The Impact on Applying Numbered Head Together (NHT) as Teaching Strategy to Increase the Students’ Reading Comprehension

Ledy Nur Lely¹, Welliam Hamer², Dea Ratna Aulia³

¹ English Education Study Program of Teacher Training and Education Faculty, Universitas Sultan Ageng Tirtayasa
² English Education Study Program of Teacher Training and Education Faculty, Universitas Sultan Ageng Tirtayasa
³ English Education Study Program of Teacher Training and Education Faculty, Universitas Sultan Ageng Tirtayasa

ARTICLE INFO

Keywords:
Impact
Numbered Head Together (NHT)
Reading Comprehension

ABSTRACT

The purpose of this study was to determine the impact on applying the Numbered Head Together (NHT) strategy on eighth-grade students’ reading comprehension of recount material at SMPN 10 Kota Serang. For the study, the researchers conducted quantitative research with a true experimental design. The participants in this study were eighth grade students of SMPN 10 Kota Serang. Cluster random sampling was used to choose the sample for this study. There were 30 students in each of the two classes participated in this study: VIII B as the experimental class and VIII G as the control class. The experimental class was instructed using the NHT strategy, while the control group was instructed using the lecturing technique. The data were gathered by pre- and post-tests, and the hypothesis was tested by using the t-test procedure. The t-test calculation revealed that t-count (9.22) was higher than t-table (2.00) with a significance of 0.05. This indicates that the alternative hypothesis (Ha) has been accepted. It can be determined that applying the NHT strategy had a substantial impact on students’ reading comprehension of recount text in eighth grade at SMPN 10 Kota Serang.

INTRODUCTION

Learners who study English are able to acquire more than one skill. They should be able to perform all tasks. One of the English abilities that should be learned is reading. "Reading is the
ability to take meaning from the printed page and interpret the information effectively (Grabe & Stoller, 2011). Meanwhile, according to Nunan (2003), reading is a fluent activity in which readers combine information from the text with their own prior knowledge to construct meaning. Students can obtain the message from what they read by reading, and they can also expand their knowledge by reading the information or message from the text they have read by reading. Students’ reading skills are crucial, and they must be mastered properly in order to comprehend what they read.

According to the researchers’ conversation with an English teacher at SMPN 10 Kota Serang, many students in the eighth grade had difficulty understanding an English text. First, students believe that learning English reading makes them bored; they do not enjoy or enjoy reading because the teacher continues to employ the traditional method, which makes students bored and less excited about learning in the classroom. Second, students are uninterested in reading an English text; this is due to a lack of vocabulary, which can cause students to get confused and unable to comprehend the meaning of an English text. Third, the teaching-learning process is still primarily focused on the teacher, therefore students remain passive in the classroom during the teaching-learning process.

The use of relevant and intriguing strategies can be a way to make it easier for students to understand the content. In order to tackle the challenges, the researchers employed cooperative learning in the classroom. Students that participate in cooperative learning must complete an assignment as a group. Working together allows them to express their thoughts and share information because they can help each other in their group handle their learning challenges, and working in a group allows them to enjoy and enjoy themselves more than working alone.

Cooperative learning methods come in a variety of forms. The Numbered Head Together (NHT) is one of the cooperative learning strategies/techniques that might boost students’ enthusiasm in reading. “NHT provides a motivation for students to harness their interest in socializing to an academic purpose, to invest in the learning of their teammates, and to work hard themselves (Leighton in Cooper, 2011). Based on the statement, it can be inferred that NHT is an effective strategy for motivating students to support and assist one another in their learning activities.

THE NATURE OF READING

Reading is an activity that students engage in in order to obtain information that they were previously unaware of. Reading also allows students to build knowledge and broad insight. Reading, according to Brown (2004), is a process of negotiating meaning in which the reader brings a set of schemata to the text in order to understand it and creates the product of interaction. Reading is also an interactive procedure for comprehending the text’s contents. Similarly, according to Nunan (2003), reading is a fluent process in which readers combine information from a text with their own background knowledge to construct meaning. Everyone has to read to keep up with current events in a variety of fields. As a result, it is one of the receptive skills that most foreign language programs aim for. It demonstrates that reading is a crucial aspect of knowledge transmission.

Furthermore, according to Harmer (2007), reading is beneficial for language acquisition. It implies that reading has a positive impact. We may get a lot of vocabulary knowledge from reading, and reading can also help us enhance our comprehension of what we read. In line with the definition above, reading is the process of a reader comprehending a text to obtain information, knowledge, and by reading, the reader will understand what they have read and will be able to respond to the author’s thoughts.

