

## The Effectiveness of “Gamilab” Media Online Games For Arabic Vocabulary Mastery at Junior High School

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### ABSTRACT.

*This study explains the effectiveness of teaching Arabic vocabulary mastery using Gamilab media online games, particularly at the junior high school level. The difficulty students face in learning is due to a lack of supportive facilities, which affects their motivation during lessons. This research employs a quantitative approach, with the experimental method used by the researcher. The experimental design follows the "pretest-posttest one group design." The population of this study consists of 80 students from Mts Muhammadiyah Muallimien Muallimat Jakarta. The sampling method used is purposive sampling, and the sample under investigation includes 25 eighth-grade students from Mts Muhammadiyah Muallimien Muallimat Jakarta, drawn from one class. The validity test results show that 20 (100%) of the pretest and posttest questions are valid. The reliability test, conducted using SPSS 26 with Cronbach's Alpha, yielded a coefficient of 0.733, indicating that the test instrument comprising 20 questions is reliable, as the alpha value exceeds the threshold of 0.70. Regarding difficulty levels, 60% of the questions were categorized as easy, while 40% were considered moderately difficult. In terms of item discrimination, 70% of the questions had a sufficient index, 30% had a good index, and 10% had a poor index. The normality test showed significance values of 0.194 and 0.68, both greater than 0.05, indicating that the data is normally distributed. However, a significance value of 0.43, which is less than 0.05, suggests that the data is not homogeneous. A significance value of 0.000 (less than 0.05) was obtained, further confirming this. The mean scores of the pretest and posttest showed an improvement from 47.40 to 74.00. Thus, it can be concluded that Gamilab media is quite effective in enhancing Arabic vocabulary mastery.*

**Keywords:** Arabic language, vocabulary and learning media

### مستخلص

كان الغرض من هذا البحث هو شرح عن فعالية تعليم إتقان مفردات اللغة العربية باستخدام ألعاب وسائط *Gamilab* على الإنترنت، خاصة في المرحلة ا الثانوية خاصة عن المشكلة تعلم اللغة العربية في المدرسة الثانوية المحمدية معلمين معلمات تبيت جاكرتا. الحاجة إلى اختراقات ابتكارية للتغلب على ذلك حتى يظل الطلاب متحمسين للتعلم. الطريقة التي يستخدمها الباحثون هي الطريقة التجريبية. تم تنفيذ التصميم الذي تم تنفيذه في هذه

التجربة باستخدام تصميم "تصميم المجموعة الواحدة للاختبار القبلي والاختبار البعدي". كان عدد السكان في هذه الدراسة 80 طالبًا من مدرسة محمدية معلمين معلمات جاكرتا. وكان نوع أخذ العينات المستخدم هو أخذ العينات الهادفة. كانت العينة التي تمت دراستها هي 25 طالبًا من طلاب الصف الثامن مدرسة محمدية معلمين معلمات جاكرتا، المكونة من فصل واحد، وتم إعلان صحة نتائج اختبار الصلاحية المكون من 20 سؤالًا (100٪) للاختبار القبلي والبعدي. حصلت نتائج حسابات اختبار الثبات بمساعدة طريقة SPSS 26 على قيمة ألفا كرونباخ، لذلك تم الحصول على التفسير بأن أداة الاختبار على شكل 20 أداة كانت موثوقة لأن قيمة معامل ألفا كانت 0.733 - 0.70. 60% من الأسئلة مستوى سهل في صعوبة التفسير، 40% مستوى متوسط في صعوبة التفسير، 70% من الأسئلة مؤشر كافي، 30% مؤشر جيد، و10% مؤشر ضعيف، ووفقًا لنتائج اختبار قوة التفريق. وكانت الأهمية التي تم الحصول عليها 0.194 و0.68، وهو ما يعني أن اختبار الحالة الطبيعية كان أكبر من 0.05 أو 0.1940.05 و0.680.05. وبالتالي، يمكن أن نستنتج أن البيانات موزعة بشكل طبيعي، وأهمية البيانات هي 0.43، مما يعني أن الأهمية أقل من 0.05. وهذا يدل على أن البيانات غير متجانسة. الأهمية التي تم الحصول عليها هي 0.000، وهي أصغر من 0.05 أو أهمية 0.0000.05. وأظهر متوسط الاختبار القبلي والاختبار البعدي تطوراً قدره 74.00 إلى 47.40. ووصفياً، يظهر أن هناك زيادة. متوسط قيمة درجة N-Gain للطلاب هو 56.4120 أو 56%، وفي هذه الحالة يظهر أنه فعال جداً من نتائج البحث أعلاه، ويظهر أن ارتفاع متوسط قيمة الطلاب مقارنة بما كان عليه قبل استخدام الوسائط في تعلم *Gamilab* لتحسين إتقان اللغة العربية لدى الطلاب. وبالتالي، يمكن أن نستنتج أن وسائل التعلم *Gamilab* فعالة جداً في تحسين إتقان اللغة العربية.

