

# The Influence Of High Order Thinking Skill (Hots) Based Questions On Arabic Language Learning Outcomes Of Madrasah Tsanawiyah Student

Ihwan Mahmudi<sup>1</sup>, Neni Naqiyah<sup>2</sup>, Alif Cahya Setiyadi<sup>3</sup>

<sup>12</sup>Universitas Darussalam Gontor

<sup>3</sup>Leipzig University

<sup>1</sup>ihwanm@unida.gontor.ac.id, <sup>2</sup>neni.naqiyah.pba@mhs.unida.gontor.ac.id, <sup>3</sup>as79suja@stuserv.uni-leipzig.de

Received March 05, 2023/Accepted June 08, 2023

## ABSTRACT

The low Arabic language skills of students at MTs Al-Khairiyah Kelapian Banten are partly influenced by the use of questions that tend to measure Low Order Thinking Skills (LOTS). The aim of this research is to determine the effect of using questions based on High Order Thinking Skills (HOTS) on the Arabic language learning outcomes of class VIII students at MTs Al-Khairiyah Kelapian Banten for the 2022 – 2023 academic year. This research uses a quantitative experimental method with a True Experimental Design research design with a Pretest-Posttest Control Group Design approach. The research sample consisted of 30 students who were divided into two classes, namely the experimental class and the control class. Research data was taken using tests. Data analysis uses the difference test. The results of the research show that there is an influence of HOTS based questions on students' Arabic learning outcomes.

**Keywords:** *HOTS, HOTS Based Questions, Arabic Learning Results*

## A. INTRODUCTION

The rapid development of the era brings great challenges.<sup>1</sup> The human resources needed must have three important skills, namely critical thinking skills, creative thinking skills, and the ability to solve problems so the curriculum must combine several scientific disciplines and have three aspects of assessment, namely the knowledge (cognitive) aspect, the attitude and behavior aspect. and skills aspects.<sup>2</sup> Various efforts to form high quality human resources are carried out through education.<sup>3</sup> Among them is the aspect of questions that are required to help students improve high-level thinking skills (High Order Thinking Skills/ HOTS).<sup>4</sup>

Resnick defines high order thinking skill as a complex process of describing material, making conclusions, building representations, analyzing, and building relationships involving the most basic mental activities.<sup>5</sup> Saputra emphasized that HOTS is a higher cognitive level thinking process.<sup>6</sup> According to Herman HOTS is a mental processing process by maximizes the ability to think comprehensively which ultimately results in finding a desired goal.<sup>7</sup> *HOTS* is defined as the use of the mind more broadly to discover new challenges so as to require a person to apply new information or previous knowledge

<sup>1</sup> Fuaddilah Ali Sofyan, "Implementasi HOTS Pada Kurikulum 2013," *INVENTA* 3, no. 1 (2019): 1.

<sup>2</sup> Baderiah, *Buku Ajar Pengembangan Kurikulum* (Palopo: Lembaga Penerbit Kampus IAIN Palopo, 2018), 12.

<sup>3</sup> Darmadi et al., "Pengaruh Penerapan Soal HOTS Sebagai Bagian Dari Kurikulum 2013 Terhadap Pemahaman Siswa Sekolah Dasar Pada Pembelajaran Matematika," *Jurnal Pendidikan dan Konseling (JPDK)* 4, no. 1 (2022): 29, <https://jpdk.org/index.php/jpdk/article/view/124/91>.

<sup>4</sup> Moh. Zainal Fanani, "Strategi Pengembangan Soal HOTS Pada Kurikulum 2013," *Edudeena : Journal of Islamic Religious Education* 2, no. 1 (2018): 58–59, <https://jurnalfaktarbiyah.iainkediri.ac.id/index.php/edudeena/article/view/137>.

<sup>5</sup> Yoki Ariyana et al., *Buku Pegangan Pembelajaran Keterampilan Berpikir Tingkat Tinggi Berbasis Zonasi* (Jakarta: Direktorat Jenderal Guru dan Tenaga Kependidikan Kementerian Pendidikan dan Kebudayaan, 2018): 5.

<sup>6</sup> Husna Nur Dinni, "HOTS (High Order Thinking Skills) Dan Kaitannya Dengan Kemampuan Literasi Matematika," *Prisma, Prosiding Seminar Nasional Matematika* 1 (2018): 171.

<sup>7</sup> Ahmad Muradi et al., "Higher Order Thinking Skills Dalam Kompetensi Dasar Bahasa Arab," *Arabi : Journal of Arabic Studies* 5, no. 2 (2020): 3, <https://journal.imla.or.id/index.php/arabi/article/view/293>.

and manipulate information to reach possible answers in new situations.<sup>8</sup>

HOTS is done by associating new information with information already stored in memory and rearranging and developing this information to achieve a goal or find a solution to a situation that is difficult to solve.<sup>9</sup> These skills underscore various high-level processes demonstrated by operational verbs.<sup>10</sup> According to Bloom, skills are divided into two; the low level consists of remembering (C1), understanding (C2), and applying (C3); and high-level skills in the form of appearance analyzing (C4), evaluating (C5), and creating (C6).<sup>11</sup> High Order Thinking Skills include three important aspects, namely the ability to think critically, the ability to think creatively, and the ability to solve problems.<sup>12</sup> So HOTS based questions are questions used to test and measure students' high-level thinking abilities which consist of analyze (C4), evaluate (C5), and create (C6).

