

Cooperative Learning Based on Word-Matching Game to Enhance Mastery of Arabic Vocabulary for Eighth-Grade MTs Students

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Abstract

The research addresses the necessity for developing and implementing more effective learning methods and media to enhance the mastery of Arabic vocabulary among school students. The research aims to apply and evaluate the effectiveness of cooperative learning through the word-matching game technique to enhance the mastery of Arabic vocabulary among grade VIII students. This research used a quantitative approach with a quasi-experimental design, specifically a non-equivalent control group design. The research sample consisted of two VIII classes in MTs Negeri 1 Bandung City, namely the control class (VIII B) and the experimental class (VIII E), each totaling 30 students. Data were collected through observations, interviews, and tests to measure the enhancement of Arabic vocabulary mastery. The results showed that cooperative learning with word-matching game technique significantly enhanced students' vocabulary mastery compared to the conventional method. The experimental class showed significant enhancement with a normalized gain score of 56.55%, categorized as quite effective. In comparison, the control class only obtained a score of 30.50%, which is classified as ineffective. The scientific contribution of this research is to provide empirical evidence regarding the effectiveness of game-based cooperative learning in enhancing Arabic vocabulary acquisition at the junior high school level. This research also enriches the literature on innovative learning methods in language education, especially Arabic. Future research suggests further studies exploring the application of this word-matching game technique at different educational levels and contexts and examining the long-term effects of using this technique. In addition, further research can consider other factors that can affect learning success, such as student motivation, parental involvement, and technological support in the learning process.

Keywords: Arabic Vocabulary Mastery, Cooperative Learning, Word-Matching Game

ملخص

يتناول البحث ضرورة تطوير وتطبيق أساليب ووسائل تعلم أكثر فاعلية لتعزيز إتقان مفردات لدى طلبة المدارس. يهدف البحث إلى تطبيق وتقييم فاعلية التعلم التعاوني من خلال تقنية لعبة مطابقة الكلمات لتعزيز إتقان مفردات لدى طلاب الصف الثامن. استخدم هذا البحث نهجاً كمياً بتصميم شبه تجريبي، وتحديدًا تصميم مجموعة تحكم غير مكافئ. تألفت عينة البحث من فصلين ثامنين في مدرسة تساناوية نيجيري ١ مدينة باندونغ، وهما فئة التحكم (الثامن B) والفصل التجريبي (الثامن E)، يبلغ إجمالي كل منهما ٣٠ طالباً. تم جمع البيانات من خلال الملاحظات والمقابلات والاختبارات لقياس تعزيز إتقان المفردات. أظهرت النتائج أن التعلم التعاوني مع تقنية لعبة مطابقة الكلمات عزز بشكل كبير إتقان مفردات الطلاب مقارنة بالطريقة التقليدية. أظهرت الفئة التجريبية تحسناً كبيراً مع درجة ربح طبيعية تبلغ ٥٦,٥٥٪، مصنفة على أنها فعالة تماماً. وبالمقارنة، حصلت فئة التحكم فقط على درجة ٣٠,٥٠٪، والتي يتم تصنيفها على أنها غير فعالة. تتمثل المساهمة العلمية لهذا البحث في تقديم أدلة تجريبية فيما يتعلق بفعالية التعلم التعاوني القائم على الألعاب في تعزيز اكتساب المفردات على مستوى المدرسة الإعدادية. يثري هذا

البحث أيضًا الأدبيات حول طرق التعلم المبتكرة في تعليم اللغة، وخاصة اللغة العربية. تقترح الأبحاث المستقبلية مزيدًا من الدراسات لاستكشاف تطبيق تقنية لعبة مطابقة الكلمات هذه على المستويات والسياقات التعليمية المختلفة وفحص الآثار طويلة المدى لاستخدام هذه التقنية. بالإضافة إلى ذلك، يمكن لمزيد من البحث أن يأخذ في الاعتبار العوامل الأخرى التي يمكن أن تؤثر على نجاح التعلم، مثل تحفيز الطلاب، ومشاركة الوالدين، والدعم التكنولوجي في عملية التعلم.

الكلمات المفتاحية: إتقان المفردات، التعلم التعاوني، لعبة مطابقة المفردات

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Introduction

In the process of learning Arabic, there are several aspects of knowledge, such as speaking in Arabic (*Mahārat al-Kalām*), reading Arabic writing (*Mahārat al-Qirā'ah*), listening to conversations in Arabic (*Mahārat al-Istimā'*), and writing Arabic writing (*Mahārat al-Kitābah*). One of the main challenges in learning Arabic is vocabulary acquisition, which is an essential basis for developing all four skills.¹ However, many students experience difficulties in mastering Arabic vocabulary, which ultimately affects their ability to master Arabic.² Vocabulary mastery is a very important language skill in learning foreign languages, including Arabic, because language is inseparable from vocabulary.³

Interest in learning Arabic still needs to be increased among the community, especially school students. Many students think that learning Arabic is difficult.⁴ Starting from this assumption makes most students less motivated to learn Arabic. The main task of an Arabic teacher here is to eliminate this perception by implementing fun Arabic learning. This learning process occurs in a familiar, relaxed, and non-stressful atmosphere.⁵ This can be done through approaches in the learning process, methods used in the classroom, educational techniques, and media provided as supporting tools in the learning process.⁶

¹ Khoirul Faizin, "Permainan 'ABC 5 Dasar untuk Meningkatkan Penguasaan Kosa Kata Bahasa Arab,'" *Muróbbi: Jurnal Ilmu Pendidikan* 4, no. 1 (2020): 43–56. DOI: <https://doi.org/10.52431/murobbi.v4i1.234>

² Annisa Hanin Larenzi et al., "Development of Quizlet Platform-Based Learning Media for Middle School Students' Understanding of Arabic Vocabulary," *Mantiqu Tayr: Journal of Arabic Language* 4, no. 2 (2024): 382–402. DOI: <https://doi.org/10.25217/mantiquatayr.v4i2.4256>

³ Hanifah Nur Azizah, "Peningkatan Penguasaan Kosakata Bahasa Arab Melalui Penggunaan Media Word Wall," *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, dan Budaya Arab* 1, no. 1 (2020): 1–16. DOI: <https://doi.org/10.17509/alsuniyat.v1i1.24212>

⁴ Ahmad Arifin, "Peranan Permainan Bahasa dalam Proses Kegiatan Belajar Mengajar Mata Pelajaran Bahasa Arab," *An Nabighoh Jurnal Pendidikan dan Pembelajaran Bahasa Arab* 19, no. 2 (2017): 302. DOI: <https://doi.org/10.32332/an-nabighoh.v19i2.1005>

⁵ Umi Hanifah, "Fun Arabic Learning through Songs Media," *Tanwir Arabiyyah: Arabic As Foreign Language Journal* 1, no. 2 (2021): 73–82. DOI: <https://doi.org/10.31869/afli.v1i2.2873>

⁶ Ahmad Nahidl Silmy et al., "Urgensi Metode Belajar dalam Pembelajaran Bahasa Arab (Bagi Penutur Non-Arab)," *Mantiqu Tayr: Journal of Arabic Language* 4, no. 2 (2024): 368–81. DOI: <https://doi.org/10.25217/mantiquatayr.v4i2.4423>

One of the efforts to realize a comfortable and pleasant learning atmosphere is by applying games to learning. Many variations of learning models accompanied by language educational games can be used to learn Arabic, especially in learning Arabic vocabulary because Arabic vocabulary is the primary key for someone learning Arabic. The more Arabic vocabulary we have, the more likely we are to be skilled in Arabic. The amount of Arabic vocabulary students master greatly determines the level of success in mastering the subject matter as a whole.⁷ According to the findings of research conducted by Ahyar, there is a significant relationship between mastery of Arabic vocabulary and *qawā'id* with Arabic writing skills. This shows the importance of mastering Arabic vocabulary to learn and master Arabic language skills.⁸ The difficulties experienced by students in mastering Arabic vocabulary are often caused by monotonous and less varied learning, such as the lecture or drill method, where the teacher only mentions and repeats Arabic vocabulary without any interesting and interactive variations.⁹ As a result, students feel bored and easily forget the newly learned Arabic vocabulary. A teacher must be able to implement interesting and fun learning to overcome these problems.

Based on observations at MTs Negeri 1 Kota Bandung in March 2024, it was found that a teacher-centered approach still dominates the learning process of Arabic vocabulary. Students tend to be passive listeners and less actively involved in learning.¹⁰ The learning media is limited to books and blackboards, making learning monotonous. Some students look less focused during learning, and some chat and even play on cell phones. As a result, many students feel bored and have difficulty remembering the vocabulary taught.¹¹ In interviews, students admitted that they often forget the vocabulary they have learned and only memorize it during exams.¹² Therefore, an innovative and fun approach is needed to enhance students' mastery of Arabic vocabulary.¹³

Reflecting on the above reality, using a game-based cooperative learning model to learn Arabic vocabulary can be an interesting solution.¹⁴ Cooperative learning is recognized as a great approach to teaching.¹⁵ Cooperative learning is a learning model in which students work in small groups to

⁷ Agus Wahyudi, *Aku Cinta Bahasa Arab Untuk Kelas IV Madrasah Ibtidaiyah*, (Solo: Tiga Serangkai Pustaka Mandiri, 2017), hlm. 9.