**كلمات أساسية: اللغة العربية والمفردات و وسائط التعلم**

## ABSTRAK

Penelitian ini menjelaskan efektivitas pengajaran penguasaan kosakata bahasa Arab menggunakan *game online* media *Gamilab*, khususnya di tingkat SMP. Kesulitan yang dihadapi siswa dalam belajar adalah karena kurangnya fasilitas pendukung, yang memengaruhi motivasi mereka selama pelajaran. Penelitian ini menggunakan pendekatan kuantitatif, dengan metode eksperimental yang digunakan oleh peneliti. Desain eksperimental mengikuti "desain satu kelompok *pretest-post test*." Populasi penelitian ini terdiri dari 80 mahasiswa dari Mts Muhammadiyah Muallimien Muallimat Jakarta. Metode pengambilan sampel yang digunakan adalah *purposive sampling*, dan sampel yang diteliti meliputi 25 siswa kelas delapan dari Mts Muhammadiyah Muallimien Muallimat Jakarta, yang diambil dari satu kelas. Hasil uji validitas menunjukkan bahwa 20 (100%) soal *pretest* dan *post test*

valid. Uji reliabilitas, yang dilakukan dengan menggunakan SPSS 26 dengan Cronbach's Alpha, menghasilkan koefisien 0,733, menunjukkan bahwa instrumen uji yang terdiri dari 20 pertanyaan dapat diandalkan, karena nilai alfa melebihi ambang batas 0,70. Mengenai tingkat kesulitan, 60% pertanyaan dikategorikan mudah, sedangkan 40% dianggap cukup sulit. Dalam hal diskriminasi item, 70% pertanyaan memiliki indeks yang cukup, 30% memiliki indeks yang baik, dan 10% memiliki indeks yang buruk. Uji normalitas menunjukkan nilai signifikansi 0,194 dan 0,68, keduanya lebih besar dari 0,05, menunjukkan bahwa data didistribusikan normal. Namun, nilai signifikansi 0,43, yang kurang dari 0,05, menunjukkan bahwa data tidak homogen. Nilai signifikansi 0,000 (kurang dari 0,05) diperoleh, yang selanjutnya mengkonfirmasi hal ini. Skor rata-rata *pretest* dan *post test* menunjukkan peningkatan dari 47,40 menjadi 74,00. Dengan demikian, dapat disimpulkan bahwa media Gamilab cukup efektif dalam meningkatkan penguasaan kosakata bahasa Arab.

**Kata kunci:** Bahasa Arab, kosakata dan media pembelajaran

## INTRODUCTION

The use of learning media is marked as an interesting stage in the formation of the latest forms of teaching and learning (PdP) along with the excitement of globalization which encourages the integration of innovation in the world of teaching.(Fahrurrozi, 2014). Development and renewal are seen in the use of learning characterized by 21st Century Learning (PAK21). The integration of computing in teaching must be fully utilized by teachers to attract students' interest and inspiration.(Nasution, 2012). The use of innovation in education and learning produces creative and imaginative teachers in controlling teaching and learning sessions. Different stages can be utilized by teachers to encourage student learning practices.(Tilaar & Hasriyanti, 2019)