The implementation of HOTS is not only aimed at general education and learning but is also aimed at learning foreign languages, including Arabic.<sup>13</sup> Even though Arabic is a foreign language in Indonesia, Arabic also has to adapt to developments and changes in the current era.<sup>14</sup> This is because Arabic is a tool for communication and the key to knowledge,<sup>15</sup> Apart from that, Arabic is also the language used in the Qoran and Hadith, both of which are

<sup>8</sup> Indah Rahmi Nur Fauziah, Syihabudin Syihabudin, and Asep Sopian, "Analisis Kualitas Tes Bahasa Arab Berbasis Higher Order Thinking Skill (HOTS)," *لساننا (LISANUNA): Jurnal Ilmu Bahasa Arab dan Pembelajarannya* 10, no. 1 (2020): 49.

<sup>9</sup> Nur Dinni, "HOTS (High Order Thinking Skills) Dan Kaitannya Dengan Kemampuan Literasi Matematika: 171."

<sup>10</sup> Ihwan Mahmudi, *Evaluasi Pendidikan* (Sleman: Lintang Books, 2020): 27.

<sup>11</sup> Ariyana et al., *Buku Pegangan Pembelajaran Keterampilan Berpikir Tingkat Tinggi Berbasis Zonasi*: 5.

<sup>12</sup> Wahyu Kholis Prihantoro and Suyadi Suyadi, "Islamic Education Based on Higher Order Thinking Skills (HOTS) in The Perspective of Neuroscience," *Al-Misbah (Jurnal Islamic Studies)* 9, no. 1 (2021): 5–6.

<sup>13</sup> Sholihatul Atik Hikmawati, "Pendekatan Dan Model-Model Pengembangan Kurikulum Bahasa Arab Pada Madrasah/Sekolah Di Indonesia," *Muhadasah: Jurnal Pendidikan Bahasa Arab* 1, no. 2 (2019): 217, <https://ejournal.iainkijalang.ac.id/index.php/muhad/article/view/97>.

<sup>14</sup> Apri Wardana Ritonga, "Implementasi HOTS Dalam Pembelajaran Bahasa Arab: Peluang Dan Tantangannya Di Era Digital," *Pinba Xiii 2021* (2021): 274.

<sup>15</sup> K Sassi, "Peradaban Islam Dan Renaissance Barat: Al-Qur'an Dan Bahasa Kunci Terdepan Ilmu Pengetahuan," *Jurnal AT TAHFIZH* 1, no. 2 (2020): 15.

guidelines for life for Muslims.<sup>16</sup> So there is no doubt that Arabic is important to learn, especially for the Indonesian population, which is predominantly Muslim.<sup>17</sup>

Minister of Religion Decree 183 of 2019 stipulates that one of the objectives of learning Arabic, apart from internalizing Arabic language skills well, is to integrate Arabic language skills with behavior that is reflected in a tolerant attitude, critical thinking, and systematic thinking.<sup>18</sup> Graduate competency standards in the knowledge domain place greater emphasis on students having factual, conceptual, procedural, and metacognitive knowledge abilities.<sup>19</sup> Therefore, assessment techniques are directed at measuring the achievement of HOTS.

Moch Ali Mustain emphasized that students who are trained to think critically will have a positive impact on the speed of successful learning in developing individual knowledge.<sup>20</sup> The use of HOTS based questions in Arabic language material also improves student learning outcomes, as previously researched by Siti Ta'mirul Ummah and the results are that there is an influence on improving and increasing learning outcomes for seventh grade students at MTsN, based on participant responses good education and there was an increase in test results: pre-test 65 and post-test 81.9. In the manual t test with a significance level of 0.05, the results obtained were  $t\text{-count} > t\text{-table}$ , namely  $10.92 > 2.06$ , which means  $H_0$  was rejected and  $H_a$  was accepted.<sup>21</sup> Similar research was conducted by Lailatun Nikmah,

<sup>16</sup> Aidillah Suja, "أهمية دراسة اللغة العربية في فهم معاني القرآن (دراسة عن الفعل العربي)", *PERADA* 2, no. 2 (2019): 199.

<sup>17</sup> Nurhawani, "Eksistensi Bahasa Arab Dan Problematika Pembelajarannya Di Era Revolusi Industri 4.0," *Prosiding Seminar Nasional USM* 2, no. 1 (2019): 215.

<sup>18</sup> Tim Penulis, *Keputusan Menteri Agama Nomor 183 Tahun 2019 Tentang Kurikulum PAI Dan Bahasa Arab Pada Madrasah* (Jakarta: Direktorat KSKK Madrasah Direktorat Jenderal Pendidikan Islam Kementerian Agama Republik Indonesia, 2019): 51.

