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Evaluation of the 2026 Academic Competency Test Results in Mathematics and Indonesian Language at MTsS Al Haris Makassar

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ABSTRACT

This study aims to empirically evaluate the results of the 2026 Academic Competency Test (TKA) in Mathematics and Indonesian Language at MTsS Al Haris Makassar. A quantitative descriptive approach was employed using secondary data from the 2026 TKA Results Summary, which covered all 16 students who participated in the test. The data were analyzed using Microsoft Excel through descriptive statistical procedures, including the calculation of the mean, median, standard deviation, minimum score, maximum score, and distribution of achievement categories. The results showed that the mean Mathematics score was 40.42, with a standard deviation of 8.49, while the mean Indonesian Language score was 71.04, with a standard deviation of 10.85. In Mathematics, 13 students (81.25%) were classified as Adequate, while 3 students (18.75%) were classified as Low. In Indonesian Language, 10 students (62.50%) were classified as Adequate, while 6 students (37.50%) were classified as Good. The achievement categories were determined based on the 2026 TKA guidelines. Descriptively, the data indicate that the mean score in Indonesian Language was higher, with greater score variability than in Mathematics. These findings may provide preliminary information for the school to plan follow-up instructional activities, particularly through diagnostic assessments to identify students' learning needs in Mathematics and to strengthen Indonesian Language instruction. This study is limited to data from 16 students at a single school, therefore the findings cannot establish the factors responsible for the differences in achievement.

Keywords: E*ducational Evaluation, Academic Competency Test, Mathematics, Indonesian Language, Academic Achievement*

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INTRODUCTION

Learning outcome evaluation plays an important role in improving educational quality because it provides information about students' academic achievement that can serve as a basis for planning subsequent instructional activities. Assessment results should not merely be reported as numerical scores but should also be carefully interpreted to help educational institutions identify areas of learning that require improvement. The use of assessment data to inform instructional decision-making is an important component of evidence-based educational practice. Choi et al. (2022) examined teachers' use of assessment data in instructional decision-making, while Alonzo et al. (2024) explored the role of information and communication technology-based data systems in supporting data-driven teacher decision-making. These studies highlight the importance of connecting assessment information with instructional needs rather than treating assessment results merely as administrative reports.

In Indonesia, the Academic Competency Test (TKA) is a standardized instrument designed to provide information about students' academic achievement. Its administration is governed by the Regulation of the Minister of Primary and Secondary Education Number 9 of 2025 concerning the Academic Competency Test, together with the relevant implementation guidelines. Within this policy framework, the TKA focuses on measuring students' academic achievement, whereas the National Assessment is intended to provide information for evaluating the education system (Indonesia, 2025; Indonesia, 2026). Accordingly, TKA results can serve as one source of information for describing students' academic achievement in the subjects assessed. However, the use of these results should take into account the purpose of the assessment and the characteristics of the available data to ensure that interpretations do not go beyond the supporting evidence.

At the lower secondary education level, including Madrasah Tsanawiyah (MTs) and equivalent educational institutions, TKA results are reported on a scale of 0–100, with two decimal places. The TKA implementation guidelines also classify students' achievement into three categories: Good, Adequate, and Low. These results are delivered to educational institutions through the Collective TKA Results List (DKHTKA), which serves as an official data source for identifying and examining students' academic achievement at the institutional level (Indonesia, 2026) . This information provides a basis for schools and madrasahs to systematically examine students' achievement. Nevertheless, scores and achievement categories must be interpreted in accordance with the assessment's objectives and the limitations of the available information. Such information can describe achievement patterns within the group of students being analyzed, but it does not, by itself, explain individual mastery of competencies, the factors influencing the results, or the quality of the learning process.

Using assessment results to improve instruction requires careful interpretation and a clear connection between the available data and the decisions to be made. Folger et al. (2023) discussed the importance of clarifying test-score interpretation, score use, and the claims that can be justified by the available evidence. This principle is relevant to the evaluation of TKA results because differences in scores between subjects do not, in themselves, explain the causes of those differences or demonstrate that students' overall abilities are stronger in one subject than in another. Differences in content coverage, assessed competencies, and test characteristics must be considered before broader conclusions are drawn. Therefore, descriptive analysis can be used to identify preliminary patterns in test results, whereas explanations of the factors underlying those patterns require additional and appropriate evidence.