*Gamilab* media or what is known as 'gamification' is an illustration of teaching and learning approaches in a period of innovative transformation that is increasingly receiving attention from teachers at every level.(Camelia, 2020). In agreement with Normahdiah (2016), this creative learning strategy can give a positive impression to students and help them in solving difficult problems.(Ristiana & Dahlan, 2021). The use of computerized transfer in the field of dialect teaching as an example has been widely used to see the positive impact on students' integration into their learning world.(Nurjannah et al., 2021). The application of gamification components can generally provide assistance to students from three basic perspectives, namely cognitive, emotional, and social.(Jasni et al., 2019). The role of an educator is not only limited to the aspect of providing learning materials without utilizing learning media to produce effective learning. The creativity of an educator can reflect his ability to convey information to students in a good and planned manner(Ristiana & Dahlan, 2021)

Attractive visual components and the capacity contained in a learning medium can arouse students' curiosity and concentration towards the subject matter.(Lutfina et al., 2023).The sound and image components have also been proven to be able to increase student inspiration, in addition to being able to attract students' attention to be interested in learning activities. Support and encouragement for students who memorize Arabic can be instilled through a curiosity learning methodology with the concept of autonomous and dynamic learning through the use of electronic materials ((Lutfina et al., 2023). The use of gamification components is still considered unused in the world of education because its wide use is as if in the field of trade.(Novita Sari et al., 2023). In addition, this component has been proven to be able to advance learning management at all levels, including being able to equip students with involvement in overcoming educational challenges.(Redy Winatha & Ariningsih, 2020). Agree with(Sumodiningrat, 2007)The diversification component in learning also includes students' different feelings, in addition to empowering students to continue to seek information for self-fulfillment and the fulfillment of their interests.(Jasni et al., 2019).

Learning standards that utilize gamification components can create cognitive and machine talents in students. This can be seen from its ability to provide involvement to students through authority and including difficult circumstances (Kiili, 2014). According to Wilson, Colonge and Henderson (2016) also stated that this strategy is able to provide several options for a resolution plan. Thus, this will encourage students to appreciate and realize their potential. In addition, gamification can increase student inspiration and involve them in healthy competition between students (Papastergiou, 2009). The evaluation of Arabic learning is basically still classified as conventional,the evaluation carried out is still using paper and pencil, this can be seen in school or university exams which focuses on reading, writing, vocabulary, and grammar causes conventional evaluation to be preferred by Arabic teachers in schools, Islamic boarding schools and universities. (Mia et al., 2022)

The main goal of gamification is not just competition, but or perhaps leading to the development of skills through each series of games ((Tersegno & Berlin, 2003).Gamification is also considered as a contemporary teaching and learning media and in line with the current educational revolution. In fact, analysts need to see the importance of gamification in the Arabic dialect learning handle in creating a positive impact on the thinking program from the perspective of student recognition. This is because the incorporation of gamification in teaching has been proven to be able to increase the adequacy and improve the quality of teaching and learning (PdP) handles, as well as increase student achievement and efficiency.(Nurhikmah; et al., 2023). In addition, this is considered appropriate to increase student interest.(Ihsan & Soniatin, 2020).

In addition, the application of gamification in education can also promote competitive training and challenges to achieve a goal (Kitikedizah Hambali & Maimun Aqsha Lubis, 2022). This is because by following the gamification approach in the teaching and learning process, students will be more motivated to always try to get high marks and compete with each other to get the best position on the competition chart. So the implication will encourage healthy competition in learning.

Teachers are key in ensuring that teaching is engaging for students. Survival is intertwined with the educator's capacity to decide on the educational approach that should be applied in educational sessions whether in class or online. The chosen approach should be in line with the learning objectives that have been set so that it can have a positive impact. The method of delivering education, especially teaching Arabic dialects, should be engaging and in line with the students' desires. This makes it easier for students to understand the substance of the learning that is delivered.

Apart from being able to help students master Arabic more effectively (Nur Alaha et. al, 2015) and quality teaching can also be delivered by teachers who strive to apply educational information, especially logical education in formal education. (Baroroh & Rahmawati, 2020). Furthermore, the perspective of Arabic dialect educators' educational strategies must be adjusted to students' needs for dialect skills. However, research conducted by Che Suriani & Siti Aishah (2018) found that the ineffectiveness of Arabic dialect teacher teaching is one of the factors contributing to problems in Arabic dialect learning.