Types of Reading

According to Patel & Jain (2008), there are four forms of reading, they are as follows:
1) Intensive Reading
Intensive reading is linked to further language learning under the supervision of a teacher. Intensive reading will give a foundation for explaining structural challenges and expanding vocabulary and idiom knowledge. The base for classroom activity will be intensive reading material. It will not only be read, but also discussed in depth in the target language, examined at times, and utilized as a starting point for writing assignments. Text reading or passage reading are both examples of intensive reading. The learner reads the text in order to gain knowledge or make an analysis. The purpose of this reading is to read a text that has been condensed. This reading is carried out in order to obtain specific information.

2) Extensive Reading
Extensive reading is used to gain a broad understanding of a subject and also involves leisure reading of larger literature. The reader is interested in learning more about something. After reading, the reader is unconcerned about specific or critical facts. People usually read to keep themselves up to date.

3) Aloud Reading
Aloud reading is a fundamental aspect of school discipline and order. When learners read aloud, they are confronted with written sentences that have never been spoken before. The goal of reading aloud is for learners to improve their speaking ability and pronunciation.

4) Silent Reading
Silent reading is a crucial skill in English instruction. This reading should be used to help students improve their reading skills. Silent reading is used to get a large amount of information. Silent reading must be based on a text chosen by the student. Silent reading allows learners to read fully silently, with no sounds or movements of the lips. It enables him to read quickly, easily, and fluently. It helps students understand what they are learning and expands their vocabulary.

Reading Principles
According to Harmer (2007), the precise principles must be relied on when reading. There are certain reading principles, they are as follows:

1) Encourage learners to read as often and as much as possible.
   It is beneficial for learners to read as much as possible. Everything we do should encourage learners to read widely, if not even more so than intensively. In other words, it can be said that discussing these principles with learners is an excellent idea.

2) Learners need to be engaged with what they are reading.
   When learners are reading outside of class, they should be engaged in joyful reading, which means we should aim to assist them get as much enjoyment out of it as possible. However, we will try our best during class to ensure that they are engaged with the topic of a reading material and the tasks they are required to complete while doing so.

3) Encourage learners to respond to the content of a text (and explore their feelings about it), not just concentrate on its construction.
   It is critical for learners to analyze reading texts in class to learn about things like how they utilize language, how many paragraphs they have, and how often they employ relative clause. However, the text's meaning, or message, is just as vital. As a result, we must provide pupils the opportunity to respond in some way to that message.

4) Prediction is a major factor in reading.
   When we read books in our own language, we often have a clear notion of what we are about to read before we ever begin. We can tell what is in a book by looking at the cover; we can tell what is in an article by looking at the photos and headlines; and we can tell what reports are
about by looking at them before we read a single word. Our brain begins to predict what we will read as soon as we see these clues: the book cover, the headline, the web page banner.

5) Match the task to the topic when using intensive reading texts.
We need to choose good reading tasks, the right kind of questions, appropriate activities before, during, and after reading, and useful study exploitation, among other things, once we have decided what reading text the students will read (based on their level, the topic of the text, and its linguistic and activation potential), we need to choose good reading tasks, the right kind of questions, appropriate activities before, during, and after reading, and useful study exploitation, etc.

6) Good teacher exploit reading text to the full.
Any reading material is jam-packed with sentences, words, ideas, and descriptions, among other things. It makes no sense to ask learners to read it in class and then drop it and move on to something else. Good teachers use the reading material into engaging lesson sequences, incorporating the topic for additional discussion and assignments, the language for study and then activation (or, of course, activation and then study), and a variety of activities to bring the text to life.

Reading Comprehension

According to Grabe and Stoller (2011), reading comprehension is the ability to comprehend information in a text and interpret it effectively. It indicates that reading is the process of thinking about the information in the text we are reading in order to make sense of it. Meanwhile, Nunan (2003) stated that reading comprehension is a fluent process of mixing information extracted from the text with previous schemata to interpret the meaning. When students read a chapter, they decode written information, which is then coupled with the students' prior knowledge in their heads to achieve comprehension.

Furthermore, Johnson (2008) states that comprehension is the process of making the best sense of a text. It is a process that involves actively constructing meaning and extracting as much information as possible from text. Similarly, reading comprehension, according to Snow (2002), is the process of extracting and producing meaning simultaneously through interaction and involvement with written language. Reading comprehension research has concentrated on specific factors (e.g., vocabulary knowledge) without stating whether or whether the effect of that component indicates a relationship between the reader, text, and activity, or whether the factor changes from pre-reading to reading to post-reading.