Assessment results can also provide an initial basis for educational institutions to plan follow-up activities that better address students' learning needs. Hase & Kuhl, (2024), in their systematic review of teachers' use of data from digital learning platforms, examined the relevance of learning data to instructional design. Although their review addressed a different context from the use of TKA data, it offers a useful perspective on the importance of connecting learning information with appropriate instructional decisions. In the context of utilizing TKA results at the educational institution level, possible follow-up measures include reviewing competencies that still need to be developed, conducting additional diagnostic assessments, providing remedial instruction, and offering enrichment activities based on students' needs. However, the selection of appropriate interventions must be based on further assessment and cannot be determined solely from aggregate scores.

Educational evaluation has also been conducted at the institutional level by Alamsyah et al. (2025), who evaluated the full-day school program at public special needs schools in Makassar City and Gowa Regency. Their study employed Stake's Countenance Model to evaluate the program's input, process, and outcome aspects. The study demonstrates the application of educational evaluation in the context of educational institutions in the Makassar and Gowa regions, although its evaluation focus differs from that of the present study. This distinction is important because program evaluation and test-result evaluation involve different objects of inquiry, sources of evidence, and interpretive limitations. Accordingly, the present study is not intended to evaluate an educational program but specifically to describe the results of a standardized assessment based on students' academic achievement data.

At the educational institution level, TKA results reported in the Collective TKA Results List (DKHTKA) can provide information about students' academic achievement. However, this information needs to be systematically analyzed and interpreted so that it can be used as preliminary information for instructional planning. An analysis of the mean, median, score variation, and distribution of achievement categories can help educational institutions obtain an empirical overview of students' achievement patterns in the tested subjects. Nevertheless, this information must be understood in light of the scope of the available data, as aggregate scores and achievement categories cannot fully explain specific competency mastery or the factors influencing learning outcomes. Therefore, analyzing TKA results at the educational institution level is important for providing an initial overview of students' academic achievement and serving as a basis for determining the need for further assessment and instructional planning.

In this context, MTsS Al Haris Makassar has official data on the 2026 TKA results, as reported in the DKHTKA, covering all 16 students who participated in the Mathematics and Indonesian Language tests. These data allow for an empirical analysis of score patterns, achievement variation, and the distribution of TKA achievement categories in both subjects. However, the available data are limited to scores and achievement categories and do not include item-level information, achievement profiles based on specific competencies, or comparative data from previous years. Accordingly, this study focuses on providing an empirical description of the 2026 TKA results in Mathematics and Indonesian Language at MTsS Al Haris Makassar based on official DKHTKA data. The findings are expected to provide a contextual overview of students' academic achievement that can serve as preliminary information for the school in planning diagnostic assessments and follow-up instructional activities in accordance with students' learning needs.

Based on the foregoing discussion, this study aims to descriptively evaluate the results of the 2026 Academic Competency Test in Mathematics and Indonesian Language at MTsS Al Haris Makassar using official data from the Collective TKA Results List (DKHTKA). The data were analyzed using descriptive statistics, including the mean, median, standard deviation, minimum score, maximum score, and distribution of achievement categories. The contribution of this study lies in presenting an empirical overview of students' academic achievement at the madrasah level, which can be used as preliminary information to identify the need for further assessment and plan follow-up instructional activities.

METHOD

1. Research Design

This study employed a quantitative descriptive design to evaluate the results of the 2026 Academic Competency Test (TKA) in Mathematics and Indonesian Language at MTsS Al Haris Makassar. A descriptive approach was selected because the study aimed to describe and summarize students' achievement based on the available test data, rather than to examine causal relationships or determine the statistical significance of differences between the two subjects. Descriptive statistical analysis can be used to organize and summarize numerical data, thereby facilitating the identification of patterns in central tendency and data dispersion (Nasir & Sukmawati, 2023).

