



Improving Students' English Learning Outcomes Through the Use of Jigsaw Method Assisted with LKPDs

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Abstract

This study is to examine how the Jigsaw technique is used to enhance student learning outcomes English language learning in class VIII B MTs As'adiyah Uloe. This kind of study is called classroom action research (PTK), and it employs an explanatory sequential design methodology. Test, observation, and documentation procedures are the data gathering techniques employed in this study. Data processing and analysis methods that make use of descriptive statistics include utilizing Ms. Excel to compute averages, percentages, and table/graph presentations of the data. A total of 24 VIII B class students (12 males and 12 girls) were the research participants in this study. The results showed that the percentage of completeness of student learning outcomes in the pre-cycle was 50%, cycle I was 75%, and cycle II was 100%. The percentage of non-completion of student learning outcomes in the pre-cycle was 50%, cycle I was 25%, and cycle II was 0%.

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INTRODUCTION

One of the most important components that must be present besides students is the teacher. It is not easy to be a teacher. This is due to the important role that educators play in the learning process. The key player is the teacher, who has the power to determine whether or not the learning objectives at school are achieved. Thus, in addition to educating, training and teaching, a teacher's responsibilities also include the ability to read the classroom environment and the state of his or her students as they learn (Nidawati, 2020).

In essence, teachers have four competencies, namely pedagogic, personality, professional, and social (Syafi'i & Bulan, 2022). The competencies possessed by a teacher also require an underlying talent, this competency cannot be used separately from other abilities. The need to change learning patterns to more active and participatory learning is necessitated by rapid progress, especially in the field



of information. The pace of knowledge advancement has made teachers an inadequate source of information. In addition, students need to increase their capacity to use knowledge meaningfully and shift from passive consumers to active learners (Sari et al., 2022). Moreover, teachers play various roles and tasks in the classroom, such as mentor, communicator, model, facilitator, innovator, motivator, cognitive agent, and evaluator (Nurbiah et al., 2023).

From the above statement, it is clear that teacher integrity and competence are the main factors in the teacher's ability to improve student learning outcomes. In addition to the factors mentioned above, successful learning achievement is also influenced by students' intrinsic and extrinsic factors.

Almost all countries in the world are connected through English. With this language, communication can be done between people in any part of the world. After Indonesian and some regional languages, English is the third language spoken there. As it develops, every school uses this language as a second language. English is taught during the teaching and learning process so that students can become proficient with the existing signs. There are three levels in each grade: beginner, intermediate, and professional. The design of the indicators is determined by the level of each class (Laia & Zai, 2020).

The four components of language acquisition are speaking, writing, reading and listening. A learner needs to be proficient in these areas in order to learn English well. In fact, this is difficult to do due to several barriers. For example, speaking English is difficult because of the different ways of reading it, speaking is difficult because English is not their mother tongue, speaking is difficult because they are not used to pronouncing words correctly, speaking is difficult because they do not have the vocabulary, speaking with intelligent people or native speakers makes them feel uncomfortable, and speaking is difficult because they are afraid of making mistakes. The challenges mentioned above are challenges that are often encountered and occur when learning and mastering English (Laia & Zai, 2020).

Based on the results of researchers' observations of English language learning in the learning activities of the theme My Uncle is Zookeeper in the Describing the Animal in the Zoo section at MTs As'adiyah Uloe that student learning outcomes are below standard. Low learning outcomes are usually accompanied by low student interest in learning (Nurbiah et al., 2023). The following is a graph of student learning outcomes in pre-action.

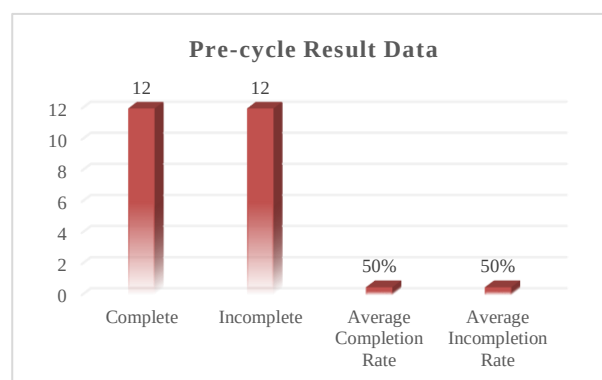


Figure 1. Pre-cycle Result Data



From the graph above, it is clear that 12 students are categorized as complete and the other 12 students are not complete based on the observation data. In percentage terms, 50% represents the average of completeness and incompleteness. KKM, which has a value of 75, is the benchmark for determining whether students are complete or not. Student learning outcomes are considered incomplete if less than 75. Student learning outcomes are considered complete if they reach a minimum score of 75.