⁸ Haerul Ahyar, "Penguasaan Mufradāt dan Qawā'id sebagai Upaya Meningkatkan Keterampilan Menulis Bahasa Arab," *Al Mahāra: Jurnal Pendidikan Bahasa Arab* 4, no. 2 (2018): 259–74. DOI: <https://doi.org/10.14421/almahara.2018.042-06>

⁹ Ahmad Ismail, Nurul Huda, and Fathul Diana Izzah, "Pembelajaran Kooperatif Berbasis Permainan Domikara (Domino Kosakata Bahasa Arab) untuk Meningkatkan Penguasaan Mufradāt Siswa Kelas VIII MTs Negeri 4 Sleman," *EduLab: Majalah Ilmiah Laboratorium Pendidikan* 5, no. 2 (2021): 197–220. DOI: <https://doi.org/10.14421/edulab.2020.52-07>

¹⁰ Maman Abdurrahman, "Penerapan Strategi Cooperative Learning dalam Meningkatkan Kemampuan Nahwu Mahasiswa," *Jurnal Pendidikan dan Pembelajaran (JPP)* 21, no. 2 (2014): 215–226. <https://www.e-jurnal.com/2017/03/penerapan-strategi-cooperative-learning.html>

¹¹ Nila Nofrita Hayati dan Syahrul Syahrul, "The Development of Matching Game as Media to Teach Vocabulary for Elementary School Students," *EduBasic Journal: Jurnal Pendidikan Dasar* 3, no. 2 (2021): 97–106. DOI: <https://doi.org/10.17509/ebj.v3i2.32630>

¹² Interview with Izkariema Aqeela Hasna (Student of Class VIII D at MTs Negeri 1 Bandung, Bandung), Wednesday, March 27, 2024, at 11.00 WIB.

¹³ Robithah Aulia, Hikmah Maulani, and Tatang, "Motivasi Penghafal Alquran Mempelajari Bahasa Arab sebagai Pendukung Kesuksesan Pembelajaran Bahasa Arab," *Jurnal Naskhi: Jurnal Kajian Pendidikan dan Bahasa Arab* 5, no. 1 (2023): 34–42. DOI: <https://doi.org/10.47435/naskhi.v5i1.1434>

¹⁴ Rofiatul Azizah, "Permainan Teka Teki Silang dalam Pembelajaran Bahasa Arab untuk Meningkatkan Maharah Kitabah," *Tatsqifiy: Jurnal Pendidikan Bahasa Arab* 3, no. 2 (2022): 116–124. DOI: <https://doi.org/10.30997/tipba.v3i2.6119>

¹⁵ Tiodora Fermiska Silalahi and Ahmad Fakhri Hutaeruk, "The Application of Cooperative Learning Model during Online Learning in the Pandemic Period," *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences* 3, no. 3 (2020): 1683–1691. DOI: <https://doi.org/10.33258/birci.v3i3.1100>

motivate and help each other to optimally achieve learning objectives.¹⁶ In cooperative learning, there is positive interaction among group members and cooperation, and all group members are responsible for advancing their group.¹⁷ The application of game techniques in learning Arabic can encourage student activeness.¹⁸ One of the educational game techniques that has the potential to enhance students' mastery of Arabic vocabulary is a word-matching game. A word-matching game is often used in vocabulary learning, where students will guess and match words with their corresponding pairs of word meanings, synonyms, antonyms, or definitions through a fun and interactive activity.¹⁹ Cooperative learning based on word-matching games is motivated by the existence of learning strategies that provide opportunities for students to actively learn by changing the teacher-centered learning method to student-centered.

From the results of preliminary studies and discussions with one of the Arabic language teachers at MTs Negeri 1 Bandung City, a solution was found that is considered appropriate to enhance students' mastery of Arabic vocabulary, namely by applying a word-matching game-based cooperative learning model in learning Arabic vocabulary. This technique will use a game board and clue cards containing Arabic vocabulary and its meaning, where students work in groups to appropriately match the questions and answers on the game board. This technique certainly involves the active role of students in realizing fun learning.²⁰ This research aims to implement and evaluate the effectiveness of cooperative learning based on word-matching games in enhancing the mastery of Arabic vocabulary of class VIII students at MTs Negeri 1 Bandung City. The novelty of this research lies in combining the cooperative learning with the word-matching game technique, which has not been widely explored in Arabic vocabulary learning, especially at the junior high school level.

This research focuses not only on enhancing vocabulary mastery but also on enhancing students' learning motivation. This research uses a quasi-experimental design by comparing the effectiveness of cooperative learning based on word-matching games with conventional methods. Some previous studies have shown that cooperative learning based on educational game techniques can enhance students' vocabulary acquisition and learning motivation. From previous research, Ismail et al. found that cooperative learning based on the domikara game (Arabic Vocabulary Dominoes) can be applied as an alternative solution in enhancing the mastery of Arabic vocabulary of 8th-grade students of MTs Negeri 4 Sleman.²¹ Suantini et al.'s research shows that the application of cooperative learning models with Wheel of Fortune game techniques can enhance the

¹⁶ Murdani et al., "Use of Cooperative Learning Methods STAD Strategies to Improve Students' Abilities in *Qira'ah* (Experimental Research in Ma'had al-Uluum Ad-Diniyyati al-Islaamiyyati Samalanga)," Budapest International Research and Critics in Linguistics and Education (BirLE) Journal 2, no. 1 (2019): 38–49. DOI: <https://doi.org/10.33258/birle.v2i1.184>

¹⁷ Zubaidah Amir et al., "The Increasing of Math Adversity Quotient in Mathematics Cooperative Learning Through Metacognitive," International Journal of Instruction 14, no. 4 (2021): 841–56. DOI: <https://doi.org/10.29333/iji.2021.14448a>

¹⁸ Mohamad Yahya Ashari and Rifatul Mahfudhoh, "The Strategy of Arabic Learning for Inclusion Students in Islamic Primay School of Islamiyah Wathoniyah Jombang," Mantiq Tayr: Journal of Arabic Language 1, no. 2 (2021): 83–100. DOI: <https://doi.org/10.25217/mantiqtayr.v1i2.1567>

¹⁹ Baiq Dewi Muhimmah, "Penerapan Teknik Word Matching Game untuk Meningkatkan Penguasaan Vocabulary Peserta Didik pada Materi Narrative Text Kelas IX D SMP Negeri 3 Praya," Teaching: Jurnal Inovasi Keguruan dan Ilmu Pendidikan 3, no. 1 (2023): 24–30. DOI: <https://doi.org/10.51878/teaching.v3i1.2164>

²⁰ Nur Lailatus Sa'adah, "The Effectiveness of Words Matching Game on Students' Vocabulary at The Seventh Grade of MTs NU Miftahul Ma'arif Kaluwungu," (Thesis, Institut Agama Islam Negeri Kudus, 2023). <http://repository.iainkudus.ac.id/id/eprint/10019>

²¹ Ahmad Ismail, Nurul Huda, and Fathul Diana Izzah, "Pembelajaran Kooperatif Berbasis Permainan Domikara (Domino Kosakata Bahasa Arab) untuk Meningkatkan Penguasaan Mufradat Siswa Kelas VIII MTs Negeri 4 Sleman," Edulab: Majalah Ilmiah Laboratorium Pendidikan 5, no. 2 (2021): 197–220. DOI: <https://doi.org/10.14421/edulab.2020.52-07>

mastery of Japanese vocabulary of students in class XI IBBU SMA Negeri 1 Busungbiu. Students feel the benefits of applying cooperative learning models with Wheel of Fortune game techniques in learning Japanese vocabulary, learning becomes fun and vocabulary mastery becomes better.²²

Speaking of the effectiveness of the cooperative learning model, the author tries to provide an overview of how the learning model has a good effect on the learning process based on several research results. One is Fajriyani's research, which concluded that the cooperative learning model with Flipchart media type Course Review Horay is effective enough to increase students' motivation to learn Arabic.²³ Furthermore, Asiyah's research showed an effect of the Teams Games Tournament cooperative learning model using the Giant Board Game on Arabic learning outcomes for class VIII students at Al-Ghurabaa Junior High School Jakarta.²⁴

In reviewing the effectiveness of the matching game technique, Mayekti and Bestari's research on the effect of matching games on learning speaking skills shows that matching games can be an effective strategy for teaching speaking skills. It can help students to practice speaking skills quickly and effectively.²⁵ Then, the research of Yuliarsih et al. Regarding teaching reading comprehension at MTs Matsaratul Huda Pamekasan using matching games, the results show that matching games positively affect students' ability to read English text skills.²⁶ Furthermore, Fuadi et al.'s research, in their article on the use of *nahwu* matching games in teaching *isim isyārah*, the results of his research show that this game has cognitive advantages that help students remember the material and this game runs well and is interesting, as evidenced by the positive response from students.²⁷ In reviewing the effectiveness of word-matching game techniques in enhancing vocabulary mastery, Rachmawati's research results show that the use of word-matching games is effective in enhancing students' mastery of English vocabulary.²⁸ Maulana's research results also show that using word-matching game techniques in the learning process can enhance mastery of Japanese vocabulary.²⁹

Based on the literature review above, the position of this research is different from that of previous studies. This research combines cooperative learning with a matching game technique. This approach has yet to be explored in the context of Arabic vocabulary learning in junior high school. This research focuses explicitly on Arabic vocabulary acquisition, an essential foundation for