Accordingly, the analysis focused on measures of central tendency, score dispersion, minimum and maximum scores, and the distribution of students across achievement categories for each subject. The results were then used to provide an initial overview of students' academic achievement and to inform considerations for planning subsequent instructional interventions.

2. Data Source and Study Participants

This study used secondary data obtained from the 2026 Collective Academic Competency Test Results List at MTsS Al Haris Makassar. The dataset comprised TKA results for 16 students in Mathematics and Indonesian Language. The unit of analysis was each student's recorded score and achievement category in each subject. This study employed a total sampling or census sampling technique, in which all members of the population who met the study criteria were included. This technique was used because all 16 students who participated in the TKA and met the eligibility criteria at MTsS Al Haris Makassar were included in the analysis. Accordingly, the analyzed dataset comprised 16 Mathematics scores and 16 Indonesian Language scores from the same group of students.

The available data were limited to the scores and achievement categories recorded in the DKHTKA document. The dataset did not include students' responses to individual test items, competency-specific achievement results, students' learning backgrounds, or TKA results from previous years. These limitations were considered when interpreting the findings, particularly when formulating implications for instructional improvement. The use of secondary data requires researchers to consider the completeness of the available information and the limitations arising from the original data collection process (Diatta & Berchtold, 2023).

3. Data Processing and Analysis

The Mathematics and Indonesian Language scores were processed using Microsoft Excel. The analysis was conducted separately for each subject using descriptive statistics, including the mean, median, standard deviation, minimum score, and maximum score. Frequencies and percentages were also calculated to describe the distribution of students across the achievement categories recorded in the DKHTKA document. The mean was used to describe the average student score, whereas the median represented the middle value after the scores had been arranged in ascending order. The standard deviation was used to describe the dispersion of scores around the mean. The minimum and maximum scores were used to identify the lowest and highest observed scores, respectively.

In this study, the population standard deviation was calculated using the following formula:

$$\sigma = \sqrt{\frac{\sum_{i=1}^{N}(x_i - \overline{x})^2}{N}}$$

where:
σ = standard deviation of the dataset being analyzed;
x_i= score of the (i)-th student;
$\overline{x}$ = mean score of the dataset;
N = total number of records analyzed, which was 16 students.

The denominator (N) was used because the analysis described all 16 student records available in the TKA results document under study, rather than estimating the standard deviation of a sample drawn from a broader population. Using this formula, the standard deviation was 8.49 for Mathematics and 10.85 for Indonesian Language.

The percentage of students in each achievement category was calculated using the following formula:

$$P = \frac{f}{N} \times 100\%$$

where:
P = percentage of students in a particular achievement category;
f = number of students in that category;
N= total number of students analyzed, which was 16.

The achievement categories Good, Adequate, and Low were retained as recorded in the DKHTKA document. The researchers did not establish additional numerical cut-off scores for classifying student achievement. The frequency and percentage of students in each category were calculated based on the category information available in the source document. The descriptive statistics for the two subjects were subsequently presented and compared descriptively to identify patterns in the observed achievement results. This comparison was not intended to establish statistically significant differences or determine the factors responsible for differences in achievement. The interpretation of the findings was therefore limited to conclusions supported by the available data.

4. Scope and Ethical Considerations

The findings were interpreted within the scope of the dataset, which comprised 16 students from one madrasah and one administration of the 2026 TKA. Accordingly, the findings were not intended to be generalized to all madrasahs or used to establish causal relationships between instructional practices and students' academic achievement. Data processing and reporting were conducted with due consideration for the confidentiality of student information. The findings were presented in aggregate statistical form, including means, standard deviations, frequencies, and percentages, without disclosing students' personal identities. The use of the TKA results document must also comply with the applicable data-access requirements and authorization procedures of the madrasah. Within these limitations, the findings are expected to provide preliminary information for MTsS Al Haris Makassar to review students' learning needs and plan subsequent instructional interventions.

RESULT AND DISCUSSION

A. Research Results

1. Descriptive Statistics of the Academic Competency Test Results

This study evaluated the results of the 2026 Academic Competency Test (TKA) in Mathematics and Indonesian Language at MTsS Al Haris Makassar. The data comprised the scores of 16 students in both subjects. Descriptive statistical analyses were conducted to provide an overview of score centrality, score dispersion, and the range of student achievement.