<sup>19</sup> Mochammad Shofwan Hidayatullah and Mardiyah, "Studi Komparasi KMA No. 183 Tahun 2019 Dengan KMA No. 165 Tahun 2014 Tentang Pedoman Kurikulum 2013 Materi PAI Dan Bahasa Arab," *CENDEKIA: Jurnal Ilmu Pengetahuan* 2, no. 1 (2022): 21.

<sup>20</sup> Moch Ali Mustain, "Pembelajaran Bahasa Arab Berbasis Higher Order Thinking Skills (HOTS)," *Prosiding Seminar Nasional Bahasa Arab Mahasiswa III* 3 (2019): 397, <https://prosiding.arab-um.com/index.php/semnasbama/article/view/397>.

<sup>21</sup> Siti Ta'mirul Ummah, "إعداد كراسة التدريبات لمادة تعليم اللغة العربية باستخدام مهارات التفكير العليا لترقية إنجاز العربية لتلاميذ الصف السابع من المدرسة المتوسطة (High Order Thinking Skill) التفكير العليا

that the application of HOTS based questions on speaking skills material for MTs seventh grade students was effective, based on the t-count value greater than the t-table value meaning  $3.544 > 2.042$  at the level The significant is 5%, which means that  $H_0$  is accepted and has an impact on improving learning of speaking skills.<sup>22</sup> Umar Faruq and M. Miftakhul Huda also stated in their research that the use of the HOTS model in Arabic language learning and its evaluation affects improving student learning outcomes in Arabic language subjects.<sup>23</sup>

Meanwhile in reality, in the Arabic language learning field at MTs Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year, the 2013 curriculum has been used, but in the learning evaluation process, teachers have not implemented many HOTS based questions, especially in class 8. So the result is that Arabic language learning for class 8 students at MTs Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year is still low and below the KKM value set by the school with a percentage of 81.57% of the 38 students who have not completed it. Examples of Arabic questions used in class 8 such as: “كم قسما ينقسم الفعل؟” “kam qisman yanqasimu al-fi’lu?” (How much does the verb divide?), “ما هو الفعل الماضي؟” “maa huwa al-fi’lu al-madhi?” (What is past tense?), “أذكر حرف النواصب” “udzkur harf an-nawaasib?” (Mention the nawasib letter?).

Based on the problems above, this research aims to test the influence of High Order Thinking Skills (HOTS) based questions on the Arabic language learning outcomes of class VIII students at Mts Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year. It is hoped that after evaluating Arabic language learning using HOTS based questions, the learning outcomes of grade 8 students at Mts

سيدوارحوا “الإسلامية الحكومية ١” (Universitas Islam Negeri Sunan Ampel Surabaya, 2019), 88, [http://digilib.uinsa.ac.id/35644/2/Siti Ta%20mirul Ummah\\_F12616322.pdf](http://digilib.uinsa.ac.id/35644/2/Siti%20Ta%20mirul%20Ummah_F12616322.pdf).

<sup>22</sup> Lailatun Ni'mah, تطوير كراسة التدريبات لتعليم مهارة الكلام المبنية على مهارات التفكير العليا، “HOTS باطي” (Universitas Islam Negeri Maulana Malik Ibrahim Malang, 2021), 134, <http://etheses.uin-malang.ac.id/30773/>.

<sup>23</sup> Umar Faruq and Mokhammad Miftakhul Huda, “BAHASA ARAB BERBASIS PENINGKATAN PEMBELAJARAN HOTS ( Higher Order Thinking Skills ) ( Kajian Pembelajaran Bahasa Arab Di Madrasah Aliyah Unggulan Darul ‘ Ulum Step 2 Kemenag RI ),” *Jurnal Al-Hikmah* 8, no. 1 (2020): 18, <https://www.jurnal.badrussholeh.ac.id/index.php/Al-Hikmah/article/view/135>.

Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year will increase and become input in the form of feedback for further improvement or development of the Arabic language learning process.

## B. Research Methods

This research uses a quantitative approach, namely research that emphasizes the analysis of numerical data (numbers) which are then analyzed using appropriate statistical methods and used to test hypotheses.<sup>24</sup> Meanwhile, the type of research used is experimental. According to Borg & Gall, experimental research is the research that is most scientifically reliable (the most valid), because it is carried out with strict control over confounding variables outside those being experimented with.<sup>25</sup> Sugiyono added that the experimental research method is a research method used to find the effect of certain treatments on others.<sup>26</sup>

The research design used in this research uses design *True Experimental*, namely research that can control all external variables that influence the course of the experiment, where the main characteristic is that the samples used in the experimental group and control group are taken randomly from a certain population.<sup>27</sup> The research design is a Pretest-Posttest Control Group Design. In this design, there are two groups selected randomly, namely the experimental group and the control group.<sup>28</sup> Both groups were given a pretest (the same test) to determine the students' initial abilities. The tests used for the pretest are the questions used at the Madrasah Tsanawiyah. Then the experimental group was given treatment, namely applying HOTS based questions, while the control class used normal or non-HOTS based questions. The test used for the post-test

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<sup>24</sup> Hardani. dkk, *Metode Penelitian Kualitatif & Kuantitatif* (Yogyakarta: CV. Pustaka Ilmu Group, 2020): 228-229.