From the data and facts above, it is clear that student learning outcomes are still far from the KKM. Low student learning outcomes can be caused by several factors, including teachers who still use traditional teaching techniques, students' lack of understanding of the topics taught, teachers' failure to communicate learning objectives, and decreased student enthusiasm. Teachers should make improvements, because this is an inevitable necessity in the learning process (Hasnawati et al., 2023). Teachers need to improve learning methodologies in the classroom to improve student learning outcomes.

This research has a relationship with a number of studies that have been conducted previously. First, Theresia Clara Nahak with the title "Application of the Jigsaw Type Cooperative Learning Model to Improve English Language Learning Achievement in Class XI IPA 2 SMA Negeri I Malaka Barat in the 2021/2022 Study Year". According to the findings, Jigsaw greatly improves student performance. Vocabulary, grammar, and student motivation all improved at the end of the cycle. After Jigsaw was used, the exam results increased from 65% to 85% for the students. In addition, observation results showed students' engagement in Jigsaw conversations and teachers' ability to support learning (Nahak, 2023).

Second, research conducted by Dyah Mu'miroh with the title "Increasing Activity and Learning Outcomes in English Information Report Text Material Through the Application of the Jigsaw Type Cooperative Learning Model for Class IX-D Students of MTs Negeri 4 Jember Semester 2 of the 2019/2020 School Year". The results showed that the use of the Jigsaw type cooperative learning model could increase student learning activities. In particular, compared to the initial conditions of only 9 students, there were 17 students in cycle I or 68.00% and 25 students in cycle II or 100%. The average value of student learning outcomes in each cycle was 57.60 in the initial condition, 68.40 in cycle I, and 78.80 in cycle II. This has increased as a result of increasing student learning activities. This is evidenced by the increasing number of students who have completed learning. In the initial condition only 7 students or 28.00%, in cycle I it increased to 15 students or 60.00%, and in cycle II it increased to 23 students or 92.00%. Based on the description above, it can be concluded that the application of the jigsaw type cooperative learning model can increase the activeness and learning achievement of students in class IX-D MTs Negeri 4 Jember Semester 2 2019-2020 Study Year (Mu'miroh, 2021).

Third, Cucu Marlina with the research title "Improving English Language Learning Activities and Outcomes on Information Report Text Material through the Application of the Jigsaw Type Cooperative Learning Model for Class IX-A Students of MTs Negeri 2 Subang Even Semester of the 2018/2019 School Year". The findings from data analysis show that the application of the Jigsaw type cooperative learning model can increase student learning activities. In the initial condition there were only 12 students (34.29%), 32 students (91.43%) in cycle I, and 22 students (62.86%) in cycle II. Student learning outcomes also increased,



rising from 62.57 to 76.29 in the first cycle and 87.43 in the second cycle. This is supported by the increase in students who completed their learning outcomes, in the first cycle, there were only 8 students, or 22.86%; in cycle I, there were 33 students, or 94.29%; and in cycle II, there were 23 students, or 65.71% (Marliana, 2023).

Based on several considerations, the Jigsaw type Cooperative Learning model is believed to have the ability to overcome low student interest and learning outcomes. This method is proven to be able to improve student learning outcomes. This method is then supported by the use of LKPD as an individual task instrument.

Elliot Aronson created a cooperative learning method known as Jigsaw. This learning method aims to instill a greater sense of responsibility in students for their own education as well as the education of others. Students must be prepared not only to learn the material given to them, but also to teach it to their group. The jigsaw learning model, which requires the formation of small groups of three to five people consisting of expert and home groups, requires student-centered learning (Budiyanto, 2016).