Table 1. Descriptive Statistics of the 2026 TKA Results

Statistic	Mathematics	Indonesian Language
Number of students	16	16
Mean	40.42	71.04
Median	43.33	73.33
Standard deviation	8.49	10.85
Minimum score	26.67	50.00
Maximum score	53.33	86.67
Score range	26.66	36.67

Source: Data processed from the 2026 TKA Results Summary (DKHTKA).

As shown in Table 1, the mean Mathematics score was 40.42, whereas the mean Indonesian Language score was 71.04. Based on the unrounded values, the difference between the two means was approximately 30.63 points. Descriptively, the Indonesian Language mean was higher than the Mathematics mean among the students included in the analysis. The median Mathematics score was 43.33, slightly higher than its mean of 40.42. Similarly, the median Indonesian Language score was 73.33, exceeding its mean of 71.04. These two measures provide information about the central position of students' scores; however, they are insufficient to explain the factors underlying the observed score distributions.

Regarding score dispersion, the standard deviation was 8.49 for Mathematics and 10.85 for Indonesian Language. The Indonesian Language score range was also wider, at 36.67 points, compared with 26.66 points for Mathematics. These findings indicate that Indonesian Language scores exhibited greater absolute dispersion within the dataset analyzed. Nevertheless, the standard deviations and score ranges do not, by themselves, explain the factors that may have contributed to score variation.

2. Distribution of Student Achievement Categories

In addition to examining numerical scores, this study analyzed the distribution of students across the achievement categories reported in the DKHTKA document. The categories were Good, Adequate, and Low. These classifications followed the categories provided in the source document; no additional score thresholds were established by the researchers.

Table 2. Distribution of TKA Achievement Categories in Mathematics

Category	Frequency	Percentage
Baik (Good)	0	0.00%
Memadai (Adequate)	13	81.25%
Kurang (Low)	3	18.75%
Total	**16**	**100.00%**

Source: Data processed from the 2026 TKA Results Summary (DKHTKA).

Table 2 shows that 13 of the 16 students (81.25%) were classified in the Adequate category for Mathematics. Three students (18.75%) were classified in the Low category, while no students were classified in the Good category. This distribution indicates that most students were placed in the Adequate category, although some students may require further attention based on the achievement classifications recorded in the source document.

Table 3. Distribution of TKA Achievement Categories in Indonesian Language

Category	Frequency	Percentage
Baik (Good)	6	37.50%
Memadai (Adequate)	10	62.50%
Kurang (Low)	0	0.00%
Total	**16**	**100.00%**

Source: Data processed from the 2026 TKA Results Summary (DKHTKA).

In Indonesian Language, 10 students (62.50%) were classified in the Adequate category, while 6 students (37.50%) were classified in the Good category. No students were classified in the Low category. This distribution indicates that the Indonesian Language achievement of the students analyzed was concentrated in the Adequate and Good categories. A comparison of the category distributions reveals a clear difference in achievement patterns between the two subjects. In Mathematics, 18.75% of students were classified in the Low category, and none were classified in the Good category. In contrast, no students were classified in the Low category in Indonesian Language, while 37.50% were classified in the Good category. These findings complement the comparison of mean scores by showing how students were distributed across the achievement categories recorded in the source document.

B. Discussion

1. Differences in Achievement Patterns between Mathematics and Indonesian Language

The main finding of this study is the difference in achievement patterns between Mathematics and Indonesian Language. The mean Indonesian Language score of 71.04 was approximately 30.63 points higher than the mean Mathematics score of 40.42, based on the unrounded values. This difference was also reflected in the category distributions: Indonesian Language achievement included both the Good and Adequate categories, whereas Mathematics achievement was concentrated in the Adequate category, with some students classified in the Low category.