Meanwhile, reading comprehension, according to Klingner et al. (2007), is the act of building meaning from a text through cognitive cooperation, which includes word knowledge and fluency. As a result, reading comprehension can be defined as the ability to interpret, extract, and build words and/or sentences in order to underline the importance of grasping the meaning and the link between concepts given in a book as a criterion for reading comprehension.

THE NATURE OF TEACHING READING

According to Brown (2003), teaching consists of guiding and promoting learning, enabling the learner to learn, and establishing the conditions for learning. As a result, we can deduce that teaching is the interaction between the teacher and the learners in order to impart knowledge.

Meanwhile, according to Nunan (2003), teaching reading involves at least two elements. First, it can relate to teaching learners who are learning to read for the first time. A second facet of teaching reading is to teach students who already know how to read in their native language. Teaching reading is the interaction between the teacher and the students in the classroom to discuss and then identify the book that will help them enhance their knowledge, with the teacher acting as a facilitator, assisting, and guiding the students to acquire new information. Teaching
reading comprehension is also a crucial task i.e. choosing appropriate comprehension techniques and other assistance as much as possible as a teacher.

**The Teacher’s Roles in Reading Instruction**

Teachers have a critical role in ensuring that pupils learn to read successfully. The students are expected to understand the substance of the reading text they read in this situation. Teachers must give texts that are appropriate for the students’ ability level in order for the reading teaching process to go smoothly. While assigning reading assignments, teachers must also organize the learners in various ways.

Furthermore, teachers must select or create numerous activities in each of the three phases of reading in order to build students’ interest and motivation, as well as motivate them to find knowledge from what they read. Aside from that, teachers must assess their learners’ reading progress throughout the reading process.

**The Selection of Reading Materials**

One of the components of the lesson plan in general, and reading competence in particular, is the selection of reading resources. Textbooks, students’ workbooks, periodicals, newspapers, articles, and other reading resources may be used by the teacher. When choosing reading materials, two factors must be considered: the content's relevancy and the level of difficulty of the texts (Hood et al., 1996).

Teachers must be encouraged to locate appropriate reading materials for their kids to read. In this situation, the reading texts chosen should be relevant to the students’ daily lives and experiences, their needs, or the goals of reading instruction. Teachers should also evaluate the reading texts’ level of difficulty, which is determined by a mix of contextual and textual elements such as the readers’ prior knowledge and experiences, the nature of the reading activities, and the language of the reading texts. Furthermore, when picking reading materials, teachers must consider the learners’ skill level (Gebhard, 2000). It suggests that teachers should choose materials that are easier to understand.

Besides, in order to assist students in reading, teachers must select, edit, change, or develop appropriate materials for students with a variety of needs and objectives to read that are challenging but do not frustrate them. Students will be able to extract information more readily and enjoyably if they are directed to the proper materials. In summary, the reading materials chosen must pique the kids’ interest in reading. They also assist students in realizing the importance of reading to them. Students are encouraged to think about and discuss the content of the reading materials in this scenario because they are interested in what they are reading. In other words, choosing reading materials that include these features will allow students to like and encourage them to read, as well as make it easier for them to comprehend the reading texts.

**The Activities of Reading**

To comprehend the content of a reading piece, proficient readers normally go through three stages. They try to use their prior knowledge to guess the topic of the reading material at first. Then they study the content to have a better understanding and determine how far they have progressed. These activities are usually divided into three categories: pre-reading, reading, and reading thereafter. Each phase might include a range of activities to encourage readers to read additional books that they are interested in.

Pre-reading activities are those that are completed before to reading a material. Pre-reading aid is intended to encourage learners to read or to pique their interest in the reading text. It also provides them with the background knowledge they will need to understand the reading text. It also gives learners particular reasons or objectives for reading the reading content. It suggests that teachers play an essential role in motivating students to read, revealing students' prior knowledge
and experience related to the reading text’s topic, and providing a variety of reading objectives to help students prepare to read.

Pre-reading exercises, in general, prepare students to read, think critically about text materials, and seek solutions to the questions they have about the material. Teachers may focus on one or more of the following during the pre-reading phase of instruction: (1) motivating readers, (2) building and activating prior knowledge, (3) introducing key vocabulary and concepts, and (4) developing assignments and strategies that are important to consider for effective learning (Fachrurrazy, 2002).

