

Cooperative Learning with Jigsaw Type for Teaching Nahwu

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General Background: The teaching of Nahwu in Islamic boarding schools is often hindered by monotonous, teacher-centered methods that limit students' comprehension and engagement. **Specific Background:** At Daarul Abror Modern Islamic Boarding School, Grade II-C students displayed low achievement in Nahwu due to limited interactive and contextualized learning. **Knowledge Gap:** While the Jigsaw cooperative learning model has been shown to improve language skills in other contexts, its application in teaching Nahwu with the *Nahwu Wāḍiḥ* text in modern pesantren remains underexplored. **Aims:** This study investigates the effectiveness of the Jigsaw method in enhancing students' comprehension of Nahwu and fostering active participation. **Results:** Using a qualitative case study with observations, interviews, and pre-post tests, findings reveal improved mastery of grammatical structures, higher test scores (from 62.60% to 68.90%), and increased student motivation and collaboration. **Novelty:** Unlike prior studies limited to Arabic or English descriptive texts, this research applies the Jigsaw strategy specifically to Nahwu instruction within a modern pesantren framework. **Implications:** The study highlights the potential of cooperative learning to strengthen both cognitive and social aspects of students' learning, offering teachers a practical model to promote deeper comprehension, accountability, and engagement in grammar instruction.

Highlights:

- Jigsaw method improved students' comprehension and motivation in Nahwu.
- Pre-post tests showed higher achievement after implementation.
- Cooperative learning fosters collaboration and accountability.

Keywords: Jigsaw Technique, Nahwu Learning, Cooperative Learning, Pesantren Education, Student Engagement

Introduction

Language serves as the key to understanding texts, whether in narrative, descriptive, or contextual forms, and thus becomes a medium for accessing knowledge and uncovering various branches of science. Ibn Khaldun emphasized that children should be taught the Arabic language prior to other disciplines, given its essential role in broadening intellectual horizons through the comprehension of diverse literary works [1]. Nevertheless, the teaching of Arabic in Islamic boarding schools still encounters obstacles, mainly because traditional methods dominate and fail to maximize students' deep comprehension of texts. Instruction is often delivered through lectures and direct translation, which limits students' capacity to understand the broader context and linguistic patterns within the material. As a result, they struggle to transfer this knowledge to other readings. At Daarul Abror

Modern Islamic Boarding School, the researcher observed that the teaching process generally lacks collaborative interaction among students. Classroom practices are mostly monotonous and teacher-centered, creating a learning atmosphere that feels repetitive and uninspiring. Such conditions hinder students from gaining a deeper grasp of the content. To effectively understand texts across various subjects at Daarul Abror, students not only need a solid foundation in Arabic vocabulary and grammar—particularly *Nahwu* and *Sharf*—but also require engaging, structured, and interactive learning activities. The teacher's role in planning such activities greatly influences students' attention, concentration, and motivation, which in turn affects their ability to interpret sentences in accordance with the structure and function of each word [2].

Have confirmed the effectiveness of the cooperative learning model with a student-centered learning approach in enhancing students' conceptual understanding [3][4]. In addition, Rahayu's research demonstrated highly feasible outcomes by developing the cooperative learning method of the Jigsaw type to enhance students' listening skills and comprehension of learning materials.[5] In line with this, the use of the Jigsaw method can significantly enhance students' active participation and motivation, as well as facilitate their comprehension of learning materials in Arabic language instruction [6]. indicate that the implementation of Jigsaw learning increases students' interest in the learning process and leads to improved outcomes in *Qawā'id* instruction. This, in turn, facilitates students' ability to comprehend Arabic texts in other contexts, such as descriptive, narrative, and various other types of texts.[8]

In the study conducted by Falah et al., it was concluded that the Jigsaw technique is highly effective in enhancing students' ability to comprehend *Nahwu* [9]. and is fairly effective in improving their reading skills[10]. Although the study did not specifically focus on the effectiveness of cooperative methods, cooperative learning is considered effective when implemented to enhance students' motivation in learning *Nahwu* [11]. In line with previous studies, in addition to formulating ten stages for the application of the Jigsaw technique in teaching reading skills, Akmalia and Cahyani also discussed various cooperative methods, such as the use of the Jigsaw strategy to improve reading ability [12].