These results indicate that, within the group examined, the recorded achievement patterns were not the same across the two subjects. Nevertheless, the findings should not be interpreted as evidence that students generally have greater mastery of Indonesian Language than Mathematics. Conclusions about mastery of specific competencies require more detailed information, such as results by competency or individual test item, which was not available in the dataset used in this study. Differences in mean scores should also be interpreted in accordance with the characteristics of the measurement and the information available in the reported results. The mean provides a numerical summary, whereas the achievement categories represent classifications reported in the official document. These two forms of information complement each other, but neither explains students' reasoning processes, the difficulty of the test items, or the specific competencies that students have or have not mastered.

Accordingly, the contribution of these findings lies in providing an initial description of student achievement patterns at MTsS Al Haris Makassar. The data can serve as a basis for identifying areas that warrant further investigation, rather than as evidence that differences in achievement were caused by teaching methods, student characteristics, or particular instructional factors.

2. Interpretation of Mathematics Achievement and Implications for Instruction

In Mathematics, the mean score was 40.42, with a standard deviation of 8.49. In addition, 13 students (81.25%) were classified in the Adequate category, while 3 students (18.75%) were classified in the Low category. The absence of students in the Good category and the presence of students in the Low category provide relevant information for the madrasah to examine students' Mathematics learning needs more systematically.

However, classification in the Adequate category should not automatically be interpreted as evidence that all Mathematics competencies have been adequately mastered. Similarly, classification in the Low category does not identify the specific content areas or skills that students find difficult. Because this study relied only on overall scores and achievement categories, it could not identify the specific competencies requiring improvement.

One practical implication is to conduct further diagnostic assessments to map students' learning needs. Teachers could examine students' work or responses to test items, identify concepts that have not been fully understood, and use the resulting information to design appropriate learning activities. Students who require additional support could receive reteaching or structured, gradual practice, while other students could be provided with reinforcement activities based on their identified needs. These recommendations are practical implications derived from the observed data patterns; they are not findings from an evaluation of the effectiveness of a particular intervention. This study did not test whether diagnostic assessment or any specific follow-up strategy would improve Mathematics scores. Therefore, the implementation of such strategies should be accompanied by monitoring of students' learning progress to determine whether the support provided is appropriate to their needs.

3. Interpretation of Indonesian Language Achievement and Implications for Instruction

In Indonesian Language, the mean score was 71.04 and the median was 73.33. Ten students (62.50%) were classified in the Adequate category, while six students (37.50%) were classified in the Good category. No students were classified in the Low category in the dataset analyzed. Descriptively, this distribution indicates that the Indonesian Language achievement of this group was concentrated in two categories that were higher than the category distribution recorded for Mathematics in the source document.

Nevertheless, these results do not mean that all aspects of Indonesian Language ability have been mastered uniformly. Overall scores do not directly reveal students' abilities in specific areas, such as reading comprehension, information interpretation, or text evaluation. Without competency-level or item-level data, these areas cannot be identified as student strengths or weaknesses on the basis of this study. Possible follow-up measures include maintaining instructional activities that are relevant to students' achievement while examining the competencies assessed by the TKA in greater detail. Teachers could use classroom assessments, reading assignments, and text-comprehension activities to obtain more detailed information about students' learning needs. If particular competencies are found to require further reinforcement, instructional activities can be adjusted in response to the assessment findings.

Thus, Indonesian Language results are more appropriately viewed as indicating relatively higher achievement within this particular dataset, rather than as evidence that instructional improvement is unnecessary. Further instructional decisions should still be based on more specific competency-level information and ongoing monitoring of students' learning progress.

4. Using Assessment Results for Instructional Planning

Assessment results should inform instructional decisions based on evidence of student achievement and learning needs. TKA results can provide preliminary information for identifying academic achievement patterns, but their interpretation should be supplemented with more detailed information. Alamsyah (2026) emphasizes that TKA results can be considered alongside classroom assessment results, records of learning progress, students' work, and teacher reflection to help identify competencies requiring reinforcement and plan appropriate follow-up instruction. Therefore, test results should not be the sole basis for determining instructional interventions. Assessment information can be useful when it is interpreted carefully and applied appropriately in educational decision-making. The OECD (2023) explains that national or centralized assessments in various education systems serve both summative and formative purposes, including providing diagnostic information to teachers. This perspective supports the importance of interpreting TKA results not merely as a summary of scores, but also as one source of information for examining students' learning needs.