Teachers must choose from a number of activities based on the pre-reading indicated above, taking into account the students’ requirements, interests, and the suitability of reading materials. Another thing that teachers should think about is how they use time allotment. Because the primary point of reading education is the students’ comprehension of the text they read, teachers should not spend too much time leading the students to the topic of the reading materials.

While-reading exercises are at the heart of the reading instruction process and are carried out while the student is reading the material. This phase tries to elucidate aspects of the text so that it can be fully comprehended. To summarize, teachers should assist students in constructing their knowledge of the informational text process by promoting their grasp of the content of the reading passage. To put it another way, the goal of the reading exercise is to draw students into an interaction with the text that facilitates comprehension (Cahyono & Widiati, 2006).

Students are required to read silently with restricted time in order to complete the above-mentioned sequence of exercises. This method is very beneficial for learners in terms of thinking about the substance of the reading text, exposing what they previously thought and sharing their views with the reading text, and training their reading speed. It also bridges the gap between students and the text, allowing them to learn how to discriminate between major and minor concepts, recognize relationships, and actively respond to meaning.

Post-reading activities are those that are completed after the material has been read and discussed. These are designed to determine or confirm the learners’ comprehension of what they have read. Ideas discovered before and during reading may require explanation and elaboration at this point. Students can produce a summary after reading the book (Janzen in Richards and Renandya, 2002). In other words, the nature of this project requires learners to write out their own thoughts. They condense the major points of the text into a single paragraph.

Furthermore, according to Cox (1999), reliving the reading experience, word study, and reaction possibilities, such as drawing, writing, art creation, theatre, and constructions are all examples of efforts that can be used after reading. In other words, learners are tested again to see how much they grasp about the reading text’s content. The purpose of post-reading tasks is to assess how well learners understand what they have read. In addition, teachers might include some questions in the post-reading exercises; these questions should encourage students to think critically and help them understand what they have just read (Cahyono & Widiati, 2006).

In relation to all of the activities listed above, the post-reading activities are primarily designed to help students rebuild what they have read, after which they are expected to review the content of the reading material. Listening, speaking, and/or writing activities can be used as post-reading exercises. Teachers can, for example, invite students to express how they feel about materials that have already been discussed during the teaching-learning process. Teachers can also remark on what the students did in their presentation, for example, by writing the students’ grammatical and pronunciation errors on the whiteboard and then asking the other students to examine.

**Reading Assessments**
Giving learners a test after they have finished learning to read is not the only way to evaluate their development. Assessment might be done during the reading instruction process. It suggests that the students' reading ability is assessed not only after they have completed the teaching and learning activities, but also during the reading instruction process.

Teachers can identify students' strengths and shortcomings by assessing their reading skills during the reading instruction process. It also allows the teacher to assess the efficiency of various instructional strategies/techniques. Furthermore, it is a component of integrated assessment, which is used to determine a student's level of achievement. Teachers, on the other hand, sometimes conduct it incorrectly. Teachers should avoid making judgments about a student's ability to talk or write when assessing reading (Hood et al. (1996).

Despite the fact that speaking and writing activities are incorporated into reading instruction, the evaluation is always focused on the students' comprehension of the reading text's content. In this situation, the assessment is based on the information that students provide regarding the reading text's content.

Assessing learners' development in the reading instruction process can be done in a variety of ways. Observation, interaction, and analysis are some of the methods (Burns et al., 1996). Teachers observe students' actions individually, in groups, or as a complete class during observation. Meanwhile, when the teachers ask questions and the learners respond, there is interaction. Its goal is to encourage them to use the language and improve their thinking skills. The teachers then gather information during analysis by listening to the students' reading and debate. Examining the work of the students is also used to implement it.

In short, the authentic assessment is used to judge how well learners have met the required educational objectives. It allows teachers to make educated decisions about the type of instruction they provide to their students. Assessment helps them identify materials and strategies that have the best chance of success before they start teaching. During instruction, assessment guides teachers to the types of adjustments that will improve the flow of the classes. Following instruction, learners are assessed to see how much they have learnt.

THE NATURE OF COOPERATIVE LEARNING

According to Richards & Renandya (2002), cooperative learning requires students to work collaboratively in groups of two to four people. Cooperative learning, on the other hand, is more than merely putting students in groups and assigning them tasks. Teachers utilize cooperative learning ideas and practices to enhance reciprocal helpfulness in groups and active engagement from all members.