²² Ni Putu Suantini, Gede Satya Hermawan, and I Wayan Sadyana, "Penerapan Kooperatif Teknik Permainan Roda Keberuntungan (Wheel of Fortune) untuk Meningkatkan Penguasaan Kosakata Bahasa Jepang," *Jurnal Pendidikan Bahasa Jepang Undiksha* 2, no. 2 (2016): 1-10. DOI: <https://doi.org/10.23887/jpbj.v2i2.7852>

²³ Riyan Fajriyani, "Eksperimen Penerapan Media Flipchart Dan Model Pembelajaran Kooperatif Tipe Course Review Horay Terhadap Motivasi Belajar Siswa dalam Pembelajaran Bahasa Arab di Kelas IV MI Ma'arif Giriloyo 2 Tahun Ajaran 2018/2019," (Skripsi, UIN Sunan Kalijaga Yogyakarta, 2019). <http://digilib.uin-suka.ac.id/id/eprint/37310>

²⁴ Siti Syara Asiyah, "Pengaruh Model Pembelajaran Kooperatif Teams Games Tournament dengan Media Giant Board Game Terhadap Hasil Belajar Bahasa Arab (Penelitian Eksperimen di Kelas 8 SMP Al-Ghurabaa Jakarta)," (Skripsi, Universitas Negeri Jakarta, 2023). <http://repository.unj.ac.id/eprint/42703>

²⁵ Meilina Haris Mayekti and Ade Christanty Yudha Bestari, "The Effect of Matching Games for Teaching Speaking Skills," *Economics, Social and Humanities Journal (Esochum)* 1, no. 2 (2022): 56–66. <https://jurnal.unupurwokerto.ac.id/index.php/esochum>

²⁶ Yuliarsih and Evha Nazalatus Sa'adiyah, "Matching Game in Teaching Reading Comprehension at MTs Matsaratul Huda Pamekasan," *INTERAKSI: Jurnal Kependidikan* 13, no. 2 (2018): 137–143. http://ejournal.unira.ac.id/index.php/jurnal_interaksi/article/view/501/414

²⁷ Abdul Hafizh Nur Fuadi et al., "Penerapan Permainan Nahwu Matching dalam Pembelajaran Isim Isyārah," *Al Mi'yar: Jurnal Ilmiah Pembelajaran Bahasa Arab dan Kebahasaaraban* 7, no. 1 (2024): 501. DOI: <https://doi.org/10.35931/am.v7i1.2452>

²⁸ Risya Julia Rachmawati, "The Effectiveness of Using Word Matching Games on Students' Vocabulary (A Quasi-Experimental Study at the Eight Grade of MTsN 1 South Tangerang in Academic Year 2019/2020)," (Skripsi, FITK UIN Syarif Hidayatullah Jakarta, 2019). <http://repository.uinik.ac.id/dspace/handle/123456789/49602>

²⁹ Fatha Maulana, "Penggunaan Teknik Permainan Mencocokkan Kata dan Gambar untuk Meningkatkan Penguasaan Kosakata Bahasa Jepang," (Skripsi, Universitas Negeri Jakarta, 2021). <http://repository.unj.ac.id/eprint/19499>

developing other language skills.³⁰ The research used a quasi-experimental design with control and experimental groups to evaluate its effectiveness in enhancing students' Arabic vocabulary acquisition. The literature review shows that this research makes practical and theoretical contributions to language education. This research offers a learning model that can be widely implemented to enhance Arabic vocabulary acquisition. Theoretically, this research adds to the literature regarding the effectiveness of game-based cooperative learning. The focus of this research is to find out whether cooperative learning based on word-matching games can significantly change the level of students' Arabic vocabulary mastery. The research questions were: Can cooperative learning based on word-matching games enhance students' mastery of Arabic vocabulary in class VIII MTs Negeri 1 Bandung City? The hypothesis tested is that using a cooperative learning model based on a word-matching game will significantly enhance students' mastery of Arabic vocabulary compared to the conventional method.

Thus, this research is expected to help students of grade VIII MTs Negeri 1 Kota Bandung enhance their mastery of Arabic vocabulary from the material taught, make students more active in learning, and eliminate the perception that learning Arabic vocabulary is boring and saturating.³¹ This research is also expected to make a new contribution to Arabic vocabulary learning and become a reference for educational practitioners who want to design learning strategies that are more optimal and fun. Implementing a cooperative learning model based on a word-matching game is expected to create a more interactive learning atmosphere and motivate students to be more active in learning Arabic, especially in learning Arabic vocabulary, so that the learning objectives of Arabic can be achieved more effectively.³²

Method

This research uses quantitative quasi-experimental research. Quasi-experimental research tests and proves hypotheses about the presence or absence of the effect of treatment compared to other treatments by controlling the variables by existing conditions.³³ The reason the researchers used the quasi-experimental research method is first because the research sample was taken through a purposive sampling technique, namely the selection of samples not randomly and has a purpose, and second because this research aims to find out the effect of cooperative learning through word-matching games with Arabic vocabulary learning in experimental and control classes.

The type of research design used in this research is a pre-test, post-test, non-equivalent control group design. This design requires two sample groups: the control and experimental groups. The control group is not given any treatment and uses conventional methods, while the experimental group is given treatment through cooperative learning based on a word-matching game. Both classes will be given a test before the learning begins and another after the treatment on Arabic vocabulary learning is completed. This type of design is the most commonly used design in educational

³⁰ Hunaidu and Mahlani Sabae, "Pengaruh Penguasaan Kosakata Bahasa Arab Terhadap Kemampuan Berbahasa Arab Siswa Pondok Darul Arqam Muhammadiyah Punnia Pinrang," *Al-Maraji: Jurnal Pendidikan Bahasa Arab* 3, no. 1 (2019): 75–92. <https://journal.unismuh.ac.id/index.php/al-maraji/article/view/3653/2655>

³¹ Thityn Ayu Nengrum and Muh. Arif, "Efektivitas Media Pembelajaran dalam Penguasaan Kosa Kata Bahasa Arab," *Ajamiy: Jurnal Bahasa dan Sastra Arab* 9, no. 1 (2020): 14. DOI: <https://doi.org/10.31314/ajamiy.9.1.1-15.2020>

³² Umar Manshur, "The Importance of Teaching Aids and Their Impact on the Teaching of the Arabic Language" *IJ-ATL (International Journal of Arabic Teaching and Learning)* 1, no. 1 (2018): 1–14. DOI: <https://doi.org/10.33650/ijat.v1i2.280>

³³ Muhammad Galang Isnawan, *Kuasi Eksperimen*, ed. Sudirman, 1st ed., (Lombok: Nashir Al-Kutub Indonesia, 2020), hlm. 6.

research.³⁴ This research aims to understand the differences that occur before and after treatment. This research assesses students' mastery of Arabic vocabulary before and after using cooperative learning based on word-matching games. The research design used in this research is as follows:³⁵

Table 1. Research Design

Group	<i>Pre-test</i>	<i>Treatment</i>	<i>Post-test</i>
Experiment	O ₁	X ₁	O ₂
Control	O ₃	X ₂	O ₄

Description:

- O₁ : Experimental group pre-test
- O₂ : Post-test of the experimental group
- X₁ : Arabic vocabulary learning using word-matching game technique
- X₂ : Arabic vocabulary learning using a conventional technique
- O₃ : Control group pre-test
- O₄ : Post-test of control group

Based on Table 1, it is found that this research used an experimental design with two groups: the experimental group and the control group. The experimental group received Arabic vocabulary learning treatment using a word-matching game technique, while the control group used a conventional learning technique.³⁶ The research results were measured through pre-test and post-test in both groups to compare their effectiveness on students' Arabic vocabulary mastery. The population in this research were VIII grade students of MTs Negeri 1 Bandung City in the academic year 2023/2024. The samples were selected using a purposive sampling technique, namely class VIII E as the experimental class and class VIII B as the control class, each with 30 students. Furthermore, the data collection methods used in this research include observation, interviews, and tests. The instrument used in this research was an Arabic vocabulary mastery test made in the form of Google Forms. This test consisted of 20 multiple-choice items tested for validity and reliability in class VIII D of the 20 items, 16 were declared valid and reliable.

In analyzing the data, researchers used the Paired Sample Test to compare differences in the results before and after the test of each group. The stages of the analysis carried out are as follows: (1) Calculating the average value of the pre-test and post-test (2) Performing a normality test with the Shapiro-Wilk method (3) After conducting a normality test, then conducting a data homogeneity test (4) After obtaining normal and homogeneous distribution data, then calculate the t-test for hypothesis testing. With testing standards, if the t-count > t-table value, then Ho is rejected, and Ha is accepted, which means there is a significant difference. But if, on the contrary, the value of t-count < t-table, then Ho is accepted, and Ha is rejected, meaning there is no significant difference.³⁷

³⁴ Irfan Abraham and Yetti Supriyati, "Desain Kuasi Eksperimen dalam Pendidikan: Literatur Review," Jurnal Ilmiah Mandala Education 8, no. 3 (2022): 2476-2481. DOI: <https://doi.org/10.58258/jime.v8i3.3800>

³⁵ Sugiyono, *Metode Penelitian Pendidikan Kuantitatif Kualitatif dan R&D*, (Bandung: Alfabeta, 2013), hlm. 79.