As the name implies, the technical implementation of this type of learning goes back and forth like a saw. Here are the steps of implementing the Jigsaw learning model (Budiyanto, 2016). First, the beginning of the learning activity. At this point, the instructor can: 1) provide a basic summary of the substance of the topic, inspire students, and clarify why understanding the material is important; 2) Depending on how many students are in each group and how many topics the students have mastered so far, the jigsaw cooperative learning material is divided into sections; 3) Assign students into expert groups and home groups in jigsaw cooperative learning, these groups consist of three to five people who have different backgrounds, genders, and academic abilities; 4) Calculate the initial score which is the average of each student's score on the previous quiz or each student's final score on the previous semester quiz.

Second, the learning activity plan. At this stage, each group studies and discusses relevant subtopics to select experts who will join their group; 2) All subtopics that have been distributed based on the number of groups are collected and integrated by expert members from each group; 3) students who have better knowledge return to their respective groups to clarify the subtopics they have discussed; 4) students take exams in groups or individually for each subtopic; 5) group awards that recognize and reward group achievements in the form of individual and group grades.

Third, the evaluation system. In evaluation, there are three ways that can be done in evaluating learning activities using the Jigsaw method, namely taking individual quizzes that cover all topics, making independent or group reports, and presentations (Budiyanto, 2016).

One type of printed learning resource that is often used by teachers in the teaching and learning process is a worksheet known as the Learner Worksheet (LKPD). The KTSP curriculum uses LKPD which is often known as LKS (student worksheet). worksheets for students (Nursyamsi et al., 2019). Students can use LKPDs that include discussion topics, practicum instructions, home experiments, portfolio assignments, and many practice questions. Students will be more involved in the learning process as a result of these factors (Hamidah et al., 2018). One of the



learning resources used to achieve learning objectives is LKPD. One of the media used to maximize student participation in learning is LKPD (Hamidah et al., 2018).

The results students get from receiving instruction over a period of time are known as learning outcomes. Another way to look at learning outcomes is as a reflection of learning effort. Ideally, students will get higher learning outcomes if they work harder to learn. Therefore, one of the tools to evaluate the effectiveness of the learning that students have experienced is learning outcomes (Yandi et al., 2023).

Educational experts have proposed variables that influence student learning outcomes. The elements they provide are complex, but can be broadly divided into two categories: influences originating from the student's internal environment and influences originating from outside the student's environment. elements provided by students, particularly their skills. The learning outcomes achieved are significantly influenced by students' capacities. Learning motivation, interest and focus, attitude and study habits, tenacity, and physical and psychological aspects are other elements that have a significant impact. As a result, the more a student works to prepare himself for the act of learning, the more learning outcomes he will experience (Aminah, 2020).

Criteria for measuring learning outcomes usually use instruments in the form of tests. Sometimes the evaluation of student learning outcomes also uses non-test instruments, such as direct observation and interviews (Syafi'i & Bulan, 2022). In PTK, sometimes teachers use standardized assessments, no longer using intervals or classifying learning outcomes. The research is called KKM or Minimum Completeness Criteria (Nurbiah et al., 2023).

Based on the description above, the author is inspired to conduct research with the title "Improving Students' English Learning Outcomes Through the Use of Jigsaw Method Assisted with LKPDs".

METHOD

This research is classified as PTK because it was conducted as a classroom action research. This research is characterized as an investigation of how instructors engage in self-reflection of social events in order to better understand and improve their own methods (Aminah, 2020).

The research approach referred to in PTK is a mixed methods research approach. This research combines two different types of research in one research presentation, namely quantitative and qualitative. As the nature of PTK, this type of action research does use a mixed methods model. To understand the research challenges, mixed methods research is collecting, examining, and mixing quantitative and qualitative research methodologies in a number of studies (Vebrianto et al., 2020).

Mix Methods research designs also vary. In this PTK, the design used is Explanatory Sequential Design Mix Methods. This method uses two research methodologies sequentially (qualitative and quantitative) in this design, each approach will be applied independently in two different research stages. Also referred to as two phases (Vebrianto et al., 2020).

The data collection techniques used in this PTK are observation, tests, and documentation. Observation is a data collection method used to observe the object



under study through concentration using all sensory organs (Arikunto, 2011). The test technique is used to measure (Syafi'i et al., 2023). In PTK, this technique is useful for providing information to researchers to what extent the level of achievement of student learning outcomes after treatment or action through measurement. The test used is a written test. This type of test is in the form of multiple choice. The LKPD is used to write down what is listened to and discuss the presentation of material from other groups. Documentation is a method used to find data about the object under study. Usually this documentation is in the form of notes, transcripts, books, newspapers, magazines, inscriptions, meeting minutes, leggers, agendas, and so on (Asmani, 2011). In this study, the documentation technique was used to obtain information/data related to the state of the institution, photos of learning activities, and other matters related to information/data of MTs As'adiyah Uloe.