Cooperative learning is a type of learning in which students collaborate with their peers. They collaborate to help each other solve challenges in their groups. Students unconsciously learn how to be respectful, open-minded, and accountable to themselves and their peers. Students who do not understand the topic or what is being discussed will learn because their teammates in the group who do understand can share what they know with their friends who do not know or understand what is being discussed. There are various methods for cooperative learning. Numbered Head Together is one of them.

Numbered Head Together

Numbered Head Together (NHT) is a straightforward four-step Cooperative Learning (CL) structure. Its key advantages are mastery and review of previously taught material. It signifies that the technique is implemented in four steps by NHT. The goal of NHT is to improve students' understanding as well as to refresh and memorize previously studied content.

NHT is a reading program that can be utilized in an English as a foreign language lesson. It is a simple four-step structure that is used for group projects involving four or more learners. Each
student has a unique number; for example, if a group of four students has four members, the number ranges from one to four. When the teacher asks a question, the students each write down their own answer before coming together to discuss it. The teacher will then call a random number to answer the question. The student with that number or letter in each group becomes the group’s spokesperson. For example, suppose the teacher called out the number three, and each student in each group who was allocated that number was asked to react and explain, or give an alternate response. To generate a random number, the teacher can use a spinner or pieces of paper to select a number at random.

The NHT learning strategy enables students to work together in groups to attain learning goals. Learners can use it to perform a small group exercise or to answer and react to a question, which can be an effective technique to inspire students to inquire and solve problems. NHT is also a set of structures that may be used by teachers to teach lessons and assess students’ understanding of specific topic. It signifies that NHT is a collaborative effort that considers not just the group’s comprehension while answering or explaining a question, but also the comprehension of each individual in the group. Each group member is responsible for ensuring that everyone knows the correct response.

Numbered Head Together (NHT) allows learners to share ideas and discuss the best response. Then, using Numbered Head Together can help learners become more motivated, and the NHT technique can be utilized with any content and at any grade level. It means that the NHT strategy allows students to share their ideas with their peers while also motivating them to study more. After that, NHT strategy can be used with any subject and at any grade level.

**The Steps of Numbered Head Together in Teaching Reading**

According to Olsen & Kagan in Kessler (1992), Numbered Head Together is a four-step Cooperative Learning (CL) structure as follows:

1) **Step 1:** Students are divided into groups and assigned a number. If a group of four students is formed, each student will be assigned to one of the following positions: 1, 2, 3, or 4.

2) **Step 2:** The teacher asks a question with a high level of agreement, such as "What is the capital of the United States?" A question is posed by the teacher based on the content being addressed.

3) **Step 3:** Students gather together, discuss the correct answer, and double-check that everyone on the team knows it.

4) **Step 4:** The teacher calls one of the numbers one through four. Only those students who have that number in their palms are allowed to raise their hands. Then give an explanation for your answer.

It may be deduced from the preceding steps that the numbered head together technique includes four steps: To begin, the teacher separated the students into groups of four students, each with a number 1, 2, 3, or 4. Second, the teacher posed a question; in this study, the researchers posed a question to the students regarding a personal recount text, which they had to respond to based on the text. Third, students put their heads together to debate the answer; each student in their group is responsible for ensuring that all members of their group are aware of the answer; and finally, the teacher named a number at random, and the student having that number (as called by the teacher) had to respond with an explanation and reasoning. Students can better comprehend the material if they work in groups with their peers, because students often understand the material better when their peers explain it to them rather than the teacher. The reason is that by asking their friends rather than asking the teacher, the students feel more free and comfortable. They are also
less afraid to inquire when they do not comprehend the content. As a result, this step is ideal for use in the classroom during the teaching and learning process.

The Advantages of Numbered Head Together

NHT (Numbered Head Together) has a number of advantages. For starters, it can help learners improve their academic performance and can be used in nearly any topic. NHT can drive learners to learn since it creates a sense of competitiveness and enjoyment for them. Furthermore, they will be motivated as a result of the assistance they receive from their teammates. They will participate enthusiastically in the lesson because they are motivated. Because all members of each group must know and be prepared to answer and explain their group's answer, NHT fosters successful group work functioning. Students become engaged in studying the subject covered in a learning activity and have the opportunity to participate actively in the cognitive process and learning activities. It will give students a better comprehension of the studying material, hence increasing their knowledge. NHT also strengthens the bond between the teacher and the students, as well as the knowledge gained. Positive teacher-student-content interactions engage students in the learning process and encourage them to want to learn more.