<sup>25</sup> Priadana M Sidik and Sunarsi Denok, *Metode Penelitian Kuantitatif* (Tangerang: Pascal Books, 2021): 119.

<sup>26</sup> Sugiono, *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif Dan R&D* (Bandung: Alfabeta, 2014): 11-12.

<sup>27</sup> Ibid: 114.

<sup>28</sup> Ibid: 112.

in the experimental and control classes is a mixed test, some of which are HOTS based questions and some of which are regular questions. The design is as follows:

Class/Group	Pretest	Treatment	Posttest
Experiment (Random)	O1	X	O2
Control (Random)	O3	-	O4

The population is all subjects or research objects that are used as data sources that have certain characteristics in research with the aim of researchers being able to determine the size of the sample members taken and can be generalized.<sup>29</sup> The population in this study was eighth grade students totaling 40 students at MTs Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year.

The sample is a portion of the population collected by researchers using sampling techniques. The number of samples taken in this research was 30 students, namely some 8 grade students at MTs Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year. As for the sampling method in this research, the researcher used a simple random sampling technique. Simple random sampling is a sampling technique in which the sample members used from the population are taken at random without paying attention to the strata of the population. Because the number of members of the population is considered homogeneous.<sup>30</sup> The number of samples in this study was 30 students, which were divided into two classes, 15 students in the experimental class and 15 students for the controller class.

## C. DATA ANALYSIS AND DISCUSSION

### 1. Data analysis

Data analysis in this research was carried out in three steps, namely descriptive analysis, prerequisite testing and hypothesis testing as follows:

<sup>29</sup> Hardani. dkk, *Metode Penelitian Kualitatif & Kuantitatif*, 361.

<sup>30</sup> Sugiono, *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif Dan R&D*, 120.



a. Descriptive Analysis

Descriptive analysis is carried out by describing or illustrating the data that has been collected as it is without intending to make general conclusions or generalizations.<sup>31</sup> In this descriptive analysis, it can also be used to compare the average of sample data or population data through measuring central tendency which consists of the average value, median and standard deviation of the data.<sup>32</sup>

1) Pretest

Table 1. Pretest Descriptive Analysis of Experimental Class

Statistics		
PreTest		Experiment
N	Valid	15
	Missing	0
Mean		26.40
Median		28.00
Mode		32
Std. Deviation		5,462
Variance		29,829
Range		16
Minimum		16
Maximum		32
Sum		396

Based on the descriptive analysis table using the IBM SPSS 22 application above, it shows that the number of samples for the experimental class during the pretest was 15 students. As for the experimental class pretest results, the average value was 26.40, median 28.00, mode 32, standard deviation 5.462, variance 29.829, range 16, with the lowest value 16, and the highest value 32, and the total was 396. And after the researcher explained the results of the descriptive analysis of the experimental class pretest results, the researcher then explained the results of the

<sup>31</sup> Neliwati, *Metodologi Penelitian Kuantitatif (Kajian Teori Dan Praktek)* (Medan: CV. Widya Puspita, 2018), 191.

<sup>32</sup> Sugiono, *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif Dan R&D*, 209.



descriptive analysis of the control class pretest results as follows:

**Table 2. Pretest Descriptive Analysis of Control Class**

Statistics		
PreTest Control		
N	Valid	15
	Missing	0
Mean		27.20
Median		30.00
Mode		30
Std. Deviation		5,226
Variance		27,314
Range		20
Minimum		14
Maximum		34
Sum		408

Based on the descriptive analysis table using the IBM SPSS 22 application above, it shows that the number of samples for the control class during the pretest was 15 students. As for the control class pretest results, the average value was 27.20, median 30.00, mode 30, standard deviation 5.226, variance 27.314, range 20, with the lowest value 14, and the highest value 34, and the total was 408.

## 2) Posttest

**Table 3. Posttest Descriptive Analysis of Experimental Class**

Statistics		
Posttest Experiment		
N	Valid	15
	Missing	0
Mean		42.27
Median		42.00
Mode		36a
Std. Deviation		9,453
Variance		89,352
Range		29
Minimum		28
Maximum		57
Sum		634

Based on the descriptive analysis table of posttest scores for the experimental class, the average score was 42.27, the median was 42.00, the mode was 36, the standard deviation was 9.453, the variance was 89.352, the range was 29, with the lowest score being 28 and the highest score being 57, and a total of 634. Meanwhile, for the control class as in the following table:

**Table 4. Posttest Descriptive Analysis of Control Class**

Statistics		
PostTest Control		
N	Valid	15
	Missing	0
Mean		24.40
Median		19.00
Mode		16a
Std. Deviation		13,442
Variance		180,686
Range		42
Minimum		10
Maximum		52
Sum		366

Based on the descriptive analysis table for the control class, the average value was 24.40, the median was 19.00, the mode was 16, the standard deviation was 13.442, the variance was 180.686, the range was 42, with the lowest value being 10 and the highest value being 52, and a total of 366.