Data processing and analysis techniques using descriptive statistics. Descriptive statistical analysis is statistics to analyze data by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the public or generalizations (Vebrianto et al., 2020). Data processing uses Ms. Excel in calculating the average and percentage of student learning outcomes data. Furthermore, the results of calculations and percentages are presented in the form of tables or graphs.

RESULTS AND DISCUSSION

A. Cycle I

1. Planning Step

First, the teacher provides the material. The material chosen is Describing the Animal in the Zoo. Second, determine the purpose of the action, namely improving learning outcomes. The target used is KKM with a score of 75. Third, teachers make cycle I lesson plans. Fourth, teachers provide a reflection of PTK cycle I observations.

2. Acting Step

At this stage it is divided into three parts, namely introduction, core, and closing. The following is the explanation.

a. Introduction Activities

After greeting each other, the students prayed. The instructor encourages the students and also monitors their attendance. Next, the instructor explains the benefits of the material and the learning objectives. The teacher gives an overview of the subject matter and teaches syntax.

b. Core Activities

First, the teacher divides the students into jigsaw groups of six to seven people. Second, students choose a group member to be the leader. Third, following the teacher's instructions, the students study the subject matter and become experts in it. Fourth, after everyone feels that they have understood the material, the students reread the material. Fifth, students are divided into expert team groups, with one member from each Jigsaw joining other students who have the same segment. They then practice presenting to the Jigsaw group and debating the key



ideas from their segment. Sixth, each student from the expert team returns to their Jigsaw group. Seventh, the students give a presentation to their group on the lesson they have learned and give other students the opportunity to ask questions. Eighth, as the teacher observes, students engage in debate and exchange questions and answers regarding the subject matter covered. Ninth, students report the results of their debate to the class.

c. Closing Activities

Both the teacher and students consider what they have learned. After that, the teacher conducts a quick and arbitrary oral assessment. The teacher then has to finish the activity which takes 20 minutes. The teacher closes the lesson by sharing the lesson plan for the next meeting and praying.

3. Observing Step

The teacher directly observes the extent to which students can understand the Describing the Animal in the Zoo material through practice questions. Test as a means to determine student learning outcomes is a fairly effective instrument. Here are the data.

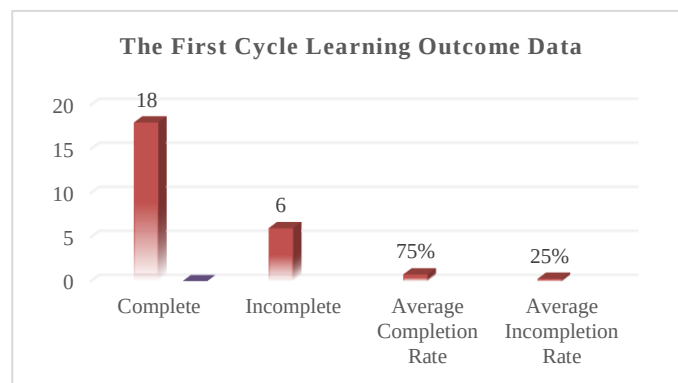


Figure 2. The First Cycle Learning Outcome Data

Based on the data in the graph above about student learning outcomes in cycle I, it can be understood that the use of the Jigsaw method assisted by LKPD can improve student learning outcomes in learning English on the theme Describing the Animal in the Zoo in class VIII B MTs As'adiyah Uloe. This can be seen in the data that the number of students who belong to the complete category is 18 people and 6 people are not complete. When percented, it can be stated that the average student completeness is 75% and the incompleteness is 25%. This indicates that there has been a significant increase.

By referring to the illustration/graphic above, it can be understood that using the Jigsaw method will help students in class VIII B MTs As'adiyah Uloe to better understand Describing the Animals in the Zoo. The Jigsaw method can significantly improve the learning outcomes of students in class VIII B, but this cannot be determined with certainty. This can be seen from the statistics of six students who have incomplete criteria. Therefore, the teacher needs to continue the action research in the next cycle.