METHOD

The researchers employed a quantitative research design in this study. The impact of employing the Numbered Head Together (NHT) strategy in teaching reading comprehension was discovered by the researchers. The researchers adopted a proper experimental design in their study. According to Creswell (2014), in true experimental research, the participants are assigned to treatment groups at random. There were two groups in the real experiment study: an experimental group and a control group. Both groups were given a pre-test and a post-test, but only the experimental group received the treatment, i.e. NHT strategy.

Research Variable

In this study, there were two variables. According to Creswell (2014), a variable is a property or attribute of an individual or an organization that can be measured or seen by a researcher and differs among the individuals or organizations examined. The researchers employed the following two variables in this study:

1) The independent variable was Numbered Head Together (NHT) strategy.
2) The dependent variable was the students’ reading comprehension in recount text.

Population and Sample

A population, according to Creswell (2014), is a collection of people who share a characteristic. To obtain population data, the researchers selected one feature or level for each population. The participants in this study were eighth-grade students at SMPN 10 Kota Serang. The Students in the eighth grade at SMPN 10 Kota Serang were divided into ten classes, each with 348 students from Class VII A until Class VIII J.

Meanwhile, according to Sugiyono (2010), a sample is a portion of the population's number and characteristics. The sample was made up of students from the population who had agreed to take part in the study. The sample size for this study was 60 students, with Class VIII B serving as the experimental class with 30 students and class VIII G serving as the control control class with 30 students.

In this study, the researchers employed cluster random sampling to select a sample from the population. According to Sugiyono (2010), cluster random sampling is utilized to definite sample if the item or source being examined is very large. As a research sample, the researchers used two classes. To select the sample, the researchers used ten pieces of paper to create a random number
and chose two numbers at random. The experimental class was VIII B, and the control class was VIII G. Each class consisted of 30 students in it.

**Data Collecting Technique**

In this study, the researchers employed testing as a data collecting technique. According to Arikunto (2010), a test is a set of questions, exercises, or other devices intended to assess an individual’s skill, knowledge, intelligence, aptitude, or talent. The researchers used a test that consisted of multiple-choice items. A multiple choice test is one in which the answer can be found by selecting one of four options: a, b, c, or d. The tests in this study were separated into two categories. There were two tests: a pre-test and a post-test. Both classes were given a pre-test and a post-test. A pre-test was provided to both classes with the goal of determining the students’ comprehension of the recount text prior to treatment.

At the end of the study, the researchers used a post-test to assess the students’ reading comprehension of the recount text after they had received treatment. The researchers conducted a try-out before implementing the test in both classes. The experiment was carried out by the researchers in order to assess the test’s validity and reliability. Outside of the experimental and control classes, other classes were given the opportunity to try out.

Before the researchers delivered the treatment, a pre-test was given to both classes to determine the students’ reading comprehension in recount text. The test was multiple choice, with 20 items divided into four categories: a, b, c, and d. Meanwhile, after the researchers had delivered the treatment, both classes were given a post-test. The test was multiple choice, with the following options: a, b, c, and d, totaling 20 items.

**Data Analysis Technique**

The study of normal distribution test, homogeneity of the test, and hypothesis testing were all part of the data analysis technique. In this study, the results of the pre-test and post-test were examined using the following formula:

1) Normality of Distribution Test

The normality of test distribution was determined by comparing pre- and post-test results in two groups to determine whether normality was distributed or not. For the normality of distribution test, the researchers employed the graphical approach in this study. According to Hatch & Lazaraton (1991), a normal distribution means that the majority of the scores cluster around the distribution’s midpoint, with the number of scores steadily decreasing on either side. There were three properties that indicate that the data had a normal distribution:

![Graphic of Normal Distribution](image)

To convert the data into a normal distribution graph, follow these steps:

1. Determine the highest and lowest scores, then compute the range (R)
2. Calculate the sum of classes (BK) with the form as follow:
   \[ BK = 1 + 3.3 \log N \]
Note: \( N = \text{Sum of the students} \)

3. Calculate the interval of class (I) with the form as follow:

\[
I = \frac{R}{BK}
\]

4. Create a table with the frequency distribution of pre-test and post-test data.

5. After constructing the table, draw the normal distribution graphics to input the data.

2) Homogeneity Test

The homogeneity test was used to see if the experimental and control groups’ post-test scores had the same variance. The homogeneity test is calculated as follows using \( F \) count:

\[
F_{\text{count}} = \frac{BV}{SV}
\]

Notes:
- \( F_{\text{count}} \): \( f \) value variant
- \( BV \): The biggest variant
- \( SV \): The smallest variant

The criteria are as follows:
- If \( F_{\text{count}} \geq f_{\text{table}} \), it indicates that the test is homogenous.
- If \( F_{\text{count}} \leq f_{\text{table}} \), it indicates that the test is not homogenous.

