0.05. This indicates that the data from both groups are not normally distributed. Therefore, a non-parametric statistical test, the Mann-Whitney U test, was used for further analysis. Meanwhile, the homogeneity test results showed that the data were homogeneous, as the significance value was 0.309, which is greater than 0.05. In addition, the T-test results indicated that Levene's Test for Equality of Variances produced a Sig. (2-tailed) value of 0.757, which is also greater than 0.05. Thus, it can be concluded that the MEA learning model does not have a significant effect on students' learning outcomes in the Islamic Education (PAI) subject.

These results indicate that conventional teaching methods can still be effective, provided that the teacher is able to explain the material clearly and adapt their approach to the nature of the content, particularly when it is theoretical or memorization-based. Additionally, students with strong independent learning skills can achieve good academic outcomes even without the use of a specific instructional model. On the other hand, the implementation of the MEA learning model has not yet shown a significant impact on improving learning outcomes. This may be due to several factors, including: (1) the limited duration of the model's use, which may have prevented students from becoming familiar with the approach; (2) the relatively similar baseline abilities of the students, resulting in minimal differences in learning outcomes; and (3) the low level of difficulty of the material, allowing students to understand the lessons even through conventional methods without requiring a specialized model like MEA (Yandi et al., 2023)(Yandi et al., 2023).

The study conducted by Wahyu Ningsih (Wahyu Ningsih, 2024) which involved university students, showed that the MEA learning model was effective in improving students' ability to write argumentative discourse in Indonesian Language and Literature Education. The study conducted by Shofa Hana Kamila (Kamila & Waluya, 2023) involving students in mathematics learning, showed that the MEA learning model was effective in enhancing critical thinking skills in mathematics. The study conducted by Nur Asra (Asra, 2023) involving seventh-grade students in Social Studies with the topic of Prehistoric

Cultural Values in Indonesia at SMP Negeri 1 Syamtalira Bayu, showed that the MEA model can improve students' learning outcomes in Social Studies. The study conducted by Nisa Nurjanah (Nurjanah & Patonah, 2025) found that the MEA learning model had a positive effect on improving students' critical thinking skills in Economics at SMA Negeri 9 Tasikmalaya. The study by Nadia Anugrah (Anugrah et al., 2025) wed that the MEA learning model is effective in enhancing the critical thinking skills of tenth-grade students at SMA Negeri 9 Pekanbaru.

This study shows that the MEA learning model has not been effective in improving students' learning outcomes in Islamic Education (PAI). This is evident from the statistical test results, which indicate no significant difference between the class using the MEA model and the class taught with conventional methods. These findings differ from several previous studies that reported the MEA model as effective in enhancing learning outcomes, particularly in subjects like Mathematics and Science. The discrepancy may be due to the nature of the PAI subject, which focuses more on theoretical and attitudinal aspects, as well as other factors such as the limited duration of model implementation, the relatively similar initial abilities of the students, and the simplicity of the learning material. Therefore, it can be concluded that in the context of PAI instruction, the MEA model has not yet demonstrated a significant impact on improving student achievement (Pratiwi et al., 2025; Putra et al., 2022)

The implementation of the MEA learning model in this study serves as an initial step in exploring innovative teaching strategies. Future researchers are encouraged to apply the MEA model to other subjects that require stronger critical thinking and problem-solving skills, such as Mathematics, Science, or Social Studies. The goal is to assess the effectiveness of this model in different learning contexts. It is also recommended that future studies be conducted over a longer period to allow students more time to understand and become familiar with the steps involved in the MEA model. Furthermore, assessments should not be limited to measuring cognitive abilities alone but should also include affective and psychomotor aspects, so that students' learning outcomes can be evaluated more comprehensively. The MEA model could also be integrated with other teaching methods that align with the characteristics of Islamic Education (PAI), such as value-based or contextual learning, to ensure that learning objectives are achieved in a more balanced manner.