4. Reflecting Step



Based on the results of the observation, the researcher will share some notes from partners or peers. First, some students have shown activeness in class, although not fully. Second, teachers should use learning media so that students are not bored or bored. This needs to be done because there is still some time left. Third, student learning outcomes have improved. However, it has not been comprehensive for all students. There are still 8 students who have not reached the KKM. Departing from the results of the reflection notes above, the researchers and colleagues agreed to continue the action in cycle II.

B. Cycle II

1. Planning Stage

As in the preparation of cycle I, the teacher provides the material, determines the Minimum Completeness Criteria (KKM), creates the lesson plan for cycle II, and reflects on the observation of the PTK for cycle II.

2. Action Stage

Similar to the implementation of actions in cycle I, the teacher carried out the learning steps according to what was outlined in the lesson plan for cycle II. There is no difference in the implementation of cycle I and cycle II, except that the researcher in this cycle added learning media in the form of YouTube videos using a projector and speaker so that students do not get bored.

3. Observation Stage

Like the implementation of observations in cycle I, the researcher also did the same in this cycle. Therefore, the researcher will present the student learning outcomes graph for cycle II.

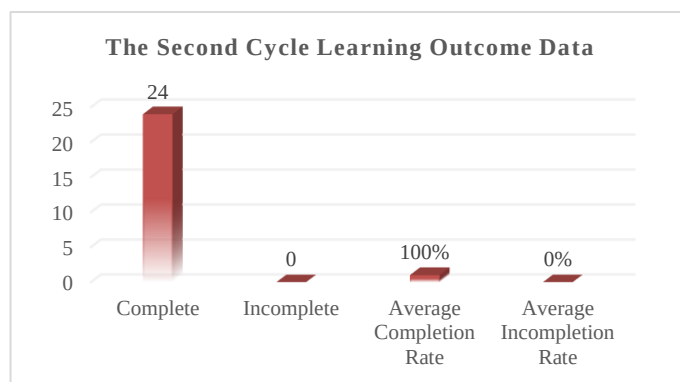


Figure 3. The Second Cycle Learning Outcome Data

Based on the data in the graph above regarding student learning outcomes in cycle II, it can be understood that the use of the Jigsaw method assisted by LKPD can improve student learning outcomes in English learning on the topic of Describing the Animal in the Zoo in class VIII B MTs As'adiyah Uloe. This is evident in the data that the number of students categorized as complete is 24 people and incomplete is 0 people. When expressed as a percentage, it can be stated that the average student completion rate is 100% and the non-completion rate is 0%. This indicates that there has been a significant improvement. Referring to the illustration/graph above, it can be understood that using the Jigsaw method will help students in class VIII B MTs As'adiyah Uloe to better



understand Describing the Animals in the Zoo. The Jigsaw method can significantly improve the learning outcomes of eighth-grade students in class VIII B. Therefore, the action is deemed successful.

4. Reflection Stage

Based on the observation results, colleagues and researchers summarized their findings as follows. First, all students were active during the learning process. Second, all students appeared to enjoy the learning due to the use of teaching media. Third, the students' learning outcomes have improved comprehensively. Based on the results of the reflection notes, the action is concluded in this cycle. This statement indicates that the action can be considered successful.

The use of the jigsaw method in English language learning can make the learning process more interactive and collaborative, which can ultimately improve students' understanding and their learning outcomes. First, it increases Active Participation. In the jigsaw method, each student is responsible for a specific part of the material, which they then teach to their peers. This encourages students to learn and understand the material more actively, as they need to prepare themselves to explain it to their group (Yani et al., 2023).

Second, it enhances material comprehension. By dividing the material into several small parts that are studied in depth by the students, the jigsaw method allows students to understand the material more deeply. When students teach the material back to their classmates, they reinforce their own understanding (Rahmatullah & Jasman, 2024).

Third, it encourages cooperation and communication. The jigsaw method requires students to communicate and collaborate in groups, which are essential skills in learning English. They must listen, speak, and explain concepts in English, which helps improve their language skills (Ito et al., 2023).

Fourth, building self-confidence. When students successfully teach the material to their peers, they feel more confident in their English skills. This confidence can have a positive impact on their learning outcomes (Sukmawati et al., 2023).