3) Hypothesis Testing

The hypothesis expresses the researcher’s opinion on the relationship between the variables in the question (Ary et al., 2010). \( T \)-test was used to evaluate if the hypothesis was accepted or denied by comparing \( t \)-count with \( t \)-table. The \( T \)-test was used to see if there were any differences in average student scores between two variables at the average of two samples. In this study, the researcher employed a \( T \)-test with the following formula:

\[
T_{xy} = \frac{M_x - M_y}{\sqrt{\left\{ \frac{\sum x^2 + \sum y^2}{N_x + N_y - 2} \right\} + \left\{ \frac{1}{N_x} + \frac{1}{N_y} \right\}}}
\]

Notes:
- \( T_{xy} \): \( t \)-test
- \( M_x \): Mean of deviation of experiment class
- \( M_y \): Mean of deviation of control class
- \( \sum x^2 \): Sum of the squared deviation score of experiment class
- \( \sum y^2 \): Sum of the squared deviation score of control class
- \( N_x \): The number of students of experiment class
RESULTS AND DISCUSSION

Result of Validity and Reliability of the Try Out Test

The researchers used the try-out test to determine the test's validity. The researchers looked at the test's validity to see which items from the try-out test may be used for pre-test and post-test. The try-out test was a multiple-choice test with 50 items and four options: A, B, C, and D. The researchers employed the Pearson Product Moment formula to assess the test's validity. The t-table value was 1.699.

The item test was valid when the $t_{count} \geq t_{table}$, and the item test was not valid when the $t_{count} \leq t_{table}$. In line with the results of the validity try-out test, 41 items were valid and 9 were not. Numbers 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 39, 40, 41, 42, 43, 48 were valid items on the try-out exam. The following items on the try-out test were found to be invalid: 5, 32, 38, 44, 45, 46, 47, 49, 50.

The validity of the try-out test was examined by the researchers, who discovered that 41 items were valid. It can be used as a pre-test and post-test in both experimental and control classes. The researchers separated the items test into 20 items for pre-test and 20 items for post-test after determining the test's validity.

Reliability is an assessment tool used in quantitative research to examine the instrument's reliability. The term "reliability" refers to the stability and consistency of an instrument's scoring. The researchers employed the Spearman Brown formula to assess the items test's reliability. If $r_{count}$ is more than $r_{table}$, the tests are reliable. Based on the result value of Reliability of the test, it could be seen from $r_{table}$ with 31 respondents (df=n-1) 31 – 2 = 29. It was calculated $r_{count} \geq r_{table}$ or 0.925 ≥ 0.355. It can be concluded that the test was reliable.

Result of Pre-test

Before starting the treatment, both classes were given a pre-test to gather data on the students' reading comprehension. The experimental and control groups were given the same pre-test. The experimental and control classes' pre-test results are shown in the table below.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Experimental Class</th>
<th>Control Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>53.5</td>
<td>48.3</td>
</tr>
<tr>
<td>Maximum Score</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Minimum Score</td>
<td>40</td>
<td>30</td>
</tr>
</tbody>
</table>

From the table above, the experimental and control classes had the same maximum score, while the control class had a lower minimum score than the experimental class. The mean of the experimental and control classes yielded different results. The mean of experimental class was higher than the mean of control class or 53.5 ≥ 48.3.

Result of Post-Test

After the researchers administered the treatment, both classes were given a post-test. The experimental and control groups were given the same post-test. The following table shows the post-test results of the experimental and control classes:
### Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Experimental Class</th>
<th>Control Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>78.6</td>
<td>56.8</td>
</tr>
<tr>
<td>Maximum Score</td>
<td>95</td>
<td>75</td>
</tr>
<tr>
<td>Minimum Score</td>
<td>60</td>
<td>35</td>
</tr>
</tbody>
</table>

Based on the table above, the experimental and control classes’ post-test results were different. The post-test mean of experimental class was higher than the post-test mean of control class or $78.6 \geq 56.8$.