In delivering education, especially foreign moment or dialect education, the use of appropriate and interesting materials is very important. Teaching aids are not only centered on the use of books. This is because research conducted by Muhammad Haron et al. (2018) found that the level of utilization of technology-based educational materials was not supportive. This situation causes the learning environment to become boring and students become less interested in learning remote dialects, especially Arabic.

In this way, teachers should use various teaching aids to create more interesting teaching and learning. Among the teaching aids that will be used are gamification-oriented teaching aids. Therefore, this research was conducted to survey students' understanding of the use of learning media which emphasizes the gamification component in learning and learning Arabic as a third dialect at UiTM.

Previous researchers have conducted many studies on the EFFECTIVENESS OF GAMILAB MEDIA. The first researcher wrote entitled "Progress of Gamification Teaching Materials in Class VIII" this study aims to deliver gamification teaching materials about insights

that are suitable for use and interesting for junior high school students. The second researcher entitled "Gamification of Learning Hijaiyah Letters and Arabic Using Addie Show: Case Example of Mutiara Yogyakarta Preschool Coordinates" this study aims to Gamify Learning Hijaiyah Letters and Arabic Using Addie Show: Reflection on Mutiara Yogyakarta Case Coordinates PAUD. The third study entitled "The Impact of the Taking Outloud Match Issue Understanding (TAPPS) Learning Strategy Utilizing Gamification Teaching Materials on Fathomi Numerical Issue Learning", this study aims to determine the increase in understanding of numerical problems among students who use the learning strategy of considering match problems out loud (TAPPS).

From the three examples of research above, we found similarities about this research. All three conducted research on the influence of the use of Learning Gamification media. The difference is that we will conduct research at Mts Muhammadiyah Muallimien Muallimat Jakarta and the sub-discussion is Arabic which focuses on improving vocabulary.

## **METHODS**

This study uses quantitative research and the method used by the researcher is the experimental method. The design used in this experiment is a "pretest posttest one group design" design. The population in this study were all students of Mts Muhammadiyah Muallimien Muallimat Jakarta totaling 80 students. The type of sampling used was purposive sampling. The sample studied was 25 students of class VIII Mts Muhammadiyah Muallimien Muallimat Jakarta, consisting of 1 class. Data collection techniques are (1) Observation. (2) Test. This test is a written test conducted during the pretest and posttest, conducted to measure how far students understand the Arabic vocabulary material in Arabic lessons before and after the lesson. (3) Documentation. Before the instrument is used, the validity of the criteria is first carried out by conducting a field trial and then an analysis is carried out with the help of the SPSS 26.00 application, where the validity test is carried out with Pearson product moment and the reliability test with Conbarch alpha. The learning outcome data analysis technique includes descriptive data analysis which produces a table of distribution of max, min, mean and standard deviation values, while inferential data analysis produces paired sample t-test data. Before the data is analyzed, a prerequisite analysis test is first carried out including a normality test using the Kolmogorov-Smirnov test and a homogeneity test with the Levens test. The data was analyzed by researchers with the help of the SPSS 26.00 application. As for assessing the average student with the N-Gain effectiveness interpretation category.

## RESULTS AND DISCUSSION

Pretest and posttest data are types of data obtained from measurements before and after an intervention or treatment, usually in the context of research or evaluation of educational programs.(Susilana & Riyana, 2008). By comparing the results of the pretest and posttest, researchers or evaluators can determine how big the impact or effectiveness of the intervention given is.(Asrul et al., 2014). If the posttest results show a significant increase compared to the pretest, it indicates that the intervention was successful in improving the participants' abilities or knowledge.

**Table 1 nilai pre-test dan post-test siswa**

No absence	Pre-test	Post test
Student_01	50	90
Student_02	30	55
Student_03	45	75
Student_04	25	55
Student_05	50	100
Student_06	55	95
Student_07	50	65
Student_08	60	95
Student_09	80	100
Student_10	30	40
Student_11	60	95
Student_12	40	60
Student_13	50	90
Student_14	45	70
Student_15	55	85
Student_16	35	50
Student_17	50	70
Student_18	50	80
Student_19	65	90
Student_20	50	80
Student_21	55	65
Student_22	55	80
Student_23	60	100
Student_24	30	50

Student_25	10	20
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Sumber: EXEL

## Validity test

Validity testing is a procedure used to measure the extent to which an instrument, test, or measuring tool actually measures what it is supposed to measure. (Saputra et al., 2022). In the context of educational research or measurement, validity testing aims to ensure that the measuring instrument is appropriate and accurate in measuring the desired variables or concepts. (Muluki, 2020). Validity as the first characteristic of a good test means the extent to which the test measures what it is supposed to measure. (Saputra et al., 2022).