This study aimed to examine whether the MEA learning model could improve student learning outcomes in Islamic Education (PAI) and create a more meaningful learning experience. The results showed that the MEA model did not produce a significant effect on students' learning outcomes. Although there was an improvement in both groups those taught using the MEA model and those taught with conventional methods no meaningful difference was found between them. These findings suggest that conventional teaching methods can still be effective, especially when the teacher delivers the material clearly and aligns the approach with subjects that are more theoretical or memorization-based.

During this study, the researcher encountered several obstacles that affected the smooth implementation of the research. One of the main challenges was the limited time allocated for applying the MEA learning model. The short duration prevented students from fully adapting to the steps of the model, resulting in less-than-optimal outcomes. Additionally, the students' relatively similar initial abilities posed another challenge, as differences in learning outcomes were difficult to observe most students already possessed adequate foundational knowledge. Another factor was the simplicity of the material, which students found easy to understand regardless of the teaching method used, including conventional approaches. Consequently, the MEA learning model did not demonstrate superior results.

The results of this study indicate that the MEA learning model needs to be carefully planned and effectively implemented in order to truly support the improvement of student learning outcomes. These findings can serve as valuable input for teachers to better understand students' needs, select appropriate learning materials, and create an active and meaningful learning environment. This study also encourages schools and teachers to continuously develop teaching methods that actively engage students, making the learning process more effective and enjoyable.

CONCLUSION

Based on the findings and discussion of this study, the use of the MEA learning model in the Islamic Education (PAI) subject at SMA Negeri 10 Bandar Lampung was not proven to be effective in improving student learning outcomes. This is supported by the results of the Independent Sample T-Test, which indicated no significant difference, thereby accepting the null hypothesis (H_0) and rejecting the alternative hypothesis (H_a). However, the ineffectiveness of the MEA model in this study does not imply that the model is inherently ineffective. Student learning outcomes are influenced by various factors, not solely by the instructional model employed.

For future research, it is recommended that the study duration be extended to allow the MEA learning model to be implemented more effectively, giving students sufficient time to understand and master the material. Researchers may also consider selecting classes with more diverse student abilities, so that differences in learning outcomes can be more clearly observed and analyzed. Additionally, choosing more complex or challenging material could enhance the effectiveness of the MEA model. Other important factors to consider include student motivation and support from parents or teachers, as these can significantly contribute to the success of the learning model. Future studies could also incorporate technology or more supportive learning tools to increase student engagement and participation in the learning process.