³⁶ Thomas Dicky Hastjarjo, "Rancangan Eksperimen-Kuasi," Buletin Psikologi 27, no. 2 (2019): 187-203. DOI: <https://doi.org/10.22146/buletinpsikologi.38619>

³⁷ Azka Dhianti Putri et al., "Pengaplikasian Uji T dalam Penelitian Eksperimen," Jurnal Lebesgue : Jurnal Ilmiah Pendidikan Matematika, Matematika dan Statistika 4, no. 3 (2023): 1978-1987. DOI: <https://doi.org/10.46306/lb.v4i3.527>

5) The gain test was conducted to get an overall picture of increased students' mastery of Arabic vocabulary before and after treatment. The increase was calculated using the formula developed by Hake, namely, Normalized Gain (g) = $\frac{\text{post-test score} - \text{pre-test score}}{\text{ideal score (max)} - \text{pre-test score}}$.³⁸

Result and Discussion

This research raised the variables, namely the independent variable word-matching game, and the dependent variable, namely students' mastery of Arabic vocabulary. Researchers used the average students' end-of-semester assessment (PAS) results in Arabic subjects as initial data. Then, a multiple choice test was given through Google Forms to obtain the results of students' Arabic vocabulary skills. This test is packaged in the form of pre-test and post-test exams. This research obtained data from pre-test and post-test tests conducted in the experimental class, class VIII E, and the control class, class VIII B. The two classes were selected for the pre-test and post-test tests in this design. In this design, the two classes were chosen with specific considerations. First, the number of students is the same. Second, the average value of the student's midterm exam is almost the same.³⁹ Class VIII E was chosen as the experimental class because the pre-test results showed that the scores obtained were smaller than those of the control class.

The pre-test results showed that class VIII E got an average score of 60 on the test, and class VIII B got an average score of 61. The researcher used the pre-test results as a reference and then used conventional methods to treat the experimental class by applying word-matching game-based cooperative learning and the control class.⁴⁰ The researcher prepared the media in 4 game boards containing 28 vocabulary words or 14 pairs of questions and answers. Each game board will be attached with 14 clue cards that students will match. Furthermore, the experimental class followed two treatment sessions with cooperative learning based on a word-matching game. Each treatment session involved dividing small groups, giving instructions, implementing the matching game for 15-20 minutes, and evaluating the Arabic teacher.⁴¹ The steps of applying word-matching game in learning Arabic vocabulary are described in Figure 1:

³⁸ Rostina Sundayana, *Statistika Penelitian Pendidikan*, (Bandung: Alfabeta, 2016), hlm. 162.

³⁹ Salma Nur Azizah, Nunung Nursyamsiah, and Hikmah Maulani, "Effectiveness of Bithaqatul Jumlab Hunting Game in Improving Arabic Text Reading Ability," *Lughawiyah: Journal of Arabic Education and Linguistics* 5, no. 2 (2023): 155-166. DOI: <https://doi.org/10.31958/lughawiyah.v5i2.10807>

⁴⁰ I Putu Ade Andre Payadnya and I Gusti Agung Ngurah Trisna Jayantika, *Panduan Penelitian Eksperimen Beserta Analisis Statistik dengan SPSS*, (Yogyakarta: Deepublish, 2018), hlm. 10.

⁴¹ Vera Kristiana and Dewi Nurmala, "Pelatihan Teknik Word Match Games dalam Pengajaran Kosakata Bahasa Inggris di Sekolah Dasar," *Prosiding Seminar Nasional Hasil Pengabdian* 2, no. 1 (2019): 595–599. <https://e-prosiding.umnaw.ac.id/index.php/pengabdian/article/view/183/188>

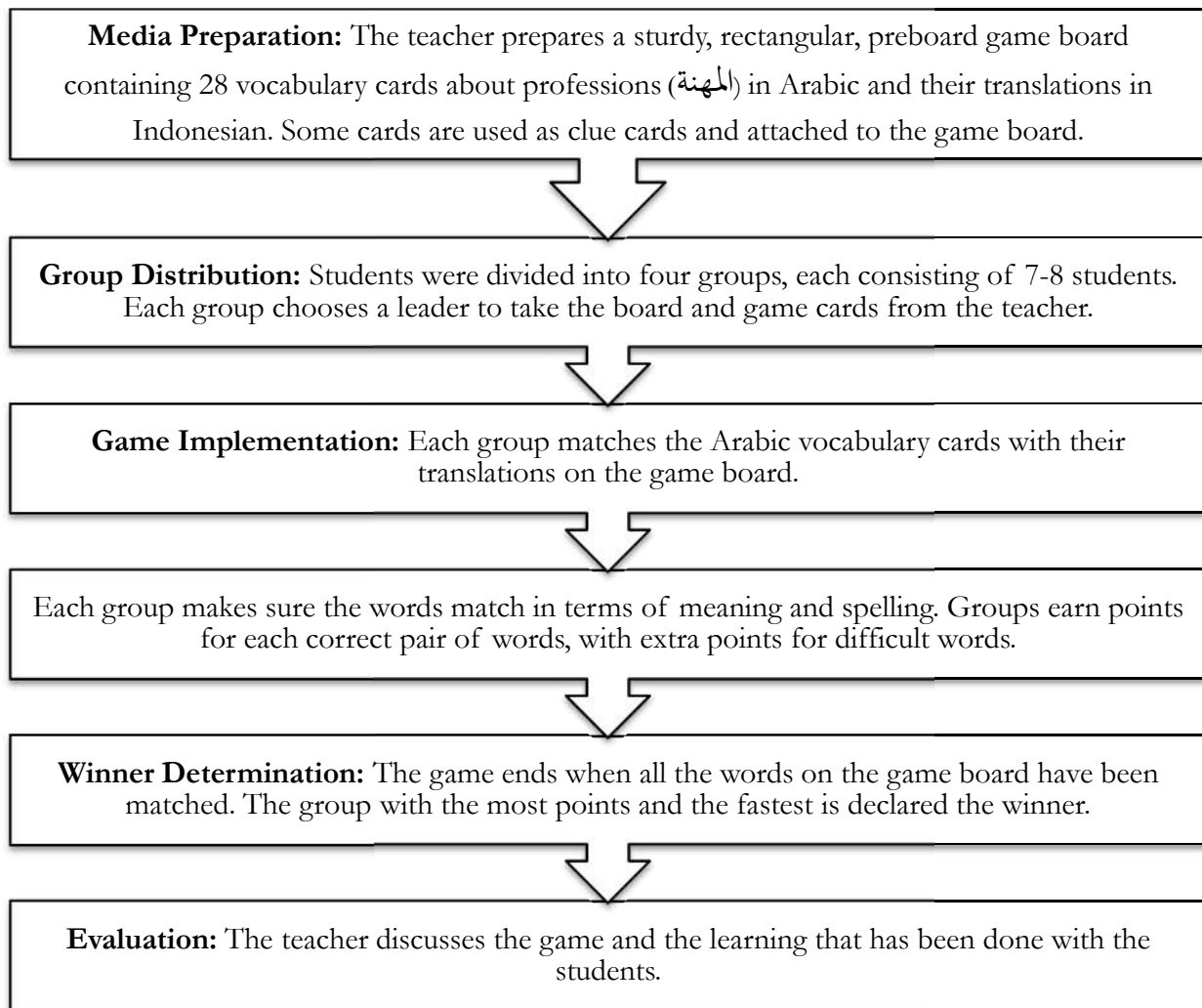


Figure 1. Phases of Word-Matching Game Implementation.

Based on Figure 1, the word-matching game technique consists of several important stages, from media preparation, group division, and game implementation to determine the winner to evaluation. These stages are designed to ensure students not only understand Arabic vocabulary but are also able to apply it correctly through active interaction within the group.⁴² After the treatment, a post-test was administered to both classes to evaluate the students' final ability after receiving the treatment.⁴³ This research discusses an innovative learning approach to enhance Arabic vocabulary proficiency among MTs Negeri 1 Bandung City eighth-grade students. The material focus used in this research is the theme of المهنة (profession), with Arabic vocabulary that includes verbs and nouns related to work. While applying the word-matching game, the researcher observed that students were more excited and enthusiastic about learning compared to the conventional method used before. This technique involves the role of students, which turns out to be effective in

⁴² Baiq Dewi Muhimmah, "Penerapan Teknik Word Matching Game untuk Meningkatkan Penguasaan Vocabulary Peserta Didik pada Materi Narrative Text Kelas IX D SMP Negeri 3 Praya," *Teaching: Jurnal Inovasi Keguruan dan Ilmu Pendidikan* 3, no. 1 (2023): 24–30. DOI: <https://doi.org/10.51878/teaching.v3i1.2164>

⁴³ I Putu Ade Andre Payadnya and I Gusti Agung Ngurah Trisna Jayantika, *Panduan Penelitian Eksperimen Beserta Analisis Statistik Dengan SPSS*, (Yogyakarta: Deepublish, 2018), hlm. 10.

increasing engagement, learning outcomes, and students' interest in learning Arabic, especially in learning Arabic vocabulary. From interviews with several students during the treatment process, the researcher's observation shows that students find memorizing nouns easier than memorizing verbs.⁴⁴ This can be seen from their quick response in matching the questions and answers of Arabic nouns, which tend to be faster than Arabic verbs. After the game was over, the teacher evaluated the results of the game and identified some Arabic vocabulary that the students found quite difficult, such as يطفئ (to extinguish), سائق الحافلة (bus driver), عامل القمامة (janitor), ينظم (to organize), and يعالج (to treat).⁴⁵ Nonetheless, each group of students completed the game well, showing that this technique was effective in helping them master the given Arabic vocabulary. This is in line with the research of Rahmawati et al. entitled "Improving Students' Vocabulary by Using Word-Matching Technique of The Seven Grade SMP TD Pardede Foundation," which proves that the word-matching game technique can enhance the English vocabulary of seventh-grade students of SMP TD Pardede Foundation.⁴⁶

Statistical Test Analysis of Word-Matching Game Technique

The pre-test and post-test scores of the control and experimental classes were obtained based on the student data collected. Then, descriptive analysis was carried out on each variable. Descriptive analysis using the help of the SPSS version 25.0 program with the results in Table 2 below:

Table 2. Descriptive Table

	N	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Experiment	30	30	100	60.37	16.238
Post-Test Experiment	30	48	100	81.27	14.295
Pre-Test Control	30	30	100	61.33	15.953
Post-Test Control	30	42	100	72.23	14.552
Valid N (listwise)	30				

Based on Table 2, it was found that the most minor pre-test score in the experimental group was 30, and the largest score was 100, with an average of 60.37. In the control group, the minor pre-test score was 30, and the largest score was 100, averaging 61.33. For the post-test, the most minor score in the experimental group was 48, and the largest score was 100, with an average increase of 81.27. In the control group, the smallest value of the post-test was 42, and the largest value was 100, with an average increase of 72.23.