**Table 2 validitas soal pre-test dan post-test**

No.	Question	Rtable	Rhitung	Information
1		0.05	,008	Valid
2		0.05	,010	Valid
3		0.05	,005	Valid
4		0.05	,008	Valid
5		0.05	,005	Valid
6		0.05	,005	Valid
7		0.05	,041	Valid
8		0.05	,015	Valid
9		0.05	,008	Valid
10		0.05	,023	Valid
11		0.05	,005	Valid
12		0.05	,031	Valid

13	0.05	,009	Valid
14	0.05	,012	Valid
15	0.05	,035	Valid
16	0.05	,003	Valid
16	0.05	,004	Valid
18	0.05	,031	Valid
19	0.05	,031	Valid
20	0.05	,038	Valid

Sumber:SPSS 26

Validity test using SPSS 26 sig (2-tailed) provisions: If  $r_{count} > r_{table}$  and the significance level is 0.05, then the instrument is said to be valid. Based on the table above, it shows that 20 (100%) pretest questions and posttest is declared valid. This is in accordance with Pearson analysis is done by correlating each item score with the total score. The total score is the sum of all items. Question items that are significantly correlated with the total score indicate that the items are able to provide support in revealing what is to be revealed à Valid. If  $r_{count} \geq r_{table}$  (2-sided test with sig. 0.05) then the instrument or question items are significantly correlated with the total score (declared valid)(Tarmizi et al., 2021).

## REABILITY

The reliability test used in this study was by using Coefficient Alpha (Cronbach's Alpha)(Fiska et al., 2021). Reliability in this study is using a composite score reliability test calculated based on strata reliability, each of which is treated as a single subtest.(Fathiyah, 2019). Reliability is calculated for each type of question, then calculated using the stratified alpha formula.(Adela, 2024).

### Table 3 reabilitas

#### Reliability Statistics

Cronbach's Alpha	N of Items
,733	21

Sumber:SPSS 26

According to(Fiska et al., 2021)If the alpha value  $> 0.7$  means sufficient reliability while if  $\alpha > 0.80$  this suggests all items are reliable and all tests consistently have strong reliability. The results of the calculation of the reliability test with the help of SPSS 26 methods obtained the value of Alpha Cronbach, then the interpretation is obtained that the test instrument in the form of 20 instruments isreliable because the alpha value coefficient =  $0.733 > 0.70$ .

## Difficulty Level

Analyzing the level of difficulty of each question means evaluating each question from the perspective of its level of difficulty to identify questions that fall into the easy, medium and difficult categories.(Suzana, 2017). The level of difficulty of the problem details is obtained from the ability or capability of the training participants to answer certain questions as seen from the teacher's perspective in conducting analysis during the question-making process.(Halik et al., 2019). The question has a difficulty index number ranging between 0.00 and 1.00. The difficulty index number is 0.00, with  $p = 0.00$ , meaning that the item is included in the category of the type of problem that is too challenging, because none of the training participants were able to answer the question correctly.(Fitriatun & Sukanti, 2016).On the other hand, if a problem has an item difficulty index with a p value of 1.00, then this part of the problem is included in the category of items that are too complicated to simple, because each training participant has the ability to answer the questions correctly.(Hayes et al., 2017).

**Table 4 tingkat kesukaran**

Question	Category	%
0	Difficult	0%
8	Currently	40%

12	Easy	60%
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Sumber:SPSS 26

According to (Verawati et al., 2023) The analysis of the level of difficulty is intended to determine whether the question is easy or difficult. The level of difficulty is a number that indicates how difficult or easy a question is. If a question gets 0.00-0.30 it is in the difficult category, if a question gets 0.31-0.70 it will get a medium category and if a question gets a score of 0.71-1.00 it will get an easy category. So from the table above it can be concluded that 60% of questions have an easy level of difficulty interpretation, 40% have a medium level of difficulty interpretation, and none have a difficult level of difficulty interpretation, according to the results of the difficulty level test above.