Fifth, broadening perspectives. Through group discussions, students can share different perspectives and understandings, which helps them see the material from a broader and deeper viewpoint (Sukmawati et al., 2023).

Sixth, reducing dependence on the teacher. This method shifts some of the learning responsibility from the teacher to the students. Students learn to be more independent and take responsibility for their own learning, which can enhance motivation and learning outcomes (Yani et al., 2023).

CONCLUSION

Based on the results of this classroom action research, it can be concluded that the use of the Jigsaw method assisted by LKPD can improve students' learning outcomes in English lessons on the topic of Describing the Animal in the Zoo in class VIII B MTs As'adiyah Uloe. In Cycle I, the percentage of students who achieved mastery increased from 50% to 75%, while the percentage of students who did not achieve mastery decreased from 50% to 25%. Additionally, in cycle II, the percentage of students who completed their learning increased from 75% to



100%, while the percentage of students who did not complete their learning decreased from 25% to 0%. This shows that the activities in cycle II successfully improved the students' learning outcomes. Therefore, the Jigsaw technique can be used to improve students' English learning outcomes on the topic of Describing the Animal in the Zoo in class VIII B MTs As'adiyah Uloe.

Based on the above conclusion, the following recommendations are suggested. To the next teachers or researchers, they can use the Jigsaw method by integrating or combining it with LKPD, thereby optimizing the learning objectives and outcomes to be achieved. The Jigsaw method can be applied in various subjects, such as science, history, language, and social studies. In English language learning, this method is effective for discussing learning themes that have varied discussions, allowing students to work together to understand and teach these concepts. Thus, the application of the Jigsaw method can enhance and streamline classroom learning.

REFERENCES

- Aminah, S. (2020). *Penelitian Tindakan Kelas Bagi Guru dan Best Practice Bimbingan PTK Bagi Pengawas Sekolah/Madrasah*. Nizamia Learning Center.
- Arikunto, S. (2011). *Prosedur Penelitian Suatu Pendekatan Praktek*. Rineka Cipta.
- Asmani, J. M. (2011). *Tuntunan Lengkap Metodologi Praktis Penelitian Pendidikan*. Diva Press.
- Budiyanto, M. A. K. (2016). *Sintaks 45 Model Pembelajaran dalam Student Centered Learning (SCL)*. UMM Press.
- Hamidah, N., Haryani, S., & Wardani, S. (2018). Efektivitas Lembar Kerja Peserta Didik Berbasis Inkuiri Terbimbing untuk Meningkatkan Hasil Belajar Siswa. *Jurnal Inovasi Pendidikan Kimia*, 12(2), 2212 – 2223.
- Hasnawati, Akmal, & Syafi, A. (2023). Penerapan Metode Make a Match pada Pembelajaran Bahasa Arab Tema Al-Ghuraflu Fi Al-Baiti untuk Meningkatkan Hasil Belajar Siswa di MTs As'adiyah Uloe. *Honai*, 5(1). <https://doi.org/https://doi.org/10.47655/honai.v5i1.81>
- Ito, E. P., Parapat, L. H., & Afifah, N. (2023). Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Kemampuan Mengkritik Cerpen Siswa Kelas XI MAN 4 Mandailing Natal. *JURNAL ALFA: Penelitian, Pendidikan, Dan Bahasa*, 1(1), 32–42.
- Laia, B., & Zai, E. P. (2020). Motivasi Dan Budaya Berbahasa Inggris Masyarakat Daerah Tujuan Wisata Terhadap Perkembangan Bahasa Anak Di Tingkat SLTA: Studi Kasus Desa Lagundri, Desa Sorake, dan Desa Bawomataluo. *Jurnal Education and Development*, 8(4), 602–608.
- Marliana, C. (2023). Meningkatkan Aktivitas dan Hasil Belajar Bahasa Inggris Materi Teks Information Report Melalui Penerapan Model Pembelajaran Kooperatif Tipe Jigsaw pada Siswa Kelas IX-A MTs Negeri 2 Subang Semester Genap Tahun Pelajaran 2018/2019. *JPG: JURNAL PENELITIAN GURU FKIP UNIVERSITAS SUBANG*, 6(1), 21–31.
- Mu'miroh, D. (2021). Peningkatan Aktivitas Dan Hasil Belajar Bahasa Inggris Materi Teks Information Report Melalui Penerapan Model Pembelajaran Kooperatif Tipe Jigsaw Pada Siswa Kelas IX-D MTs Negeri 4 Jember Semester