In the study conducted it was concluded that the Jigsaw method can improve the comprehension and reading skills of eighth-grade junior high school students in reading English descriptive texts. Moreover, this method enabled students to collaborate enthusiastically within groups, which in turn enhanced their learning outcomes in reading comprehension.[13] The aforementioned studies have thus far been limited to supporting comprehension in Arabic language learning, English descriptive texts, and the teaching of Arabic grammar such as *Nahwu* based on the *Al-Ājurrūmiyyah*. However, they have not yet been applied to the teaching of *Nahwu* within the context of modern Islamic boarding schools that employ the inductive method using the *Nahwu Wāḍiḥ*.

Based on the above discussion, the researcher concludes that the implementation of the cooperative learning model of the Jigsaw type can serve as an innovative instructional solution to address various difficulties in learning Arabic and its grammatical rules, as well as to enhance students' motivation in learning *Nahwu*. Therefore, this has encouraged the researcher to examine the effectiveness of the Jigsaw cooperative learning model on students' ability to understand *Nahwu* in Grade VII TMI at Daarul Abror Modern Islamic Boarding School, using *Kitab Nahwu Wāḍiḥ* Volume 1 as the learning material. This consideration is based on the fact that although Grade II TMI students are still beginners in learning *Nahwu*, they already possess a foundational vocabulary base that enables them to comprehend Arabic texts of relatively complex forms.

Theoretical Studies

The foundation of this research is rooted in constructivist theory, pioneered. This theory emphasizes that learning is not merely the passive reception of knowledge from external sources, but rather an active process in which students construct their own understanding through experience and social interaction. In other words, new knowledge does not emerge spontaneously;

instead, it is formed through the learner's direct engagement in connecting new information with prior experiences. In line with this, learning motivation theory provides the basis that the success of learning is highly dependent on students' psychological conditions [14]. argue that motivation grows stronger when students are placed in situations that encourage them to achieve shared goals. This implies that a student's achievement only becomes meaningful when it is accompanied by the success of their peers. Thus, group collaboration not only enhances motivation but also fosters collective responsibility, making the learning process more dynamic and engaging.

This theoretical perspective aligns with the concept of cooperative learning as explained. [15] They highlight several key principles that form the foundation of cooperative learning. First is positive interdependence, the awareness that group success can only be achieved if each member contributes. Second is individual accountability, which ensures that every student learns and does not merely rely on others. Third is face-to-face interaction, which allows for direct communication and exchange of ideas. In addition, the development of social skills and group evaluation is also considered essential to maintaining the balance of the learning process. Building upon these theoretical foundations, the jigsaw learning model was introduced. This model is designed so that students do not only act as recipients of information, but also as "experts" responsible for a particular section of the learning material. Each student then carries the responsibility to explain their mastered content to the members of their group. This approach promotes active involvement, deepens comprehension, and nurtures a spirit of collaboration among students.

Within the scope of this research, the Jigsaw model is applied to *Nahwu* instruction in a modern *pesantren*, making use of the *Nahwu Wadhih* and *Al-Qira'atur Rosyidah* textbooks. The participants are second-year TMI students who, despite being relatively new to the study of *Nahwu* rules, already have an adequate Arabic vocabulary base to engage with more advanced texts. Under these circumstances, the Jigsaw method is expected to create a more meaningful and impactful learning experience. From this framework, several outcomes are anticipated. First, students are expected to show improved mastery of *Nahwu* principles, particularly in recognizing the structure of Arabic sentences. Second, the method is projected to enhance students' motivation for learning, as it actively involves them and instills a sense of accountability within their groups. Third, the development of social skills, especially communication, collaboration, and respect for others' opinions. Previous studies, such as those conducted. [5] [9] further support this assumption, demonstrating that the jigsaw model has been proven effective in improving linguistic comprehension while simultaneously fostering students' motivation to learn.

1. Jigsaw Technique

Jigsaw is a learning method that provides students with the opportunity to study and collaborate with their peers within their respective home groups. [5] The Jigsaw technique represents a collaborative learning strategy that promotes mutual dependence among learners while improving their capacity to exchange information efficiently. [16] Within this approach, every student is tasked with learning a particular section of the material and then sharing their understanding with peers in their home group. This arrangement guarantees active participation from all learners while also fostering crucial abilities such as teamwork, communication, and responsibility. Through mutual reliance in pursuing a shared academic objective, students not only gain a more profound grasp of the subject matter but also enhance their social and cognitive competencies.