REFERENCES

- Abdullah. (2023). *Melalui Model Pembelajaran Means Ends Analysis (Mea) Dapat Meningkatkan Prestasi Belajar Siswa Kelas Ix-3 Materi Dampak Positif Dan Negatif Dari Globalisasi Pelajaran Ppkn Pada Smp Negeri 1 Kutamakmur Kabupaten Aceh Utara* Abdullah. 23(2), 1–5.
- Anugrah, N., Isjoni, I., & Asril, A. (2025). Pengaruh Model Pembelajaran Means Ends Analysis (Mea) Terhadap Kemampuan Berpikir Kritis Siswa Dalam Pembelajaran Sejarah Kelas Xi Ips E Dan F Di Sman 9 Pekanbaru. *Journal Of Education Technology Information Social Sciences And Health*, 4(1), 710–717.
- Asmedy, A. (2021). Perbandingan Hasil Belajar Matematika Menggunakan Model Pembelajaran Means Ends Analysis (Mea) Dengan Model Pembelajaran Konvensional Pokok Bahasan Dimensi Tiga. *Ainara Journal (Jurnal Penelitian Dan Pkm Bidang Ilmu Pendidikan)*, 2(2), 124–132. <https://doi.org/10.54371/Ainj.V2i2.42>
- Asra, N. (2023). Melalui Model Pembelajaran Means-Ends Analysis (Mea) Dapat Meningkatkan Hasil Belajar Siswa Kelas Vii. 1i. 1 Pelajaran Ips Materi Nilai Budaya Masa Praaksara Di Indonesia Pada Smp Negeri 1 Syamtalira Bayu Kabupaten Aceh Utara. *Jurnal Lentera*, 23(2).
- Barus, E. R., Setiawan, D., & Saragi, D. (2021). The Effect Of The Mea Model And Learning Motivation On Student Learning Outcomes Ppkn Subjects At Sd. *Sensei International Journal Of Education And Linguistic*, 1(2), 562–578. <https://doi.org/10.53768/Sijel.V1i2.41>
- Budiono, T. (2021). Upaya Meningkatkan Prestasi Belajar Matematika Materi Lingkaran Melalui Metode Means-Ends Analysis Siswa Kelas Xi Jasa Boga 5 Smk Negeri 3 Blitar Tahun Ajaran 2017/2018. *Jurnal Pendidikan : Riset Dan Konseptual*, 5(4), 664. https://doi.org/10.28926/Riset_Konseptual.V5i4.437
- Cahya, D. H., Revita, R., & Azmi, M. P. (2024). *Bagaimana Model Means End Analysis (Mea) Meningkatkan Kemampuan Komunikasi Matematis Siswa Berdasarkan Self Confidence ?* 6(2), 124–134.
- Dakhi, A. S. (2020). Peningkatan Hasil Belajar Siswa Melalui Metode Pakem. *Jurnal Pendidikan Indonesia*, 1(03), 283–294. <https://doi.org/10.59141/Japendi.V1i03.33>
- Darmawan Harefa. (2023). Efektivitas Model Pembelajaran Talking Chips Untuk Meningkatkan Hasil Belajar Siswa. *Tunas : Jurnal Pendidikan Biologi*, 4(1), 83–99. <https://doi.org/10.57094/Tunas.V4i1.1011>
- Daud, M. J. (2021). Pengaruh Model Pembelajaran Means Ends Analysis (Mea) Terhadap Hasil Belajar Siswa Pada Muatan Pelajaran Ipa Kelas Iv Sdn 8 Tilongkabila Kabupaten Bonebolango. *November*, 125–135.
- Fadila, J. A., & Rahayu, N. (2023). Analisis Model Pembelajaran Means Ends Analysis Pada Hasil Belajar Matematika Siswa Di Min 2 Aceh Tamiang. 3, 173–180.
- Ferdiansyah, F. (2024). Penerapan Model Pembelajaran Means-Ends Analysis Dalam Meningkatkan Pemahaman Siswa Pada Proses Pembelajaran Ekonomi Di Kelas Xi

Sman 15 Muaro Jambi. 8(September), 69–76.