### Distinguishing power

One of the goals of item discrimination analysis is to determine whether a question item can differentiate high-ability training participants from low-ability training participants. (Wulandari et al., 2022). The discriminatory power of a question item is defined as the ability of a question item to differentiate groups in the measured aspect based on the differences that exist within the group. (Supriadi, 2011).

**Table 5 daya pembeda**

Question	Category	%
0	Very good	0%
14	Good	70%
6	Enough	30%
0	Bad	0%

Sumber:SPSS 26

According to (Hidayati & Nisa', 2023) The discriminating power of a question is the ability of a question to distinguish between students with high ability and students with low ability. If the index is 0.00-0.20 it can be categorized as bad, 0.21-0.40 can be categorized as sufficient, 0.41-0.60 can be categorized as good, 0.7-1.00 can be categorized as very good. So from the table

above it can be seen that 70% of questions have a sufficient index, 30% have a good index, and 10% have a poor index, according to the results of the discriminating power tested. With Thus, it can be said that the crossword questions on the Maharah Kitabah Arabic language show a better level of student ability than students who are lacking.

## Normality Test

The Normality Test is a test carried out with the aim of assessing the distribution of data in a group of data or variables, whether the data distribution is normally distributed or not. (Sumodiningrat, 2007). Normality Test is useful to determine the data that has been collected is normally distributed or taken from a normal population. The classic method in testing the normality of data is not so complicated. Using Shapiro-Wilk statistics to assess whether the data is normally distributed.

**Table 6 normalitas**

Shapiro_wilk	Sig
Pre-test	0.194
Post-test	0.68

Sumber: SPSS 26

According to (Statistics, 2018) Shapiro Wilk Test is a normality test method used to determine whether data is normally distributed or not. If the p value  $> 0.05$ , then the data can be considered normally distributed. If the p value  $< 0.05$ , then the data is not normally distributed. Based on the table above, the significance of 0.194 and 0.68 is obtained, which means that the normality test is greater than 0.05 or  $0.194 > 0.05$  and  $0.68 > 0.05$ . Thus, it can be concluded that the data is normally distributed and can be used for further data testing.

## Homogeneous test

The homogeneity test is a statistical testing method used to determine whether two or more samples from different populations have the same distribution of variance or characteristics. (Кондратенко et al., 2020). homogeneity test is conducted to determine whether the variation of data in several groups is the same or not. This is very important in

statistical analysis, especially in hypothesis testing such as the independent t-test and analysis of variance (ANOVA).

**Table 7 homogenitas**

Test of Homogeneity of Variances	
Based on Mean	0.43
Based on Median	0.660
Based on Median and with adjusted df	0.669
Based on trimmed mean	0.57

Sumber:SPSS 26

The homogeneity test is used as a reference material to determine the next statistical test decision. According to (Кондратенко et al., 2020) the basis or guideline for decision making in homogeneity testing is

1. If the significance value or Sig. < 0.05, then it is said that the variance of two or more groups of data population is not the same (not homogeneous).

2. If the significance value or Sig. > 0.05 then it is said that the variance of two or more groups of data population is the same (homogeneous). Based on the homogeneity test table above, the significance data obtained is 0.43, which means the significance is less than 0.05. This shows that the data is not homogeneous.

## T Test

The test falls into the category of parametric statistical tests, which means that it requires certain assumptions about the data, such as the data must be normally distributed. The T-test is used to determine whether there is a significant difference between the means of two groups of data. (Mustafidah et al., 2020). It is very useful in research to compare treatment effects, population differences, etc. Paired Sample T Test Used to test the difference between two related data groups, such as before and after treatment on the same subjects. (Montolalu & Langi, 2018).