The Jigsaw-based cooperative learning strategy is broadly acknowledged as an effective way to promote collaboration among students. A range of studies has shown that this approach not only stimulates cooperative participation but also strengthens learners' critical thinking, problem-solving capacity, and social interaction skills. Moreover, the structured group dynamics within the Jigsaw technique provide opportunities for students to share knowledge, exchange perspectives, and communicate more effectively with their peers, thereby creating a more meaningful and participatory learning environment [17]. This method has been applied across various fields, including literature, social sciences, natural sciences, and zoology, as evidenced in several studies

[18][19]. According to an article [20], the Jigsaw method requires students to first work within their original groups, after which they are reorganized into expert groups. Within these expert groups, students collaborate and engage in discussions to deepen their understanding of specific aspects of the learning material. The number of members in each expert group is determined by the scope and complexity of the material being studied. During the expert group sessions, teachers provide support to students who may encounter difficulties in grasping the content. It is expected that members of the expert groups will gain a solid understanding of the material and develop the ability to identify the most effective strategies for teaching it to others.

Once the expert group discussions are completed, students return to their original groups, where each member shares their acquired knowledge and insights with their peers. In this way, the Jigsaw learning strategy fosters collaboration, as every member of the group plays an equally important role. Consequently, each student contributes meaningfully to problem-solving and is valued by their peers for broadening the group's collective knowledge. Moreover, the Jigsaw method has been shown to reduce excessive competition among students and minimize the potential for discrimination within the classroom [21].

2. Steps and Strategies in Learning with the Jigsaw Technique

According to the official website of *The Jigsaw Classroom*, the steps involved in implementing this method are as follows:

- a. **Group Formation** The teacher organizes students into small groups of 5–6 members. Each group is arranged to ensure diversity and balance in terms of gender, ethnicity, race, and academic ability. One student is chosen as the leader, preferably someone who shows responsibility and maturity.
- b. **Material Allocation** The lesson content is divided into five or six parts. Every student within a group is assigned one specific section to study and receives access only to their portion. Adequate time is provided for students to read and reread their part until they gain a clear understanding, without relying on rote memorization.
- c. **Formation of Expert Groups** Students responsible for the same section from different groups then come together to create an “expert group.” In these groups, they exchange ideas, clarify points, and rehearse how to present the material in preparation for teaching their original group.
- d. **Returning to Home Groups** Afterward, students return to their initial groups, where each member presents their assigned section. The teacher promotes active participation by encouraging explanations, asking questions, and facilitating discussions.
- e. **Observation and Support** The teacher supervises group activities, ensuring that they function effectively, and intervenes when issues arise, such as when one student dominates or interrupts the process. Group leaders are tasked with ensuring that all members contribute equally and fulfill their responsibilities.
- f. **Evaluation and Feedback** At the conclusion of the session, the teacher conducts a quiz to measure students' grasp of the material. To further develop leadership skills, group leaders may receive additional coaching or discreet support until they feel confident in guiding their peers.

With careful planning, these sessions can become engaging and enjoyable learning experiences rather than mere classroom routines. The Jigsaw technique not only strengthens comprehension but also builds teamwork, leadership, and responsibility among students [12].

3. The Application of Nahwu Understanding in *Muthola'ah* Learning

The subject of *Muthola'ah* holds a significant position within the curriculum of many pesantren educational institutions in Indonesia. Its presence and role are particularly prominent in modern pesantren that implement the *Kulliyyatul Mu'allimin al-Islamiyyah* (KMI) or *Tarbiyatul Mu'allimin al-Islamiyyah* (TMI) systems. These practices are adaptations of the model pioneered by Pondok Modern Darussalam Gontor, a prominent Islamic educational institution in Indonesia. As such, *Muthola'ah* is not simply treated as a regular subject but as a vital element in the modernization of pesantren education, shaped by Gontor's contributions to Islamic pedagogy. The subject emphasizes the study of inspirational stories infused with moral and spiritual values. Its core objective is to cultivate students' abilities in Arabic storytelling and oral expression, while also strengthening their capacity to understand, interpret, and derive lessons from these narratives.[22]. The main instructional resource for this subject is the textbook *Al-Qira'atur Rasyidah*, written by Abdul Fattah Shobri Bek and Ali Umar Bek. In practice, lessons generally start with the teacher presenting difficult vocabulary. After students grasp and memorize these terms, the teacher continues by providing a detailed explanation of the story's content. This approach ensures a deep understanding of the material, moving gradually from word-level comprehension to the overall narrative context. It is important to note that *Muthola'ah* learning does not stop at comprehension alone. Students are also required to memorize the stories and present them before their teacher and peers. This practice aligns with one of the core objectives of *Muthola'ah*—enhancing students' oral proficiency in Arabic through storytelling methods [23]. However, students' comprehension while reading and understanding the contexts presented in this subject is heavily dependent on their grasp of *Nahwu* (Arabic grammar). Therefore, it is crucial for teachers to directly integrate *Nahwu* knowledge by identifying the grammatical structures embedded within the texts.