- Fitrianna, A. Y., & Dahlan, J. A. (2022). Means End Analysis (Mea) Learning Model In Developing Algebraic Reasoning Ability: A Literature Study. *Jurnal Analisa*, 8(1), 1–10. <https://doi.org/10.15575/Ja.V8i1.10677>
- Giawa, K. (2024). Penerapan Model Pembelajaran Mean-End-Analysis Dalam Meningkatkan Hasil Belajar Siswa. *Curve Elasticity: Jurnal Pendidikan Ekonomi*, 5(2), 38–53.
- Hidayati, U., Sela, D., Selvia, E., & Azizah, N. (2024). *Learning Outcomes : How Does The Jurnal Inspiratif Pendidikan*. 18–33.
- Hosaini, H., & Kamiluddin, M. (2021). Efektivitas Model Pembelajaran Means-Ends Analysis(Mea) Dalam Meningkatkan Keterampilan Komunikasi Interpersonal Dan Pemecahan Masalah Pada Mata Pelajaran Fikih. *Edukais : Jurnal Pemikiran Keislaman*, 5(1), 43–53. <https://doi.org/10.36835/Edukais.2021.5.1.43-53>
- Irawati, I., Ilhamdi, M. L., & Nasruddin, N. (2021). Pengaruh Gaya Belajar Terhadap Hasil Belajar Ipa. *Jurnal Pijar Mipa*, 16(1), 44–48. <https://doi.org/10.29303/jpm.V16i1.2202>
- Jus, J. (2024). Systematic Literature Review (Slr): Pengaruh Penerapan Model Pembelajaran Kooperatif Tipe Two Stay Two Stray Terhadap Hasil *Jurnal Ilmiah Pena*, 16(01), 16–20. <https://ojs.unpatompo.ac.id/index.php/jip/article/view/297%0ahttps://ojs.unpatompo.ac.id/index.php/jip/article/download/297/216>
- Kamila, S. H., & Waluya, S. B. (2023). Systematic Literature Review: Model Pembelajaran Dalam Meningkatkan Kemampuan Berpikir Kritis Pada Pembelajaran Matematika. *Prosiding Seminar Nasional Oppsi 2023*, 2, 8–21.
- Karolina, A., Nurdiana, A., & Parsatiwi, N. (2022). *Pengaruh Model Pembelajaran Means Ends Analysis (Mea) Terhadap Kemampuan Pemecahan Masalah Matematika Siswa Kelas Viii Semester Ganjil Smp Pgri 2 Bandar Lampung Tahun Pelajaran 2021/2022*.
- Khadriah, N. N., & Azizah, N. (2025). *Learning Outcomes : How Is The Experimentation Of The Air Learning Model ?* 8, 271–279.
- Latri, Raihan, S., & Alim, N. (2022). Pengaruh Penerapan Means Ends Analysis (Mea) Terhadap Kemampuan Berpikir Kritis Matematika Peserta Didik Kelas Iv. *Nsj: Nubin Smart Journal*, 2(3), 197–214.
- Mahmudi, I., Athoillah, M. Z., Wicaksono, E. B., & Kusuma, A. R. (2022). Taksonomi Hasil Belajar Menurut Benyamin S. Bloom. *Jurnal Multidisiplin Madani*, 2(9), 3507–3514.
- Margarita, M., Indiati, I., & Nugroho, A. A. (2021). Efektivitas Model Pembelajaran Process Oriented Guided Inquiry Learning (Pogil) Dan Means Ends Analysis (Mea) Berbantuan Question Card Terhadap Kemampuan Pemecahan Masalah. *Imajiner: Jurnal Matematika Dan Pendidikan Matematika*, 3(3), 223–233. <https://doi.org/10.26877/Imajiner.V3i3.7576>
- Nabila, N. (2021). Tujuan Pendidikan Indonesia. *Jurnal Pendidikan Indonesia*, 2(5), 867–875.