From the descriptive data, the average pre-test value in both groups is relatively the same, around 60-61. However, after the treatment, the average post-test score in the experimental group increased more significantly compared to the control group. This shows that the word-matching

⁴⁴ Interview with Hilmi Hakim (Student of Class VIII E Experiment Class at MTs Negeri 1 Bandung, Bandung), Wednesday, May 15, 2024, at 13.30 WIB.

⁴⁵ Interview with Gun Gun Gumilar (Arabic Language Teacher at MTs Negeri 1 Bandung, Bandung), Wednesday, May 15, 2024, at 15.00 WIB.

⁴⁶ Rahmawati et al., "Improving Students' Vocabulary Mastery by Using Word Matching Technique of the Seventh Grade at SMP TD Pardede Foundation," JEEEL (Journal of English Education, Linguistics, and Literature 06, no. 2 (2020): 1-14. <http://ejournal.stkipjb.ac.id/index.php/jeel>

game technique is more effective in enhancing the mastery of Arabic vocabulary than the conventional method. The next step is to conduct a prerequisite data analysis test, the first of which is the normality test.⁴⁷

Researchers conducted a normality test using the Shapiro-Wilk method to determine whether the data followed a normal distribution. The Shapiro-Wilk test is a technique or formula for measuring data distribution developed by Shapiro and Wilk. This method is effective and valid for testing normality with small sample data, namely, less than or equal to 50 samples.⁴⁸ The data is not normally distributed if the significance level is < 0.05 . The data is normally distributed if the significance level is > 0.05 . For more details, the research results are shown in Table 3.

Table 3. Pre- and Post-Test Normality Tests

Normality Test	Group	Shapiro-Wilk		
		Statistic	df	Sig.
Pre-Test	Students in Grade VIII of E Class	.963	30	.369
	Students in Grade VIII of B Class	.965	30	.418
Post-Test	Students in Grade VIII of E Class	.941	30	.097
	Students in Grade VIII of B Class	.957	30	.255

Based on Table 3, it was found that the pre-test normality test using Shapiro Wilk and SPSS 25 showed a significance value for students in class VIII E (experimental class) of 0.369. The significance value in the pre-test for students in class VIII B (control class) was 0.418. These significance values are greater than 0.05, indicating that the pre-test data distribution in both classes is normal.⁴⁹ The significance value for the post-test normality test for students in class VIII E (experimental class) was 0.097. The significance value on the post-test for class VIII B (control class) students was 0.255. Both of these significance values are also greater than 0.05, so it can be concluded that the distribution of post-test data in the experimental class and control class is also normal.

Thus, based on the results of the pre-test and post-test normality tests obtained, both pre-test and post-test data in both groups showed normal distribution, therefore fulfilling the prerequisites for further data analysis. Furthermore, a homogeneity test was conducted to assess the similarity of variances between the two groups, experimental and control. To accept or reject the hypothesis, the homogeneity test results were compared with the value of 0.05 (sig > 0.05) Leven's statistic.⁵⁰ For more details, the homogeneity test results are shown in Table 4.

⁴⁷ Anwar Hidayat, "Uji Normalitas dan Metode Perhitungan," Statistikian, 2013. Accessed on March 17, 2024. <https://www.statistikian.com/2013/01/uji-normalitas.html>

⁴⁸ Reyvan Maulid, "Teknik Analisis Data Ragam Jenis Uji Normalitas dalam Asumsi Klasik," DQLab Kursus Data Science Online Indonesia, 2022. Accessed on March 10, 2024. <https://dqlab.id/teknik-analisis-data-ragam-jenis-uji-normalitas-dalam-asumsi-klasik>

⁴⁹ Sahid Raharjo, "Cara Uji Normalitas Shapiro-Wilk Dengan SPSS Lengkap," SPSS Indonesia Olah Data Statistik dengan SPSS, 2015. Accessed on March 17, 2024. <https://www.spssindonesia.com/2015/05/cara-uji-normalitas-shapiro-wilk-dengan.html>

⁵⁰ Rektor Sianturi, "Uji Homogenitas Sebagai Syarat Pengujian Analisis," Jurnal Pendidikan, Sains Sosial, dan Agama 8, no. 1 (2022): 386–97. DOI: <https://doi.org/10.53565/pssa.v8i1.507>

Table 4. Homogeneity Test

		Levene Statistic	Df1	Df2	Sig.
Result	Based on Mean	.012	1	58	.912
	Based on Median	.018	1	58	.894
	Based on the Median and with adjusted df	.018	1	56.584	.894
	Based on trimmed mean	.012	1	58	.914

Based on Table 4, it is found that the results of the homogeneity test show the value of Sig. Based on the average for the post-test variables of the experimental and control groups is 0.912, which is greater than 0.05. This shows that the data variance in both groups is homogeneous.⁵¹ Then, one of the requirements of the T-test has been fulfilled. The results of this homogeneity test fulfill one of the prerequisites for conducting the T-test. After it is known that the data from the control and experimental groups are normally distributed and homogeneous, the next step is to conduct a T-test. The T-test is used to determine whether there is a difference in the post-test results of students from the experimental group and the post-test results from the control group. This analysis was carried out with the help of SPSS 25 using the paired sample test with a significance level of <0.05. The following is the hypothesis formulation:

- Ha : There is a significant difference between before and after the application of cooperative learning based on word-matching games on Arabic vocabulary mastery of class VIII students of MTs Negeri 1 Bandung City.
- Ho : There is no difference before and after the application of cooperative learning based on word-matching games on students' mastery of Arabic vocabulary in class VIII MTs Negeri 1 Bandung City.

With testing standards, if the Sig. (2-tailed) <0.05, then there is a significant difference between the pre-test and post-test learning outcomes. Conversely, if the Sig. (2-tailed) > 0.05, then there is no significant difference between the pre-test and post-test learning outcomes displayed in Table 5 below:

Table 5. Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2- tailed)
					Lower	Upper			
Experimental Class	Pre-Test	-20.900	11.189	2.043	-25.078	-16.722	-	29	.000
	Post-Test						10.23 1		

⁵¹ Sahid Raharjo, "Uji Homogenitas Data Kelas Eksperimen dan Kontrol dengan SPSS Lengkap," SPSS Indonesia Olah Data Statistik dengan SPSS, 2018. Accessed on March 18, 2024. <https://www.spssindonesia.com/2018/05/uji-homogenitas-kelas-eksperimen-kontrol-spss.html>

Control Class	Pre-Test Post-Test	-10.900	9.721	1.775	-14.530	-7.270	-6.141	29	.000
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Based on Table 5, it is found that the significance value (2-tailed) between the pre-test and post-test in both groups is $0.000 < 0.05$. This shows a significant difference before and after using the word-matching game technique in students' mastery of Arabic vocabulary.

Enhancement Arabic Vocabulary Mastery Through Word-Matching Game

The data used came from the post-test results in the experimental and control classes. This research used the N-Gain Score test to evaluate the significance of the word-matching game technique, assisted by SPSS 25 software. The following are the results of the interpretation of the N-Gain index defined by Hake in Table 6:

Table 6. Interpretation Categories of N-Gain Effectiveness

Percentage (%)	Interpretation
<40	Ineffective
40-55	Less Effective
56-75	Moderately Effective
> 76	Effective

Source: Hake, R.R, 1999.⁵²

Based on Table 6, there are several categories of interpretation of N-Gain effectiveness based on the percentage increase. N-Gain is a method used to evaluate how effectively an intervention or treatment enhances student learning outcomes. The N-Gain percentage is calculated from the change in pre-test to post-test scores.⁵³ The treatment method is considered ineffective if the N-Gain percentage is less than 40%. That is, there needs to be more element in student learning outcomes after applying the method. The method is less effective if the N-Gain percentage is between 40% and 55%. This indicates an increase in student learning outcomes, but the increase is insignificant. The method is considered moderately effective if the N-Gain percentage is between 56% and 75%. This means there is a significant increase in student learning outcomes, but there is still room for enhancement. The method is highly effective if the N-Gain percentage is more than 76%.⁵⁴ This indicates a significant enhancement in student learning outcomes after applying the method. The results of the N-Gain test with the help of SPSS 25 software are shown in Table 7 below:

⁵² Ririn Widiawati, Hikmawati Hikmawati, and Jannatin 'Ardhuha, "Pengembangan Perangkat Pembelajaran Berbasis Model Problem Based Learning untuk Meningkatkan Kemampuan Pemecahan Masalah Fisika Peserta Didik pada Materi Fluida Dinamis," Jurnal Ilmiah Profesi Pendidikan 7, no. 3 (2022): 1803–1810. DOI: <https://doi.org/10.29303/jipp.v7i3c.857>

⁵³ A. Indra Nihlah Annashih and Wasposito Tjipto Subroto, "Quiet Book Media Development to Improve Ecosystem Material Learning Results in Class V Elementary School," International Journal of Educational Research Review 4, no. 3 (2019): 386–94. DOI: <https://doi.org/10.24331/ijere.573889>

⁵⁴ Ageng Triyono et al., "The Level of Effectiveness of TPS and Conventional Methods Judging from Students' Geometry Learning Results Using the N-Gain Test," AlphaMath: Journal of Mathematics Education 10, no. 1 (2024): 142–156. DOI: <https://doi.org/10.30595/alphamath.v10i1.21530>

Table 7. Description of Averages for the Normalized N-Gain Tests

Normalized Gain Test	Gain	Minimum	Maximum	Kategori
Experimental Class	56.5535	10.34	100.00	Moderately Effective
Control Class	30.5046	-17.65	100.00	Ineffective

Based on Table 7, it was found that the average value of N-Gain in the experimental class (VIII E) was 56.5535 or 56.5%, with a minimum value of 10.34% and a maximum of 100%. Based on the effectiveness category in Table 6, the average N-Gain value is included in the “Moderately Effective” category. Meanwhile, the average value of N-Gain in the control class (VIII B) was 30.5046 or 30.5% with a minimum value of -17.65% and a maximum of 100%. Based on the effectiveness category in Table 6, the average value of N-Gain in the control class is included in the “Not Effective” category.⁵⁵ Thus, it is concluded that cooperative learning based on word-matching game applied in the experimental class is effective enough to enhance the mastery of Arabic vocabulary in Arabic language subject *المهنة* (Profession). This result shows that cooperative learning based on word-matching games enhances students' mastery of Arabic vocabulary more effectively than the conventional method.

This research's results align with the findings obtained by several previous studies. For example, research by Rachmawati, who used the word-matching game technique, reported increased students' mastery of English vocabulary and motivation in learning vocabulary.⁵⁶ In addition, research by Ismail et al., which examined cooperative learning in enhancing Arabic vocabulary mastery, showed that the use of game techniques in learning can increase student motivation and participation.⁵⁷ The results showed significant enhancement in Arabic vocabulary acquisition after the application of educational games, which is similar to the findings in this research. Some of these research results support that word-matching games effectively enhance students' mastery of Arabic vocabulary.

The benefits of the word-matching game technique in Arabic language learning show its effectiveness in enhancing students' mastery of Arabic vocabulary. However, along with these successes, some weaknesses may arise. First, some students may be less active in group participation during the game, which may reduce collaboration and hinder the learning process. Therefore, additional motivational strategies are needed to encourage active participation from all students.⁵⁸ Secondly, students' seriousness and thoroughness in matching vocabulary cards must be enhanced to ensure accuracy in the learning process. Teachers can provide additional directions or

⁵⁵ Sahid Raharjo, “Cara Menghitung N-Gain Score Kelas Eksperimen dan Kontrol Dengan SPSS,” SPSS Indonesia Olah Data Statistik dengan SPSS, 2019. Accessed on March 19, 2024. <https://www.spssindonesia.com/2019/04/cara-menghitung-n-gain-score-spss.html>

⁵⁶ Risya Julia Rachmawati, “The Effectiveness of Using Word Matching Games on Students' Vocabulary (A Quasi-Experimental Study at the Eight Grade of MTsN 1 South Tangerang in Academic Year 2019/2020),” (Skripsi, FITK UIN Syarif Hidayatullah Jakarta, 2019). <http://repository.uinjkt.ac.id/dspace/handle/123456789/49602>

⁵⁷ Ahmad Ismail, Nurul Huda, and Fathul Diana Izzah, “Pembelajaran Kooperatif Berbasis Permainan Domikara (Domino Kosakata Bahasa Arab) untuk Meningkatkan Penguasaan Mufradāt Siswa Kelas VIII MTs Negeri 4 Sleman,” *EduLab : Majalah Ilmiah Laboratorium Pendidikan* 5, no. 2 (2021): 197–220. DOI: <https://doi.org/10.14421/edulab.2020.52-07>

⁵⁸ Evi Nuris Suroiyah et al., “Activating the Mnemonic Learning Model to Enhance Student Motivation in MTs Miftahul Ulum Situbondo,” *Mantiqu Tayr: Journal of Arabic Language* 4, no. 1 (2023): 91–104. DOI: <https://doi.org/10.25217/mantiquayr.v4i1.4039>

clarify the game rules to enhance students' accuracy. Third, the game atmosphere needs to be organized in such a way that it is more orderly and structured so that students can focus more on learning. This aligns with Muhimmah's research, which also reveals shortcomings or weaknesses of this word-matching game technique. The disadvantage of applying the word-matching game technique is that it is difficult for the teacher to control when students are playing.⁵⁹ By identifying and overcoming these weaknesses, this technique can be more effective in providing meaningful learning experiences for students.

Teachers can apply several suggestions to enhance learning effectiveness based on the word-matching game process. First, teachers are advised to create an interesting and dynamic game atmosphere to increase students' learning motivation. Second, it is necessary to emphasize that students should pay attention to accuracy in matching vocabulary cards to ensure learning success. Lastly, teachers must build students' confidence and encourage them to have a strong will in mastering Arabic vocabulary.⁶⁰ This aligns with Azizah et al.'s statement in their research that teachers liven up the game atmosphere.⁶¹ By implementing these suggestions, learning using word-matching games is expected to be more effective and enhance students' mastery of Arabic vocabulary.

The practical implications of this research are quite clear. Teachers in schools/madrasas can adopt word-matching games as an alternative learning technique to enhance students' mastery of Arabic vocabulary. Teachers can customize and develop the game material according to the difficulty level and students' needs. This research has several limitations that need to be considered. First, the research sample limited to grade VIII students in one school may not represent the wider population. Therefore, generalization of the results of this research needs to be done with caution. Secondly, this research only measured the mastery of Arabic vocabulary through a test administered through Google form, so it did not evaluate the reading, speaking, listening, and writing skills in Arabic. Thirdly, the relatively short duration of the research may not be enough to see the long-term effects of this learning technique. Fourth, this research did not control external factors such as learning environment and family support, which may affect the results. This aligns with Rachmawati et al.'s statement that external factors affect students' difficulties in mastering Arabic vocabulary.⁶² Further research involving a larger sample, longer duration, and external factors control is needed to overcome these limitations and strengthen the research findings.

⁵⁹ Baiq Dewi Muhimmah, "Penerapan Teknik Word Matching Game untuk Meningkatkan Penguasaan Vocabulary Peserta Didik pada Materi Narrative Text Kelas IX D SMP Negeri 3 Praya," *Teaching : Jurnal Inovasi Keguruan dan Ilmu Pendidikan* 3, no. 1 (2023): 24–30. DOI: <https://doi.org/10.51878/teaching.v3i1.2164>

⁶⁰ Subhan et al., "Strategi Pembelajaran Bahasa Arab dalam Upaya Mempersiapkan Calon Mahasiswa Baru ke Timur Tengah (Studi Kasus pada El-Darosab Banten)," *Mantiqu Tayr: Journal of Arabic Language* 4, no. 1 (2023): 123–135. DOI: <https://doi.org/10.25217/mantiqu tayr.v4i1.4027>

⁶¹ Salma Nur Azizah, Nunung Nursyamsiah, and Hikmah Maulani, "Effectiveness of Bithaqatul Jumlah Hunting Game in Improving Arabic Text Reading Ability," *Lughawiyah: Journal of Arabic Education and Linguistics* 5, no. 2 (2023): 155–166. DOI: <https://doi.org/10.31958/lughawiyah.v5i2.10807>

⁶² Safira Aura Rachmawati, Zaim Elmubarak, and Muchlisin Nawawi, "Analisis Kesulitan Penguasaan Kosakata Bahasa Arab pada Siswa," *Lisanul Arab: Journal of Arabic Learning and Teaching* 12, no. 1 (2023): 46–50. DOI: <https://doi.org/10.15294/la.v12i1.67552>

Closing

This research confirms that word-matching games can significantly enhance the mastery of Arabic vocabulary of VIII grade students at MTs Negeri 1 Bandung City. This finding provides a concrete answer to the research question regarding word-matching game-based cooperative learning as an alternative learning technique to enhance students' mastery of Arabic vocabulary.

Based on the research results, the implementation procedure has proven that the learning process uses a cooperative learning based on a word-matching game. In addition, there is a significant difference between the experimental and control classes in Arabic vocabulary mastery, which shows the success of this technique in enhancing students' understanding. This is shown by the average post-test score of the experimental class students of 81.27 and the control class of 72.23. The T-test analysis shows that the significant value (2-tailed) is $0.000 < 0.05$, which means that the alternative hypothesis (H_a) is accepted, indicating a significant difference between the mastery of Arabic vocabulary of experimental class students and control class students. It can be concluded that cooperative learning based on word-matching games can be applied as an alternative solution to enhance students' mastery of Arabic vocabulary, especially in class VIII at MTs Negeri 1 Bandung City and in other schools/madrasas. The capital of mastery of Arabic vocabulary is expected to facilitate students mastering the four Arabic language skills, namely reading, speaking, listening, and writing skills, as has been revealed in previous studies.