Method

This study employed a case study design to analyze the effectiveness of implementing the Jigsaw method in improving students' comprehension of *Nahwu*. The researcher adopted a qualitative approach by analyzing verbal data in order to provide a complex and holistic description of naturally occurring situations, thus allowing insights from informants as well as an overall understanding of the study. The research activities were carried out in Grade II-C of TMI at Daarul Abror Modern Islamic Boarding School, involving one *Nahwu* teacher from the second-grade level. To obtain a comprehensive overview of the data, the researcher analyzed information qualitatively through classroom observations of lesson plan (RPP) documents, unstructured interviews, test results, and direct observations of the teaching and learning process. Qualitative data were gathered from both the researcher's and the teacher's observations in order to analyze students' development during learning activities that applied the Jigsaw technique. Observations were conducted throughout *Nahwu* lessons, including instances when the teacher provided instructions to students, how students received the instruction, and the interactions that occurred during the learning process.

Unstructured interviews were conducted with ten students and the teacher to explore the impact of the Jigsaw implementation in instruction. In addition, quantitative data were obtained from students' test results, particularly in understanding and describing linguistic structures in Arabic texts using *Kitab Nahwu Wāḍiḥ* and *Al-Qirā'atur-Rāshidah* as learning materials. A pre-test on *Nahwu* competence was conducted prior to the implementation of the Jigsaw method as an initial step to identify students' abilities in comprehending the context of texts—both in terms of content and the linguistic structures contained within them.

Data were collected using multiple techniques to ensure the validity and richness of the findings. First, document analysis was conducted on lesson plans (RPP) to examine the instructional design and integration of the Jigsaw method in *Nahwu* learning. Second, classroom observations were carried out to capture the natural dynamics of the teaching and learning process, including the teacher's instructions, students' responses, and peer interactions during Jigsaw activities. Third, unstructured interviews were conducted with ten students and the *Nahwu* teacher to explore their experiences, perceptions, and reflections on the use of the Jigsaw method. Finally, tests were

administered to measure students' ability to understand and analyze Arabic texts. The tests involved comprehension tasks based on *Kitab Nahwu Wāḍiḥ* and *Al-Qirā'atur-Rāshidah*. Pre-tests were conducted before the Jigsaw method was introduced, while post-tests were administered afterward to identify learning process.

The qualitative data obtained from observations, document analysis, and interviews were analyzed using thematic analysis to identify recurring patterns and themes related to students' participation, comprehension, and motivation. Data were coded, categorized, and interpreted to develop a holistic understanding of the effects of the Jigsaw method. Meanwhile, the quantitative data from pre-tests and post-tests were analyzed descriptively by comparing mean scores and performance trends to determine the extent of improvement in students' *Nahwu* comprehension. The combination of qualitative and quantitative data allowed the researcher to triangulate findings, thereby strengthening the validity and reliability of the study's conclusions.

Results and Discussion

The teaching of *Nahwu* prior to the implementation of the jigsaw technique primarily emphasized theoretical mastery without providing sufficient space for students to explore the material, collaborate more deeply, or connect it with real-life contexts. As a result, students often felt bored and burdened in their attempts to understand the material. The researcher's observations revealed that when the teacher delivered lessons through lectures with limited student interaction, some students were focused and enthusiastic in listening to the explanation, while others were less attentive and showed low motivation. However, on the following day, when the teacher applied the jigsaw technique in the lesson, there was a clear increase in students' enthusiasm and active participation in following instructions and responding to the teacher's questions.

Based on interviews with the teacher and several students, the teacher observed positive responses in terms of students' participation and collaboration during classroom activities, as well as an improvement in their performance when tested with short questions. Students were able to provide more accurate responses, both orally and in writing. This condition aligns with constructivist theory, which emphasizes that students build their understanding based on prior knowledge while forming positive collaboration and interaction between peers and the teacher. Nevertheless, the researcher also identified several challenges consistent with findings from previous studies [24] particularly in the implementation stage in the classroom. Three students from three different groups struggled to understand the context of the material and tended to rely solely on their groupmates' understanding when carrying out their assigned roles as members of the expert group. This indicates the need for the teacher to be more proactive in guiding students with such characteristics. In addition, some students found it difficult to fully grasp the fragmented portions of the material within their home groups. This situation suggests the need for more effective solutions to ensure that all students can integrate their understanding of the divided content more comprehensively.