- Nada, N. M., Azizah, N., Baharudin, S. Z., & Wahyudi, W. E. (2024). *Jurnal Inspiratif Pendidikan Learning Outcomes : How Does The*. Xiii.
- Nani Widiyawati. (2019). Integrasi Domain Afektif Taksonomi Blom Dengan Pendidikan Spiritual. *Journal Educative : Journal Of Educational Studies*, 4(2), 121.
- Ndraha, I. S., Mendrofa, R. N., & Lase, R. (2022). Analisis Hubungan Minat Belajar Dengan Hasil Belajar Matematika. *Educativo: Jurnal Pendidikan*, 1(2), 672–681. <https://doi.org/10.56248/Educativo.V1i2.92>
- Noviyanti, D., Siswanah, E., & Fitriani, U. (2021). Efektivitas Strategi Pembelajaran Means Ends Analysis (Mea) Terhadap Kemampuan Pemecahan Masalah Matematika Dan Self Efficacy. *Edu Sains Jurnal Pendidikan Sains & Matematika*, 9(1), 10–19. <https://doi.org/10.23971/Eds.V9i1.1990>
- Nurjanah, N., & Patonah, R. (2025). *Metode Pembelajaran Mea (Means Ends Analysis) Untuk Meningkatkan Kemampuan Berpikir Kritis Pendahuluan Keberhasilan Proses Belajar Peserta Didik Dapat Diketahui Dari Hasil Belajar . Salah Satu Indikator Dari Hasil Belajar Peserta Didik Yaitu Tingkat Kem.* 6(1), 289–294.
- Permana, S. G. (2023). Efektivitas Model Means Ends Analysis (Mea) Terhadap Kemampuan Pemecahan Masalah Matematis Siswa Smp. *Journal Of Research In Science And Mathematics Education (J-Rsme)*, 2(1), 36–48. <https://doi.org/10.56855/Jrsme.V2i1.61>
- Pratiwi, A., Azizah, N., Saputra, M. I., Mustofa, M., Islam, U., Raden, N., & Lampung, I. (2025). *Student Learning Outcomes : Innovative Learning With An.* 5, 63–74.
- Pristiwanti, D., Badariah, B., Hidayat, S., & Dewi, R. S. (2022). Pengertian Pendidikan. *Jurnal Bioedukasi*, 4(6), 337–347. <https://doi.org/10.33387/Bioedu.V6i2.7305>
- Putra Aryana, I. M. (2021). Urgensi Pendidikan Karakter (Kajian Filsafat Pendidikan). *Kalangwan Jurnal Pendidikan Agama, Bahasa Dan Sastra*, 11(1), 1. <https://doi.org/10.25078/Klgw.V11i1.2372>
- Putra, N., Hakim, S., & Sandika, S. (2022). Pengaruh Model Pembelajaran Means Ends Analysis (Mea) Terhadap Kemampuan Proses Sains Dan Hasil Belajar Kognitif Siswa. *Educatioria : Jurnal Ilmiah Ilmu Pendidikan*, 2(1), 20–29. <https://doi.org/10.36312/Ejiip.V2i1.52>
- Rahman, S. (2021). Pentingnya Motivasi Belajar Dalam Meningkatkan Hasil Belajar Siswa. *Alfihris : Jurnal Inspirasi Pendidikan*, 2(3), 61–68. <https://doi.org/10.59246/Alfihris.V2i3.843>
- Rasyid, R., Fajri, M. N., Wihda, K., Ihwan, M. Z. M., & Agus, M. F. (2023). Pentingnya Pendidikan Karakter Dalam Dunia Pendidikan. *Jurnal Basicedu*, 1(2), 1278–1285. <https://doi.org/10.31004/Basicedu.V8i2.7355>
- Rofiq, Z. (2024). Critical Review Kurikulum Nasional Pada Mata Pelajaran Sejarah Kebudayaan Islam Kelas X Semester Ii Madrasah Aliyah Dengan Analisa Taksonomi Pendidikan. *Jurnal Pendidikan Islam*, 2(1), 1–8.
- Rusadi, A. (2025). *Model Pembelajaran Pai Yang Berbasis Keterampilan Sosial : Pendekatan Dalam Meningkatkan Karakter Siswa.* 3(1), 96–103.
- Saskia Yusrahma. (2021). *Upaya Meningkatkan Hasil Belajar Sejarah Dengan Model*

Pembelajaran Mea (Means-Ends-Analysis) Pada Siswa Kelas Xii Ips Semester Ganjil Sma Persada Bandar Lampung Tahun Pelajaran 2020/2021.