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Bibliographi

- Abdurrahman, Maman. “*Penerapan Strategi Cooperative Learning dalam Meningkatkan Kemampuan Nahwu Mahasiswa.*” Jurnal Pendidikan dan Pembelajaran (JPP) 21, no. 2 (2016): 215–226. <https://www.e-jurnal.com/2017/03/penerapan-strategi-cooperative-learning.html>
- Abraham, Irfan, and Yetti Supriyati. “*Desain Kuasi Eksperimen dalam Pendidikan: Literatur Review.*” Jurnal Ilmiah Mandala Education 8, no. 3 (2022): 2476-2481. DOI: <https://doi.org/10.58258/jime.v8i3.3800>
- Ahyar, Haerul. “*Penguasaan Mufradat dan Qawā'id sebagai Upaya Meningkatkan Keterampilan Menulis Bahasa Arab.*” Al Mahāra: Jurnal Pendidikan Bahasa Arab 4, no. 2 (2018): 259–274. DOI: <https://doi.org/10.14421/almahara.2018.042-06>

- Amir, Zubaidah, Risnawati, Nurdin Erdawati, Memen Permata Azmi, and Dedek Andrian. “*The Increasing of Math Adversity Quotient in Mathematics Cooperative Learning Through Metacognitive*,” International Journal of Instruction 14, no. 4 (2021): 841–856. DOI: <https://doi.org/10.29333/iji.2021.14448a>
- Annashih, A. Indra Nihlah, and Waspodo Tjipto Subroto. “*Quiet Book Media Development to Improve Ecosystem Material Learning Results in Class V Elementary School*,” International Journal of Educational Research Review 4, no. 3 (2019): 386–394. DOI: <https://doi.org/10.24331/ijere.573889>
- Arifin, Ahmad. “*Peranan Permainan Bahasa dalam Proses Kegiatan Belajar Mengajar Mata Pelajaran Bahasa Arab*,” An Nabighoh Jurnal Pendidikan dan Pembelajaran Bahasa Arab 19, no. 2 (2017): 302. DOI: <https://doi.org/10.32332/an-nabighoh.v19i2.1005>
- Ashari, Mohamad Yahya, and Rifatul Mahfudhoh. “*The Strategy of Arabic Learning for Inclusion Students in Islamic Primay School of Islamiyah Wathoniyah Jombang*,” Mantiqu Tayr: Journal of Arabic Language 1, no. 2 (2021): 83–100. DOI: <https://doi.org/10.25217/mantiqu tayr.v1i2.1567>
- Asiyah, Siti Syara. “*Pengaruh Model Pembelajaran Kooperatif Teams Games Tournament dengan Media Giant Board Game Terhadap Hasil Belajar Bahasa Arab (Penelitian Eksperimen di Kelas 8 SMP Al-Ghurabaa Jakarta*,” (Skripsi, Universitas Negeri Jakarta, 2023). <http://repository.unj.ac.id/id/eprint/42703>
- Aulia, Robithah, HikmahMaulani, and Tatang. “*Motivasi Penghafal Alquran Mempelajari Bahasa Arab Sebagai Pendukung Kesuksesan Pembelajaran Bahasa Arab*,” Jurnal Naskhi: Jurnal Kajian Pendidikan dan Bahasa Arab 5, no. 1 (2023): 34–42. DOI: <https://doi.org/10.47435/naskhi.v5i1.1434>
- Azizah, Hanifah Nur. “*Peningkatan Penguasaan Kosakata Bahasa Arab Melalui Penggunaan Media Word Wall*,” ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, dan Budaya Arab 1, no. 1 (2020): 1–16. DOI: <https://doi.org/10.17509/alsuniyat.v1i1.24212>
- Azizah, Rofiatul. “*Permainan Teka Teki Silang dalam Pembelajaran Bahasa Arab untuk Meningkatkan Maharab Kitabab*,” Tatsqifiy: Jurnal Pendidikan Bahasa Arab 3, no. 2 (2022): 116–124. DOI: <https://doi.org/10.30997/tjpba.v3i2.6119>
- Azizah, Salma Nur, Nunung Nursyamsiah, and Hikmah Maulani. “*Effectiveness of Bithaqatul Jumlah Hunting Game in Improving Arabic Text Reading Ability / Efektivitas Permainan Berburu Bithaqatul Jumlah untuk Meningkatkan Kemampuan Membaca Teks Bahasa Arab*,” Lughawiyah: Journal of Arabic Education and Linguistics 5, no. 2 (2023): 155–166. DOI: <https://doi.org/10.31958/lughawiyah.v5i2.10807>
- Faizin, Khoirul. “*Permainan ‘ABC 5 Dasar’ untuk Meningkatkan Penguasaan Kosa Kata Bahasa Arab*,” Muróbbi: Jurnal Ilmu Pendidikan 4, no. 1 (2020): 43–56. DOI: <https://doi.org/10.52431/murobbi.v4i1.234>
- Fajriyani, Riyan. “*Eksperimen Penerapan Media Flipchart dan Model Pembelajaran Kooperatif Tipe Course Review Horay Terhadap Motivasi Belajar Siswa dalam Pembelajaran Bahasa Arab di Kelas IV MI Ma’arif Giriloyo 2 Tahun Ajaran 2018/2019*,” (Skripsi, UIN Sunan Kalijaga Yogyakarta, 2019). <http://digilib.uin-suka.ac.id/id/eprint/37310>

- Fuadi, Abdul Hafizh Nur, Fathi Hisyam Panagara, Nurul Izzah, and Muassomah. "Penerapan Permainan Nabwu Matching dalam Pembelajaran Isim Isyarah," *Al Mi'yar: Jurnal Ilmiah Pembelajaran Bahasa Arab dan Kebahasaaraban* 7, no. 1 (2024): 501. DOI: <https://doi.org/10.35931/am.v7i1.2452>
- Hanifah, Umi. "Fun Arabic Learning through Songs Media," *Tanwir Arabiyyah: Arabic As Foreign Language Journal* 1, no. 2 (2021): 73–82. DOI: <https://doi.org/10.31869/aflj.v1i2.2873>
- Hastjarjo, Thomas Dicky. "Rancangan Eksperimen-Kuasi," *Buletin Psikologi* 27, no. 2 (2019): 187–203. DOI: <https://doi.org/10.22146/buletinpsikologi.38619>
- Hayati, Nila Nofrita, and Syahrul Syahrul. "The Development of Matching Game as Media to Teach Vocabulary for Elementary School Students," *EduBasic Journal: Jurnal Pendidikan Dasar* 3, no. 2 (2021): 97–106. DOI: <https://doi.org/10.17509/ebj.v3i2.32630>
- Hidayat, Anwar. "Uji Normalitas dan Metode Perhitungan," *Statistikian*, 2013. <https://www.statistikian.com/2013/01/uji-normalitas.html>
- Hunaidu, and Mahlani Sabae. "Pengaruh Penguasaan Kosakata Bahasa Arab Terhadap Kemampuan Berbahasa Arab Siswa Pondok Darul Arqam Muhammadiyah Punnia Pinrang," *Al-Maraji' Jurnal Pendidikan Bahasa Arab* 3, no. 1 (2019): 75–92. <https://journal.unismuh.ac.id/index.php/al-maraji/article/view/3653/2655>
- Ismail, Ahmad, Nurul Huda, and Fathul Diana Izzah. "Pembelajaran Kooperatif Berbasis Permainan Domikara (Domino Kosakata Bahasa Arab) untuk Meningkatkan Penguasaan Mufradāt Siswa Kelas VIII MTs Negeri 4 Sleman," *EduLab : Majalah Ilmiah Laboratorium Pendidikan* 5, no. 2 (2021): 197–220. DOI: <https://doi.org/10.14421/edulab.2020.52-07>
- Isnawan, Muhammad Galang. *Kuasi Eksperimen*. Edited by Sudirman. 1st ed. Lombok: Nashir Al-Kutub Indonesia, 2020.
- Kristiana, Vera, and Dewi Nurmala. "Pelatihan Teknik Word Match Games dalam Pengajaran Kosakata Bahasa Inggris di Sekolah Dasar," *Prosiding Seminar Nasional Hasil Pengabdian* 2, no. 1 (2019): 595. <https://e-prosiding.umnaw.ac.id/index.php/pengabdian/article/view/183/188>
- Larenzi, Annisa Hanin, Syarifudin Basyar, Fachrul Ghazi, and Tamer Sa'ad Ibrahim Khedr. "Development of Quizlet Platform-Based Learning Media for Middle School Students' Understanding of Arabic Vocabulary," *Mantiqu Tayr: Journal of Arabic Language* 4, no. 2 (2024): 382–402. DOI: <https://doi.org/10.25217/mantiqu tayr.v4i2.4256>
- Manshur, Umar. "The Importance of Teaching Aids and Their Impact on the Teaching of the Arabic Language/أهمية الوسائل التعليمية وأثرها في تعليم اللغة العربية" *IJ-ATL (International Journal of Arabic Teaching and Learning)* 1, no. 1 (2018): 1–14. DOI: <https://doi.org/10.33650/ijat.v1i2.280>
- Maulana, Fatha. "Penggunaan Teknik Permainan Mencocokkan Kata dan Gambar untuk Meningkatkan Penguasaan Kosakata Bahasa Jepang," (Skripsi, Universitas Negeri Jakarta, 2021). <http://repository.unj.ac.id/id/eprint/19499>