**Table 8 T Test**

Paired samples test	
Sig(2-tailed)	0,000

Mean pre-test	47.40
Mean post-test	74.00

Sumber:SPSS 26

According to (Priadi et al., 2021) The paired sample t test is part of a comparative hypothesis test or comparison test. The data used in the paired sample t test is generally interval or ratio scale data (quantitative data). Based on the table above, the significance obtained is 0.000 which is smaller than 0.05 or the significance is  $0.000 < 0.05$ . And the mean pre-test and post-test show a development of  $74.00 > 47.40$ . Descriptively, it shows an increase.

## N-Gain

The N-Gain test, or Normalized Gain, is an analysis method used to assess the effectiveness of a method or treatment in improving student learning outcomes. (Priadi et al., 2021). The N-Gain test aims to determine the extent to which a method or treatment can improve student learning outcomes. This is done by measuring the relative change between the level of understanding before and after a learning. (Wahab et al., 2021).

**Table 9 N-Gain**

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Ngainscore	25	,06	1.00	,5641	,28791
Gainpersen	25	5.56	100.00	56,4120	28.79126
Valid N (listwise)	25				

Sumber:SPSS 26

Based on the data output in Table. Descriptive N-Gain Score above shows that the average value of N-Gain score in students is 56.4120 or 56% in this case indicating that it is quite effective.

So it can be concluded that The data is normally distributed, the significance data obtained is 0.43, which means the significance is less than 0.05. This shows that the data is not homogeneous. (This is in accordance with research (Кондратенко et al., 2020) that

homogeneity if the significance value or  $\text{Sig.} < 0.05$ , then it is said that the variance of two or more groups of data population is not the same (not homogeneous). In addition, a significance of 0.000 is obtained which is smaller than 0.05 or a significance of 0.0000.05. And the mean pre-test and post-test showed a development of 74.00 47.40. Descriptively, it shows an increase. the average value of the N-Gain score in students is 56.4120 or 56% in this case indicating that it is quite effective. (This is in accordance with research that the effectiveness of the mean post-test has developed significantly compared to the mean pre-test.) From the results of the study above, it shows that the average value of students increased compared to before using gamilab learning media on improving students' Arabic vocabulary. Thus, it can be concluded that gamilab learning media is quite effective in improving Arabic vocabulary. This is confirmed by research that has been conducted by (Priadi et al., 2021) that a media is quite effective if it has 56% ngain percent.

## CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that this research is an experimental research that aims to determine the effect of gamilab learning media on improving students' Arabic vocabulary. To determine the effect of gamilab learning media by comparing the results of the pretest and posttest conducted before and after using gamilab learning media. Before being taught, a pre-test was given with the aim of determining the initial abilities of each student in each class. After conducting the pre-test, teaching was carried out using gamilab learning media. After that, students were given a post-test aimed at determining the final abilities of students after being given a lesson.

To determine the effect of the application of gamilab learning media treatment using data analysis. Pre-test and post-test questions have been tested for validity with the results of 20 questions  $r_{hitung} < r_{table}$ . The researcher also tested the reliability with the results of 0,733 > 0.7 which means reliable. After that the examiner tested the level of difficulty and discriminatory power with the results of the discriminatory power there were 70% of questions having a sufficient index, 30% had a good index, and 10% had a poor index. And the level of difficulty of 60% of questions had an interpretation of an easy level of difficulty, 40% had an interpretation of a moderate level of difficulty and none with an interpretation of a difficult level of difficulty. After that the researcher tested the normality and homogeneity. normality with the results of the data obtained a significance of 0.194 and 0.68 which means that the normality test is greater than 0.05 or  $0.194 > 0.05$  and  $0.68 > 0.05$ . Thus it can be concluded that the data is normally distributed. And homogeneity obtained significance of 0.43 which means the significance is less than 0.05. This shows that the data is not homogeneous.

After being homogeneous and normal, the researcher tested the effectiveness of the crossword method with the paired sample t test and the n gain test with the results Based on the table above, a significance of 0.000 is obtained which is less than 0.05 or a significance of  $0.000 < 0.05$ . The existence of an influence is indicated if the significance is  $< 0.05$ . And the n gain test of the experimental class is - The gain score for students is 56.4120 or 56% in this case indicating that it is quite effective. From the results of the study above, it shows that the average value of students increased compared to before using the gamilab learning media on improving students' Arabic vocabulary. Thus, it can be concluded that the gamilab learning media is quite effective in improving Arabic vocabulary.

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