- 2 Tahun Pelajaran 2019/2020. *Jurnal Ilmiah Pendidikan Visioner (JIPV)*, 2(2), 80–87.
- Nahak, T. C. (2023). Penerapan Model Pembelajaran Kooperatif Tipe Jigsaw Untuk Meningkatkan Prestasi Belajar Bahasa Inggris Pada Siswa Kelas XI IPA 2 SMA Negeri I Malaka Barat Tahun Pelajaran 2021/2022. *Haumeni Journal of Education*, 3(1), 77–86.
- Nidawati, N. (2020). Penerapan Peran Dan Fungsi Guru Dalam Kegiatan Pembelajaran. *PIONIR: Jurnal Pendidikan*, 9(2), 136–153.
- Nurbiah, Syafi'i, A., & Fahril. (2023). Implementasi Model Problem Based Learning (PBL) Berbantuan Alef Education dalam Meningkatkan Hasil Belajar Siswa pada Pembelajaran Matematika Tema Himpunan di MTs As'adiyah Uloe. *Educandum*, 9(1), 126–134. <https://doi.org/https://doi.org/10.31969/educandum.v9i1>
- Nursyamsi, D., Suprpta, & Muzakkir. (2019). Pengembangan Lembar Kerja Peserta Didik (LKPD) Berbasis Lingkungan. *JPF (Jurnal Pendidikan Fisika) Universitas Islam Negeri Alauddin Makassar*, 7(1), 74–78.
- Rahmatullah, F., & Jasman, J. (2024). Implementasi Model Pembelajaran Jigsaw Dan Penggunaan Media Canva Untuk Meningkatkan Hasil Belajar Materi Makanan Halal Dan Haram Bagi Siswa Kelas VI A MI Al-Ishlah Kota Sorong. *Seulanga*, 3(2), 153–164. <https://doi.org/https://doi.org/10.47655/932b4174>
- Sari, E. R., Yusnan, M., & Matje, I. (2022). Peran Guru Dalam Meningkatkan Keaktifan Belajar Siswa Melalui Media Pembelajaran. *Jurnal Eduscience*, 9(2), 583–591.
- Sukmawati, A., Khamalia, N. A. N., & Zuhroh, N. E. (2023). Efektivitas Metode Jigsaw pada Peserta Didik Abad 21. *TSAQOFAH*, 3(4), 568–576.
- Syafi'i, A., Akmal, & Bulan, S. (2023). Pemahaman dan Praktik Guru dalam Melaksanakan Penilaian Mata Pelajaran Pendidikan Agama Islam di MTs As' adiyah Uloe. *Wahana Karya Ilmiah Pendidikan*, 7(1), 20–30. <https://journal.unsika.ac.id/index.php/pendidikan/article/view/8923>
- Syafi'i, A., & Bulan, S. (2022). Meningkatkan Hasil Belajar Fikih pada Siswa Kelas VII D di MTs As' adiyah Uloe Melalui Penggunaan Model Pembelajaran Kooperatif Tipe TPS (Think, Pair, and Share). *Bacaka: Jurnal Pendidikan Agama Islam*, 2(2). <https://www.ejournal-bacaka.org/index.php/jpai/article/view/78>
- Vebrianto, R., Thahir, M., Putriani, Z., Mahartika, I., Ilhami, A., & Diniya, D. (2020). Mixed Methods Research: Trends and Issues in Research Methodology. *Bedelau: Journal of Education and Learning*, 1(2), 63–73. <https://ejournal.anotero.org/index.php/bedelau/article/view/35>
- Yandi, A., Putri, A. N. K., & Putri, Y. S. K. (2023). Faktor - Faktor Yang Mempengaruhi Hasil Belajar Peserta Didik (Literature Review). *Jurnal Pendidikan Siber Nusantara*, 1(1), 13–24.
- Yani, L., Sadrina, S., & Fathiah, F. (2023). Analisis Kemampuan Berpikir Kritis Siswa dalam Penerapan Metode Jigsaw. *UPITER (JURNAL PENDIDIKAN TEKNIK ELEKTRO)*, 8(1), 58–66.