- Maulid, Reyvan. “*Teknik Analisis Data Ragam Jenis Uji Normalitas Dalam Asumsi Klasik*,” DQLab Kursus Data Science Online Indonesia, 2022. <https://dqlab.id/teknik-analisis-data-ragam-jenis-uji-normalitas-dalam-asumsi-klasik>
- Mayekti, Meilina Haris, and Ade Christanty Yudha Bestari. “*The Effect of Matching Games for Teaching Speaking Skills*,” Economics, Social and Humanities Journal (Esochum) 1, no. 2 (2022): 56–66. <https://jurnal.unupurwokerto.ac.id/index.php/esochum>
- Muhimmah, Baiq Dewi. “*Penerapan Teknik Word Matching Game untuk Meningkatkan Penguasaan Vocabulary Peserta Didik pada Materi Narrative Text Kelas IX D SMP Negeri 3 Praya*,” Teaching: Jurnal Inovasi Keguruan dan Ilmu Pendidikan 3, no. 1 (2023): 24–30. DOI: <https://doi.org/10.51878/teaching.v3i1.2164>
- Murdani, Mahdir Muhammad, Bani Amin, Mira Ulfa, and Muhammad Haikal. “*Use of Cooperative Learning Methods STAD Strategies to Improve Students’ Abilities in Qira’ah (Experimental Research in Ma’had al-Uluum Ad-Diniyyati al-Islaamiyyati Samalanga)*,” Budapest International Research and Critics in Linguistics and Education (BirLE) Journal 2, no. 1 (2019): 38–49. DOI: <https://doi.org/10.33258/birle.v2i1.184>
- Nengrum, Thityn Ayu, and Muh. Arif. “*Efektivitas Media Pembelajaran dalam Penguasaan Kosa Kata Bahasa Arab*,” `A Jamiy: Jurnal Bahasa Dan Sastra Arab 9, no. 1 (2020): 14. DOI: <https://doi.org/10.31314/ajamiy.9.1.1-15.2020>
- Payadnya, I Putu Ade Andre, and I Gusti Agung Ngurah Trisna Jayantika. *Panduan Penelitian Eksperimen Beserta Analisis Statistik Dengan SPSS*. Yogyakarta: Deepublish, 2018.
- Putri, Azka Dhianti, Ahman, Rahma Sayyida Hilmia, Salwa Almaliyah, and Sidik Permana. “*Pengaplikasian Uji T dalam Penelitian Eksperimen*,” Jurnal Lebesgue: Jurnal Ilmiah Pendidikan Matematika, Matematika dan Statistika 4, no. 3 (2023): 1978–1987. DOI: <https://doi.org/10.46306/lb.v4i3.527>
- Rachmawati, Risya Julia. “*The Effectiveness of Using Word Matching Games on Students’ Vocabulary (A Quasi-Experimental Study at the Eight Grade of MTsN 1 South Tangerang in Academic Year 2019/2020)*,” (Skripsi, FITK UIN Syarif Hidayatullah Jakarta, 2019). <http://repository.uinjkt.ac.id/dspace/handle/123456789/49602>
- Rachmawati, Safira Aura, Zaim Elmubarak, and Muchlisin Nawawi. “*Analisis Kesulitan Penguasaan Kosakata Bahasa Arab pada Siswa*,” Lisanul Arab: Journal of Arabic Learning and Teaching 12, no. 1 (2023): 46–50. DOI: <https://doi.org/10.15294/la.v12i1.67552>
- Raharjo, Sahid. “*Cara Uji Normalitas Shapiro-Wilk dengan SPSS Lengkap*,” SPSS Indonesia Olah Data Statistik dengan SPSS, 2015. <https://www.spssindonesia.com/2015/05/cara-uji-normalitas-shapiro-wilk-dengan.html>
- Raharjo, Sahid. “*Cara Uji Paired Sample T-Test dan Interpretasi Dengan SPSS*,” SPSS Indonesia Olah Data Statistik dengan SPSS, 2016. <https://www.spssindonesia.com/2016/08/cara-uji-paired-sample-t-test-dan.html>
- Raharjo, Sahid. “*Uji Homogenitas Data Kelas Eksperimen Dan Kontrol Dengan SPSS Lengkap*,” SPSS Indonesia Olah Data Statistik dengan SPSS, 2018. <https://www.spssindonesia.com/2018/05/uji-homogenitas-kelas-eksperimen-kontrol-spss.html>

- Raharjo, Sahid. "Cara Menghitung N-Gain Score Kelas Eksperimen dan Kontrol Dengan SPSS," SPSS Indonesia Olah Data Statistik dengan SPSS, 2019. <https://www.spssindonesia.com/2019/04/cara-menghitung-n-gain-score-spss.html>
- Rahmawati, Epiana Banjarnahor, Maria Marpaung, Sarah Siburian, and Pingky Ayu Sitorus. "Improving Students' Vocabulary Mastery by Using Word Matching Technique of the Seventh Grade at SMP TD Pardede Foundation," JEELL (Journal of English Education, Linguistics, and Literature 06, no. 2 (2020): 1-14. <http://ejournal.stkipjb.ac.id/index.php/jeel>
- Sa'adah, Nur Lailatus. "The Effectiveness of Words Matching Game On Students' Vocabulary At The Seventh Grade Of Mts Nu Miftahul Ma'arif Kaliwungu," (Thesis, Institut Agama Islam Negeri Kudus, 2023). <http://repository.iainkudus.ac.id/id/eprint/10019>
- Sianturi, Rektor. "Uji Homogenitas Sebagai Syarat Pengujian Analisis," Jurnal Pendidikan, Sains Sosial, dan Agama 8, no. 1 (2022): 386–397. DOI: <https://doi.org/10.53565/pssa.v8i1.507>
- Silalahi, Tiodora Fermiska, and Ahmad Fakhri Hutaauruk. "The Application of Cooperative Learning Model during Online Learning in the Pandemic Period," Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences 3, no. 3 (2020): 1683–1691. DOI: <https://doi.org/10.33258/birci.v3i3.1100>
- Silmy, Ahmad Nahidl, Rahmat Hidayat Lubis, Yusvita Kusuma Wardani, Shara, and Annisaa Ismahani. "Urgensi Metode Belajar dalam Pembelajaran Bahasa Arab (Bagi Penutur Non-Arab)," Mantiqu Tayr: Journal of Arabic Language 4, no. 2 (2024): 368–381. DOI: <https://doi.org/10.25217/mantiquatayr.v4i2.4423>
- Suantini, Ni Putu, Gede Satya Hermawan, and I Wayan Sadyana. "Penerapan Kooperatif Teknik Permainan Roda Keberuntungan (Wheel of Fortune) untuk Meningkatkan Penguasaan Kosakata Bahasa Jepang," Jurnal Pendidikan Bahasa Jepang Undiksha 2, no. 2 (2016): 1-10. DOI: <https://doi.org/10.23887/jpbj.v2i2.7852>
- Subhan, Zaki Ghufro, Dina Indriana, Azizah Alawiyah, and Mufrodi. "Strategi Pembelajaran Bahasa Arab dalam Upaya Mempersiapkan Calon Mahasiswa Baru ke Timur Tengah (Studi Kasus pada El-Darosah Banten)," Mantiqu Tayr: Journal of Arabic Language 4, no. 1 (2023): 123–135. DOI: <https://doi.org/10.25217/mantiquatayr.v4i1.4027>
- Sugiyono. *Metode Penelitian Pendidikan Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta, 2013.
- Sundayana, Rostina. *Statistika Penelitian Pendidikan*. Bandung: Alfabeta, 2016.
- Suroiyah, Evi Nurus, A. Samsul Ma'arif, Mu'alim Wijaya, and Laili Sholihah. "Activating the Mnemonic Learning Model to Enhance Student Motivation in MTs Miftahul Ulum Situbondo," Mantiqu Tayr: Journal of Arabic Language 4, no. 1 (2023): 91–104. DOI: <https://doi.org/10.25217/mantiquatayr.v4i1.4039>
- Triyono, Ageng, Rusdi Hamdany Nuary, Nisa Permatasari, Yatha Yuni, and Teguh Wibowo. "The Level of Effectiveness of TPS and Conventional Methods Judging from Students' Geometry Learning Results Using the N-Gain Test," AlphaMath : Journal of Mathematics Education 10, no. 1 (2024): 142–156. DOI: <https://doi.org/10.30595/alphamath.v10i1.21530>
- Wahyudi, Agus. *Aku Cinta Bahasa Arab untuk Kelas IV Madrasah Ibtidaiyah*. Solo: Tiga Serangkai Pustaka Mandiri, 2017.

- Widiawati, Ririn, Hikmawati Hikmawati, and Jannatin 'Ardhuha. "Pengembangan Perangkat Pembelajaran Berbasis Model Problem Based Learning untuk Meningkatkan Kemampuan Pemecahan Masalah Fisika Peserta Didik pada Materi Fluida Dinamis," *Jurnal Ilmiah Profesi Pendidikan* 7, no. 3 (2022): 1803–1810. DOI: <https://doi.org/10.29303/jipp.v7i3c.857>
- Yuliarsih, and Evha Nazalatus Sa'adiyah. "Matching Game in Teaching Reading Comprehension at MTs Matsaratul Huda Pamekasan." *INTERAKSI: Jurnal Kependidikan* 13, no. 2 (2018): 137–143. http://ejournal.unira.ac.id/index.php/jurnal_interaksi/article/view/501/414