To overcome these challenges, several strategies can be applied. First, the teacher can provide additional scaffolding by giving guiding questions or structured worksheets that help students focus on the key concepts within their assigned sections. Second, implementing a brief feedback session after expert group discussions can ensure that all students have attained a sufficient level of comprehension before returning to their home groups. Third, rotating the roles within groups in subsequent lessons may reduce students' dependency on their peers and foster individual accountability. Finally, integrating periodic formative assessments, such as short oral or written quizzes, can help monitor individual progress and motivate students to actively engage with the material. These solutions align with the principles of cooperative learning, where accountability, equal participation, and positive interdependence are essential to ensure both group success and individual mastery. And for the pre-test, it was administered in the form of a written test designed to measure the students' prior knowledge. The purpose was to obtain an overview of their level of understanding of the concepts in *Nahwu* lessons. Meanwhile, by comparing the results of the pre-

test (before using the jigsaw technique in learning) and the post-test (after using the jigsaw technique), the improvement can also be observed, as follows:

No	Component	Pretest	Posttest
1	Number of students	23	23
2	Total score	1440	1745
3	Highest score	80	90
4	Lowest score	45	55
5	Percentage	62.60%	68.90%

Table 1. *Results of Pre-test and Post-test*

The results of the pre-test and post-test, as presented in Table 1, indicate a noticeable improvement in students' achievement after the implementation of the jigsaw technique. The number of participants remained the same (23 students), ensuring consistency in comparison. The overall score rose from 1440 on the pre-test to 1745 on the post-test, indicating a considerable improvement in group performance. At the individual level, the highest score increased from 80 to 90, while the lowest advanced from 45 to 55. This demonstrates that the cooperative learning process supported not only high achievers but also students with lower performance, who showed measurable progress in understanding the material.

In addition, the mastery percentage improved from 62.60% in the pre-test to 68.90% in the post-test. This growth underscores the effectiveness of the Jigsaw method in strengthening students' comprehension of *Nahwu* concepts. Although the increase is moderate, it highlights the constructive role of collaborative learning in fostering both individual and collective advancement. Through the application of the Jigsaw technique in reading and discussion activities, learners are trained to develop comprehension skills that include identifying main ideas as well as supporting details within text structures. Group discussions further encourage students to link the central ideas of a passage with their prior knowledge and personal experiences relevant to the theme. This process enables them to build a more coherent understanding framework, allowing them to quickly identify the overall theme of a new text before engaging in more detailed analysis.

Moreover, the Jigsaw strategy contributes to a more supportive classroom environment, where students simultaneously learn from and teach one another. Each learner benefits from reinforcement provided by peers with stronger skills in understanding *Nahwu* structures, promoting collective growth. Compared to traditional teaching methods—where instruction is typically delivered through lectures and direct explanations—the cooperative model yields more favorable outcomes. In conventional settings, when students face unfamiliar or complex words or sentence patterns, they are often expected to recall meanings independently or deduce them from related vocabulary and visual cues, which can limit deeper comprehension. Consequently, this approach tends to limit individual comprehension and reduce active participation in the learning process.

Conclusion

The implementation of the jigsaw technique significantly enhances students' understanding of *Nahwu* structures and grammatical rules within Arabic texts. This model provides learners with opportunities to actively explore the material and connect it with real-life contexts. The use of the jigsaw technique fosters active participation and motivation among students. Learners not only become more enthusiastic in engaging with classroom activities but also demonstrate solidarity and mutual support in achieving group goals. The teacher's role is crucial in ensuring the effectiveness of the jigsaw technique. Teachers act as facilitators, guides, and evaluators throughout the process, both in expert groups and home groups, thereby ensuring efficiency and maximizing individual contributions. The availability of Arabic dictionaries serves as an essential learning resource for

students, particularly in strengthening their ability to interpret the meaning of sentences found in *Nahwu Wadhih*. Continuous evaluation and reflection are vital after each learning session to ensure improvement in comprehension, refinement of instructional strategies, and the development of students' social and collaborative skills.

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