Based on tables 1 and 2, we can see that the number of samples used during the post-test was 15 students for the experimental class and 15 students for the control class. Then in the experimental class, the average score was 42.27, with the lowest score being 28 and the highest score being 57. Meanwhile, in the control class, the average score was 24.40, with the lowest score being 10 and the highest score being 52. So we can conclude that the average value of the

experimental class (42.27) is greater than the average value of the control class (24.40).

### b. Prerequisite Test

In this prerequisite test, basic assumption tests are carried out, namely the normality test and homogeneity test

#### 1) Normality test

The normality test aims to test whether the research data is normally distributed or not. Research data is said to be normally distributed if the significance value is greater than 0.05, while the data is said to be not normally distributed if the significance value is smaller than 0.05. The normality test in this study used the Kolmogorov-Smirnov test with the help of IBM SPSS 22 for Windows. The normality test in this study consists of pretest and posttest data student learning outcomes in the experimental class and control class which are presented in the table as follows:

##### a) Pretest

**Table 5. Pretest Normality Test Results**

Tests of Normality							
	Class	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistics	df	Sig.	Statistics	df	Sig.
Student learning outcomes	Pretest Experiment	,212	15	,069	,870	15	,034
	Control Pretest	,237	15	.023	,866	15	,029

##### a. Lilliefors Significance Correction

Based on the output above, it is known that the significant value (sig) in the Kolmogorov Smirnov normality test for the experimental class pretest data is  $0.069 > 0.05$ , so it can be concluded that the data is normally distributed. Meanwhile, the significant value (sig) in the Kolmogorov Smirnov normality test for

the control class pretest data is  $0.023 < 0.05$ , so it can be concluded that the data is not normally distributed.

b) Posttest

Table 6. Posttest Normality Test Results

Tests of Normality							
	Class	Kolmogorov-Smirnova			Shapiro-Wilk		
		Statistics	df	Sig.	Statistics	Df	Sig.
Student learning outcomes	PostTest Experiment	,156	15	,200*	,930	15	,270
	Control PostTest	,275	15	,003	,854	15	,020

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the output above, it is known that the student learning outcome variable in the Kolmogorov Smirnov normality test for experimental class pretest data has a significance value (sig) of  $0.200 > 0.05$ , so it can be concluded that the data is normally distributed. Meanwhile, the significant value (sig) in the Kolmogorov Smirnov normality test for the control class pretest data is  $0.003 < 0.05$ , so it can be concluded that the data is not normally distributed.

2) Homogeneity Test

The homogeneity test is carried out with the aim of finding out whether the research data is in the same variant (homogeneous) or not. The data is said to be homogeneous if the significant value is greater than 0.05, while it is said to be inhomogeneous if the significant value is smaller than 0.05. The homogeneity test was carried out using the analysis of variance test (F-Test) with the help of IBM SPSS 22 for Windows. If the data is homogeneous, then hypothesis testing can be carried out. This homogeneity test

is one of the conditions for continuing hypothesis testing.<sup>33</sup> The homogeneity test in this study consists of pretest and posttest data from student learning outcomes in the experimental class and control class which are presented below:

a) Pretest

**Table 7. Pretest Homogeneity Test Results**

<b>Test of Homogeneity of Variances</b>			
PreTest Results			
Levene Statistics	df1	df2	Sig.
,363	1	28	,552

Based on the output above, the Levene statistic is 0,363, with 1 degree of freedom in the numerator (df1) and 28 degrees of freedom in the denominator (df2). The significance value (Sig.) associated with this test is 0.552. It is known that the significant value (sig) for homogeneity data is  $0.552 > 0.05$ , so it can be concluded that the posttest data is homogeneous.

b) Posttest

**Table 8. Posttest Homogeneity Test Results**

<b>Test of Homogeneity of Variances</b>			
Post Test Results			
Levene Statistics	df1	df2	Sig.
1,307	1	28	,263

Based on the output above, the Levene statistic is 1.307, with 1 degree of freedom in the numerator (df1) and 28 degrees of freedom in the denominator (df2). The significance value (Sig.) associated with this test

<sup>33</sup> Ibid., 223.

is 0.263. It is known that the significant value (sig) for homogeneity data is  $0.263 > 0.05$ , so it can be concluded that the posttest data is homogeneous.

c. Hypothesis Testing

Based on the results of the test requirements, namely the normality test and homogeneity test, it shows that the data from the pretest and posttest results of the normality test in the experimental class are normally distributed while in the control class they are not normally distributed. The pretest and posttest data on the homogeneity test show that the two data are homogeneous. Therefore, in testing the hypothesis the researcher used a non-parametric test, namely the Mann Whitney test, to determine the initial condition of the research sample (pretest) and to determine the differences in Arabic learning outcomes in the experimental class and the control class after implementing HOTS-based questions, as well as to prove and answer the hypothesis.