### Result of Hypothesis Testing

To test the hypothesis of this study, the researchers employed the t-test formula. The Alternative Hypothesis ($H_a$): Numbered Head Together (NHT) strategy is able to increase students’ reading comprehension skill in recount text at eighth grade students in SMPN 10 Kota Serang, and the Null Hypothesis ($H_0$): Numbered Head Together (NHT) strategy is not able to increase students’ reading comprehension skill in recount text at eighth grade students in SMPN 10 Kota Serang are the two hypotheses assumed in this study.

The statistical computation of the t-test formula with the degree of significance of 5% was employed to prove the hypothesis of this study. The value of $t_{count}$ was compared with $t_{table}$ to determine the result of the hypothesis test. The researchers employed the t-table formula. It can be said that $t_{count} \geq t_{table}$ or $9.22 \geq 2.00$ was discovered based on the above result. The null hypothesis was rejected, while the alternative hypothesis was accepted. It may be determined that there was a significant difference in the results after teaching eighth grade students in SMPN 10 Kota Serang reading skills on recount text utilizing Numbered Head Together (NHT) strategy versus without NHT. The students at SMPN 10 Kota Serang’s eighth grade can increase their reading skills by participating in an application of NHT strategy.

### Discussion

The purpose of this study was to see how the use of the Numbered Head Together (NHT) strategy affected students’ reading comprehension. The mean of the pre-test was 53.5, referring to the data from the experimental class. Following the pre-test, the researchers used the NHT strategy to administer treatment to the students in the experimental class. The learners became more cooperative and motivated in gaining reading comprehension as the teaching and learning process progressed. NHT is a form of cooperative learning strategy that allows students to exchange their thoughts. NHT also encourages students to work in groups, which increases their excitement.

The researchers conducted a post-test after delivering the treatment to the experimental class and found that the mean score was 78.6. Meanwhile, the average pre-test score was 53.5. It indicates that the mean of the pre- and post-tests has risen. The variations in mean scores between pre-test and post-test demonstrate this. Meanwhile, the lowest post-test score was 60, the highest was 95, and the mean score was 78.6. It can be claimed that the post-test mean was higher than the pre-test mean.

Meanwhile, in the control class, the pre-test mean was 48.3 and the post-test mean was 56.8. The researchers did not employ the NHT procedure as a treatment in the control group. The lecturing method is used in the teaching and learning process. The researchers administered a post-test in the control class after administering the treatment. Based on the results of the students’ post-test scores in the control class, the maximum score was 75, the lowest score was 35, and the mean score was 56.83. And the experimental class’s post-test results revealed that the highest post-test score
was 95, the lowest score was 60, and the mean score was 78.66. It can be concluded that the experimental class had a higher mean of post-test students than the control class.

Furthermore, using the Numbered Head Together (NHT) strategy can improve students’ reading comprehension and inspire them to talk and share their thoughts with their peers, as well as urge them to learn more. Putting the NHT strategy allows students to share ideas and discuss the best answer. The use of NHT can also help students become more motivated.

Referring to the discussion above, it can be summarized that the use of Numbered Head Together (NHT) strategy can influence students’ reading comprehension of recall material. The mean score before and after being taught showed an increase in employing the NHT strategy. So, at the eighth grade of SMPN 10 Kota Serang, there was any effect of using the NHT strategy on students’ reading comprehension of recount text.

**CONCLUSION AND SUGGESTION**

Based on the outcomes of the study, it can be stated that employing the Numbered Head Together (NHT) strategy had an impact on students’ reading comprehension of recount text in eighth grade at SMPN 10 Kota Serang. The result of $t_{obt} \geq t_{table}$ or $9.22 \geq 2.00$ demonstrates this. This means that $H_a$ was approved and $H_0$ was rejected as a result of this calculation. As a result, it was discovered that applying the Numbered Head Together (NHT) strategy had an impact on students’ reading comprehension of recount material in eighth grade at SMPN 10 Kota Serang.

In light of the preceding conclusion, it is suggested that students drive themselves to read more of the reading book in order to gain more knowledge and make reading a habit. It is expected to increase reading and comprehension skills. The last goal is to make learning more interesting for learners and to prevent boredom, particularly when teaching reading utilizing recount texts and Numbered Head Together (NHT) strategy.

Additionally, teachers must be innovative in order to make the teaching and learning process more engaging, fun, and effective for learners. In order for learners to be motivated to acquire reading English in the classroom, the teacher must be an effective motivator. The researchers advise English teachers to incorporate engaging media into every instructional activity in order to improve their English teaching and boost students’ enthusiasm in the classroom, particularly while they are learning to read.

**REFERENCE**