- Setiawati, D. T., Halimah, S., & Budiyanti, Y. (2024). Pengaruh Model Pembelajaran Project Based Learning Dan Minat Belajar Terhadap Hasil Belajar Pai. *Research And Development Journal Of Education*, 10(1), 169. <https://doi.org/10.30998/Rdje.V9i2.21144>
- Silvia, N., & Ilyani Ropida. (2022). Analisis Hubungan Karakter Rasa Ingin Tahu Dengan Hasil Belajar Peserta Didik Kelas V Sd. *Journal Of Basic Education Research*, 3(2), 41–47. <https://doi.org/10.37251/jber.V3i2.249>
- Sipayung, N. C., Samosir, T. A., & Nababan, A. (2023). Pengaruh Model Pembelajaran Means Ends Analysis (Mea) Terhadap Hasil Belajar Pendidikan Agama Kristen Dan Budi Pekerti Siswa Kelas Viii Smp Negeri 4 Laguboti. *Jurnal Riset Multidisiplin Dan Inovasi Teknologi*, 1(02), 106–116. <https://doi.org/10.59653/jimat.V1i02.270>
- Somad, M. A. (2021). Pentingnya Pendidikan Agama Islam Dalam Membentuk Karakter Anak. *Qalamuna: Jurnal Pendidikan, Sosial, Dan Agama*, 13(2), 171–186. <https://doi.org/10.37680/Qalamuna.V13i2.882>
- Sudarman, S. W., & Linuhung, N. (2021). Penerapan Pembelajaran Mea (Means-End Analysis) Berbantuan Schoology Untuk Meningkatkan Hasil Belajar Matematika. 8(1), 32–40.
- Sukawati, S., Sutiarsa, S., & Rosidin, U. (2022). Perbedaan Kemampuan Numerik Peserta Didik Yang Diterapkan Model Pembelajaran Means Ends Analysis (Mea) Dan Konvensional Ditinjau Dari Intelligence Quotient (Iq). *Jnpm (Jurnal Nasional Pendidikan Matematika)*, 6(1), 184. <https://doi.org/10.33603/jnpm.V6i1.5340>
- Utomo, B., Sukarno, & Prastiti, T. D. (2023). Implementasi Model Pembelajaran Means Ends Analysis (Mea) Pada Pembelajaran Matematika. *Mendidik: Jurnal Kajian Pendidikan Dan Pengajaran*, 9(2), 169–178. <https://doi.org/10.30653/003.202392.12>
- Wahyu Ningsih, R. M. (2024). *Jpss : Jurnal Pendidikan Sang Surya , Volume 10 , Nomor 2 , Edisi Desember 2024 Efektivitas Model Mea (Means Ends Analysis) Terhadap Kemampuan Menulis Wacana Argumentasi Mahasiswa Pendidikan Bahasa Dan Sastra Indonesia Universitas Muhammadiyah Makassar. 10, 571–581.*
- Warni. (2023). Penerapan Model Pembelajaran Means Ends Analysis (Mea) Untuk Meningkatkan Hasil Belajar Siswa Nateri Jenis Dan Tata Cara Perpajakan Pada Siswa Kelas Xi Akl.2 Smk Negeri 1 Dumai Tahun. *Jurnal Pendidikan Tambusai*, 7(1), 1432–1440.
- Widjaja, A. H. (2021). Implementasi Metode Means Ends Analysis (Mea) Pada Pembelajaran Fisika Tentang Generator Untuk Peningkatan Hasil Belajar Pada Siswa Kelas Ix-G Semester 2 *Jurnal Pembelajaran Dan Riset Pendidikan (Jprp)*, 2, 260–265. <http://ojs.unublitar.ac.id/index.php/jprp/article/view/145>
<http://ojs.unublitar.ac.id/index.php/jprp/article/download/145/88>

- Yandi, A., Nathania Kani Putri, A., & Syaza Kani Putri, Y. (2023). Faktor-Faktor Yang Mempengaruhi Hasil Belajar Peserta Didik (Literature Review). *Jurnal Pendidikan Siber Nusantara*, 1(1), 13–24. <https://doi.org/10.38035/jpsn.V1i1.14>
- Zai, E. I., Laoli, B., Nias, U., & Nias, U. (2023). Penerapan Model Pembelajaran Active Learning Dalam Meningkatkan Hasil Belajar Siswa Kelas Viii Smp Negeri 2 Tuhemberua Tahun Pelajaran 2022 / 2023. 6, 239–249.