1) Pretest

Table 9. Pretest Hypothesis Test Results

Test Statistics	
	Arabic Learning Results
Mann-Whitney U	107,000
Wilcoxon W	227,000
Z	-.232
Asymp. Sig. (2-tailed)	,816
Exact Sig. [2*(1-tailed Sig.)]	.838b

- a. Grouping Variable: Class
- b. Not corrected for ties.

Based on the “test statistics” output above, it is known that the value of Asymp.Sig. (2-tailed) is  $0.816 > 0.05$ ,  $H_0$

is accepted and  $H_a$  is rejected. Thus, it is said that there is no difference in Arabic learning outcomes between the experimental class and the control class at MTs Al-Khairiyah Kelapian Banten for the 2022-2023 academic year before the implementation of HOTS based questions.

## 2) Posttest

**Table 10. Posttest Hypothesis Test Results**

<b>Test Statistics</b>	
	Arabic Learning Results
Mann-Whitney U	35,500
Wilcoxon W	155,500
Z	-3,200
Asymp. Sig. (2-tailed)	,001
Exact Sig. [2*(1-tailed Sig.)]	.001b

a. Grouping Variable: Class

b. Not corrected for ties.

Based on the “test statistics” output above, it is known that the value of Asymp.Sig. (2-tailed) is  $0.001 < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted. Thus, it can be said that there are differences in the results of learning Arabic in the experimental class by applying HOTS based questions and in the control class by applying ordinary questions. So it can be concluded that there is an influence of HOTS based questions on the learning outcomes of Arabic language subjects for class VIII students at MTs Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year.



## 2. Discussion

Based on the statistical results of the Mann Whitney non-parametric test with a significance level (alpha) of 5%, it is known that the results of learning Arabic with HOTS based questions are  $0.001 < 0.05$ , so it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted. These results indicate that there are differences in Arabic learning outcomes between the experimental class which uses HOTS based questions and the control class which uses regular questions. We can see this difference in the average pretest score for the experimental class, which is 26.40, which is smaller than the average posttest score of 42.27, which means there is an increase in Arabic language learning outcomes in the experimental class by 62%. Meanwhile, in the control class, on the other hand, the average pretest result score for the control class was 27.20, which was greater than the average posttest score of 24.40, which means that there was no increase in Arabic language learning outcomes in the control class, but there was a decrease of -11%. Therefore, it can be concluded that HOTS based questions influence the Arabic language learning outcomes of grade 8 students at MTs Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year with an increase of 62%.

The above proves that HOTS questions can influence Arabic learning outcomes. As in Siti Ta'mirul Ummah's research, it is explained that there is an influence of high-level thinking skills on improving and increasing Arabic language learning outcomes.<sup>34</sup> This is also reinforced by the research of Umar Faruq and M. Miftakhul Huda, the use of the HOTS model in Arabic language learning and its evaluation has an effect in improving student learning outcomes in Arabic language subjects.<sup>35</sup>

<sup>34</sup> Ummah, "إعداد كراسة التدريبات لمادة تعليم اللغة العربية باستخدام مهارة عمليات التفكير العليا" (High Order Thinking Skill) لترقية إنجاز العربية لتلاميذ الصف السابع من المدرسة المتوسطة الإسلامية الحكومية ١ سيدوارجوا, 88.

<sup>35</sup> Faruq and Huda, "BAHASA ARAB BERBASIS PENINGKATAN PEMBELAJARAN HOTS ( Higher Order Thinking Skills ) ( Kajian Pembelajaran Bahasa Arab Di Madrasah Aliyah Unggulan Darul ' Ulum Step 2 Kemenag RI )," 18.

By getting used to using HOTS based questions in evaluating Arabic language learning, you can train students to think critically, analytically, evaluatively and creatively, so that ultimately Arabic learning outcomes improve. According to Moch Ali Mustain, who explains that students who are trained to think critically have a positive impact on the speed of learning success.<sup>36</sup> Ujang Bahrul Hidayat also added that the use of HOTS questions can improve students' high-level thinking abilities, so in the end it can improve learning outcomes and the quality of graduates.<sup>37</sup>

Likewise in Arabic subjects, providing HOTS based practice questions will help students' thinking abilities so they can easily master the four Arabic language skills.<sup>38</sup> As explained by Oemar Hamalik, giving practice questions is aimed at developing the ability to think and solve problems faced by a person or society.<sup>39</sup> In line with this, Ujang Bahrul Hidayat stated that HOTS based questions play a role in improving the quality and accountability of learning outcomes assessment and preparing students' competencies in facing the 21st century.<sup>40</sup>

#### D. Conclusion

Based on the results of the analysis and discussion above, the researcher concludes that there is an influence of questions *based on high Order Thinking Skills* (HOTS) on the learning outcomes of Arabic language subjects for class VIII students at MTs Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year, seen from the results of the Mann Whitney non-parametric test with Asymp.Sig. (2-tailed) is  $0.001 < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted.