Research by Hawlitschek et al. (2024) on the use of national achievement test results indicates that how teachers and school leaders use assessment information is related to the context in which data are used at school. This finding highlights that the availability of test results does not automatically ensure their effective use in improving instruction. The results need to be interpreted and discussed in relation to students' needs and the school's decision-making processes.

Furthermore, the meta-analysis by (Spiele et al., 2025) found that professional development interventions focusing on teachers' data use could have a positive average effect on student achievement, although the results varied considerably across the studies reviewed. This finding provides general support for the importance of data use in instructional improvement. However, it should not be regarded as direct evidence that a particular follow-up strategy would produce the same effect at MTsS Al Haris Makassar.

In the context of this study, TKA results can serve as a starting point for establishing a data-use cycle: reviewing achievement, identifying learning needs, planning follow-up measures, implementing instruction, and reassessing students' progress. In Mathematics, initial attention could be directed toward the three students classified in the Low category, as well as an examination of the learning needs of the group as a whole. In Indonesian Language, the madrasah could maintain relevant instructional practices while examining which competencies may still require reinforcement. This cycle represents a practical recommendation derived from the descriptive findings and literature on data use. The present study did not evaluate the implementation of these follow-up measures or their effects on learning outcomes. Therefore, the effectiveness of any improvement strategy needs to be examined through subsequent data collection.

5. Limitations in Interpreting the Findings

The findings should be interpreted in light of several limitations. First, the data covered only 16 students from one madrasah and one administration of the 2026 TKA. Consequently, the results describe the group examined and cannot be directly generalized to other madrasahs or a broader student population.

Second, the analyzed data contained only scores and achievement categories. The absence of item-level responses, competency-level achievement information, students' learning backgrounds, and data from previous years limits the extent to which factors potentially associated with the observed score patterns can be explained. Third, the analysis was descriptive and did not involve inferential statistical testing. Therefore, the difference between the means represents a numerical difference within the dataset analyzed, rather than a difference established through statistical significance testing.

Fourth, this study did not directly measure instructional quality, teaching strategies, or the effectiveness of follow-up programs. Accordingly, it cannot establish that these factors caused the differences in achievement between Mathematics and Indonesian Language. Future research could combine TKA results with competency-based diagnostic assessments, appropriate item analysis, classroom observations, or classroom assessment data to provide a more detailed understanding of students' learning needs.

Overall, this study provides an initial description of TKA achievement in two subjects at MTsS Al Haris Makassar. The principal value of these findings is that they provide an empirical basis for developing further questions about students' learning needs and instructional planning, while maintaining appropriate interpretive boundaries in accordance with the scope of the available data.

CONCLUSION

The evaluation of the 2026 Academic Competency Test (TKA) results for 16 students at MTsS Al Haris Makassar revealed different achievement patterns between Mathematics and Indonesian Language. The mean Mathematics score was 40.42, compared with 71.04 for Indonesian Language. In Mathematics, most students (81.25%) were classified in the Adequate category, while 18.75% were classified in the Low category. In Indonesian Language, 62.50% of students were classified in the Adequate category and 37.50% in the Good category, with no students classified in the Low category. Descriptively, Indonesian Language achievement had a higher mean score and a different category distribution from Mathematics within the group analyzed. However, these findings do not provide a detailed account of students' mastery of specific competencies or explain the factors associated with the differences in achievement.

The findings may provide preliminary information for the madrasah in planning follow-up instructional activities. Diagnostic and classroom assessments can be used to identify students' learning needs more specifically, particularly in Mathematics, while also examining Indonesian Language competencies that may require further reinforcement. TKA results should be interpreted alongside other instructional information to ensure that follow-up decisions are appropriate to students' learning needs. The interpretation of these findings is limited by the study's coverage of a single madrasah, the number of students analyzed, and the absence of achievement data at the item or competency level. Future research is recommended to integrate TKA results with competency-based assessments and monitoring of learning progress to develop a more

comprehensive understanding of students' learning needs and systematically evaluate subsequent instructional measures.

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