<sup>36</sup> Mustain, "Pembelajaran Bahasa Arab Berbasis Higher Order Thinking Skills (HOTS)," 379.

<sup>37</sup> Ujang Bahrul Hidayat, *Modul Penyusunan Soal Keterampilan Berpikir Tingkat Tinggi (HOTS) Bahasa Dan Sastra* (Jakarta: Direktorat Pembinaan Sekolah Menengah Atas, 2019), 11-12.

<sup>38</sup> Tika Mardiyah, Umi Machmudah, and Abdul Wahab Rosyidi, "Faáliyah Al-Tadribat 'ala Asas Maharat Al-Taffir Al-Úlya Fi Ta'lim Al-Qiraáh Al-Árabiyyah," *Arabiyatuna : Jurnal Bahasa Arab* 5, no. 2 (2021): 303.

<sup>39</sup> Oemar Hamalik, *Kurikulum Dan Pembelajaran* (Jakarta: PT. Bumi Aksara, 2005), 95.

<sup>40</sup> Hidayat, *Modul Penyusunan Soal Keterampilan Berpikir Tingkat Tinggi (HOTS) Bahasa Dan Sastra*, 11-12.

We can see this in the average value of the experimental class pretest results of 26.40 which is smaller than the average posttest value of 42.27, or an increase of 62%. Meanwhile, in the control class, on the other hand, the average pretest score for the control class was 27.20, which was greater than the average posttest score of 24.40, or a decrease of -11%. Therefore, it can be concluded that HOTS based questions have an influence on students' Arabic learning outcomes in class VIII at MTs Al-Khairiyah Kelapian Banten for the 2022 - 2023 academic year.

## BIBLIOGRAPHY

- Ariyana, Yoki, Ari Pudjiastuti, Reisky Bestary, and Zamroni. *Buku Pegangan Pembelajaran Keterampilan Berpikir Tingkat Tinggi Berbasis Zonasi*. Jakarta: Direktorat Jenderal Guru dan Tenaga Kependidikan Kementerian Pendidikan dan Kebudayaan, 2018.
- Baderiah. *Buku Ajar Pengembangan Kurikulum*. Palopo: Lembaga Penerbit Kampus IAIN Palopo, 2018.
- Darmadi, Ayu Safitri, Anggraeni Dyah Wardani, and Widya Ambar Serly. "Pengaruh Penerapan Soal HOTS Sebagai Bagian Dari Kurikulum 2013 Terhadap Pemahaman Siswa Sekolah Dasar Pada Pembelajaran Matematika." *Jurnal Pendidikan dan Konseling (JPDK)* 4, no. 1 (2022): 29. <https://jpdk.org/index.php/jpdk/article/view/124/91>.
- Fanani, Moh. Zainal. "Strategi Pengembangan Soal HOTS Pada Kurikulum 2013." *Edudeena : Journal of Islamic Religious Education* 2, no. 1 (2018): 58–59. <https://jurnalfaktarbiyah.iainkediri.ac.id/index.php/edudeena/article/view/137>.
- Faruq, Umar, and Mokhammad Miftakhul Huda. "BAHASA ARAB BERBASIS PENINGKATAN PEMBELAJARAN HOTS ( Higher Order Thinking Skills ) ( Kajian Pembelajaran Bahasa Arab Di Madrasah Aliyah Unggulan Darul ' Ulum Step 2 Kemenag RI )." *Jurnal Al-Hikmah* 8, no. 1 (2020): 18. <https://www.jurnal.badrusholeh.ac.id/index.php/Al-Hikmah/article/view/135>.
- Hamalik, Oemar. *Kurikulum Dan Pembelajaran*. Jakarta: PT. Bumi

- Aksara, 2005.
- Hardani. dkk. *Metode Penelitian Kualitatif & Kuantitatif*. Yogyakarta: CV. Pustaka Ilmu Group, 2020.
- Hidayat, Ujang Bahrul. *Modul Penyusunan Soal Keterampilan Berpikir Tingkat Tinggi (HOTS) Bahasa Dan Sastra*. Jakarta: Direktorat Pembinaan Sekolah Menengah Atas, 2019.
- Hidayatullah, Mochammad Shofwan, and Mardiyah. "Studi Komparasi KMA No. 183 Tahun 2019 Dengan KMA No. 165 Tahun 2014 Tentang Pedoman Kurikulum 2013 Materi PAI Dan Bahasa Arab." *CENDEKIA: Jurnal Ilmu Pengetahuan* 2, no. 1 (2022): 21.
- Hikmawati, Sholihatul Atik. "Pendekatan Dan Model-Model Pengembangan Kurikulum Bahasa Arab Pada Madrasah/ Sekolah Di Indonesia." *Muhadasah: Jurnal Pendidikan Bahasa Arab* 1, no. 2 (2019): 217. <https://ejournal.iaiskjmalang.ac.id/index.php/muhad/article/view/97>.
- Mahmudi, Ihwan. *Evaluasi Pendidikan*. Sleman: Lintang Books, 2020.
- Mardiyah, Tika, Umi Machmudah, and Abdul Wahab Rosyidi. "Faáliyah Al-Tadribat 'ala Asas Maharat Al-Tafkir Al-Úlya Fi Ta'lim Al-Qiraáh Al-Árabiyyah." *Arabiyatuna : Jurnal Bahasa Arab* 5, no. 2 (2021): 303.
- Muradi, Ahmad, Faisal Mubarak, Ridha Darmawaty, and Arif Rahman Hakim. "Higher Order Thinking Skills Dalam Kompetensi Dasar Bahasa Arab." *Arabi : Journal of Arabic Studies* 5, no. 2 (2020): 3. <https://journal.imla.or.id/index.php/arabi/article/view/293>.
- Mustain, Moch Ali. "Pembelajaran Bahasa Arab Berbasis Higher Order Thinking Skills (HOTS)." *Prosiding Seminar Nasional Bahasa Arab Mahasiswa III* 3 (2019): 397. <https://prosiding.arabum.com/index.php/semnabama/article/view/397>.
- Neliwati. *Metodologi Penelitian Kuantitatif (Kajian Teori Dan Praktek)*. Medan: CV. Widya Puspita, 2018.
- Ni'mah, Lailatun. "تطوير كراسة التدريبات لتعليم مهارة الكلام المبنية على مهارات التفكير في المدرسة المتوسطة الإسلامية الحكومية ١ باطي HOTS العليا" Universitas Islam Negeri Maulana Malik Ibrahim Malang, 2021. <http://>

etheses.uin-malang.ac.id/30773/.

- Nur Dinni, Husna. "HOTS (High Order Thinking Skills) Dan Kaitannya Dengan Kemampuan Literasi Matematika." *Prisma, Prosiding Seminar Nasional Matematika 1* (2018): 171.
- Nurhawani. "Eksistensi Bahasa Arab Dan Problematika Pembelajarannya Di Era Revolusi Industri 4.0." *Prosiding Seminar Nasional USM 2*, no. 1 (2019): 215.
- Penulis, Tim. *Keputusan Menteri Agama Nomor 183 Tahun 2019 Tentang Kurikulum PAI Dan Bahasa Arab Pada Madrasah*. Jakarta: Direktorat KSKK Madrasah Direktorat Jenderal Pendidikan Islam Kementerian Agama Republik Indonesia, 2019.
- Prihantoro, Wahyu Kholis, and Suyadi Suyadi. "Islamic Education Based on Higher Order Thinking Skills (HOTS) in The Perspective of Neuroscience." *Al-Misbah (Jurnal Islamic Studies)* 9, no. 1 (2021): 5–6.
- Rahmi Nur Fauziah, Indah, Syihabudin Syihabudin, and Asep Sopian. "Analisis Kualitas Tes Bahasa Arab Berbasis Higher Order Thinking Skill (HOTS)." *لساننا (LISANUNA): Jurnal Ilmu Bahasa Arab dan Pembelajarannya* 10, no. 1 (2020): 49.
- Ritonga, Apri Wardana. "Implementasi HOTS Dalam Pembelajaran Bahasa Arab: Peluang Dan Tantangannya Di Era Digital." *Pinba Xiii 2021* (2021).
- Sassi, K. "Peradaban Islam Dan Renaissance Barat: Al-Qur'an Dan Bahasa Kunci Terdepan Ilmu Pengetahuan." *Jurnal AT TAHFIZH* 1, no. 2 (2020).
- Sidik, Priadana M, and Sunarsi Denok. *Metode Penelitian Kuantitatif*. Tangerang: Pascal Books, 2021.
- Sofyan, Fuaddilah Ali. "Implementasi HOTS Pada Kurikulum 2013." *INVENTA* 3, no. 1 (2019): 1.
- Sugiono. *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif Dan R&D*. Bandung: Alfabeta, 2014.
- Suja, Aidillah. "(أهمية دراسة اللغة العربية في فهم معاني القرآن) (دراسة عن الفعل العربي)." *PERADA* 2, no. 2 (2019): 199.
- Ummah, Siti Ta'mirul. "إعداد كراسة التدريبات لمادة تعليم اللغة العربية باستخدام مهارة (High Order Thinking Skill) عمليات التفكير العليا لترقية إنجاز العربية لتلاميذ"

الصف السابع من المدرسة المتوسطة الإسلامية الحكومية ١ سيدوارجوا Universitas Islam Negeri Sunan Ampel Surabaya, 2019. [http://digilib.uinsa.ac.id/35644/2/Siti Ta%27mirul Ummah\\_F12616322.pdf](http://digilib.uinsa.ac.id/35644/2/Siti%20Ta%20mirul%20Ummah_F12616322.pdf).