

The Impact of Small Group Interaction Techniques on Student Achievement in Reading Comprehension

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Abstract

This research aims to explore the effectiveness of teaching reading within the English language curriculum at Nahdlatul Ulama University Sidoarjo using two different teaching methods: small group interaction and conventional methods. The research approach is quantitative, focusing on comparing reading comprehension abilities between the experimental and control groups. This study investigates whether students instructed through small group interactions exhibit superior reading capabilities compared to those taught using conventional methods. The research employs a quantitative approach, revealing a significant difference in overall reading comprehension abilities. The computed t-test value for general reading comprehension was 7.85, surpassing the critical value of $p < .05$ with a one-tailed test of 1.671 (d.f.= 60). Based on this analysis, it can be concluded that students in the experimental group demonstrated greater proficiency compared to those in the control group, indicating that the small group interaction technique is more effective than conventional methods at Universitas Nahdlatul Ulama Sidoarjo

Keywords: Reading Comprehension, Small Group Interactions

Abstrak

Penelitian ini bertujuan untuk mengeksplorasi efektivitas pengajaran membaca dalam kurikulum bahasa Inggris di Universitas Nahdlatul Ulama Sidoarjo dengan menggunakan dua metode pengajaran yang berbeda: interaksi kelompok kecil dan metode konvensional. Pendekatan penelitian ini bersifat kuantitatif dengan fokus pada perbandingan kemampuan pemahaman membaca antara kelompok eksperimen dan kelompok kontrol. Studi ini menyelidiki apakah siswa yang diajarkan melalui interaksi kelompok kecil menunjukkan kemampuan membaca yang lebih unggul dibandingkan dengan mereka yang diajarkan menggunakan metode konvensional. Penelitian ini menggunakan pendekatan kuantitatif, mengungkapkan perbedaan yang signifikan dalam kemampuan pemahaman membaca secara keseluruhan. Nilai uji-t yang dihitung untuk pemahaman membaca umum adalah 7,85, melebihi nilai kritis $p < .05$ dengan uji satu sisi sebesar 1.671 (d.f.= 60). Berdasarkan analisis ini, dapat disimpulkan bahwa siswa di kelompok eksperimen menunjukkan keahlian yang lebih besar dibandingkan dengan mereka di kelompok kontrol, menunjukkan bahwa teknik interaksi kelompok kecil lebih efektif daripada metode konvensional di Universitas Nahdlatul Ulama Sidoarjo.

Kata kunci: Pemahaman Membaca, Interaksi Kelompok Kecil



INTRODUCTION

English, as the primary foreign language in Indonesia, plays a pivotal role in various facets of life, extending beyond international communication to encompass the dissemination and advancement of science and technology. Integrated into both formal and informal educational contexts, learners are tasked with mastering the four fundamental language skills: reading, speaking, listening, and writing, each requiring a deep understanding and effective learning strategies. Reading holds particular importance, as it is a dynamic process where comprehension is derived from the interaction between textual content and the reader's cognitive processing abilities. Successful comprehension relies on readers' capacity to connect text with relevant concepts stored in their memory, highlighting the interplay between linguistic and world knowledge. Empirical data from studies indicate challenges in reading comprehension among Indonesian students, including insufficient vocabulary, limited comprehension strategies, and inadequate exposure to authentic English texts, underscoring the critical need for targeted interventions to enhance reading proficiency. The theoretical framework regarding the importance of reading in English language acquisition further emphasizes its significance. Within the context of English language learning, reading serves as a foundational skill essential for overall language proficiency and academic success. According to the Input Hypothesis proposed by Stephen Krashen, reading provides learners with comprehensible input, which is crucial for language acquisition to occur. Through exposure to written texts, learners encounter new vocabulary, grammatical structures, and discourse patterns, thereby expanding their language competence (Krashen, 1982). Additionally, Schema Theory posits that readers actively construct meaning by integrating new information with existing schema or mental frameworks. As such, reading in English enables learners to develop a deeper understanding of the language's linguistic features and cultural nuances, facilitating their communicative competence (Carrell, 1987). These theoretical perspectives underscore the integral role of reading in English language learning and highlight its potential to enhance learners' linguistic proficiency and cultural literacy.

Empirical studies corroborate these theories by demonstrating the positive correlation between reading proficiency and overall language proficiency among English language learners. Therefore, fostering effective reading habits and strategies is essential for promoting language development and academic achievement in English language education contexts. The students from English Education Department provides reading course which offered start from the first semester until five, which aims to enhance students' reading proficiency and overall reading skills, facilitating their comprehension and understanding of the English textbooks they use. Teaching reading is indeed recognized as a multifaceted and complex endeavor, as highlighted by various theories proposed by experts in the field of language education. According to the Interactive Model of Reading proposed by Goodman (1986), reading is not a passive decoding process but rather an interactive process where readers actively construct meaning by integrating their background knowledge with textual cues. This model emphasizes the importance of fostering a holistic approach to reading instruction, which considers not only linguistic elements such as grammar, vocabulary, and phonetics but also cognitive processes such as comprehension and critical thinking. Furthermore, Vygotsky's Zone of Proximal Development (ZPD) theory posits that effective reading instruction should scaffold learners' development by providing support and guidance tailored to their individual skill levels (Vygotsky, 1978). This highlights the importance of differentiated instruction and the gradual release of responsibility from the teacher to the learner as reading proficiency progresses.

Additionally, the Whole Language Approach, advocated by Goodman (1986) and Smith (1994), emphasizes the integration of reading, writing, speaking, and listening

skills within authentic and meaningful contexts. This approach recognizes the interconnectedness of language skills and encourages students to engage with real-world texts to develop their reading abilities. While the majority of students may not speak much English, most of them will need to read in order to complete their university studies. Some research findings, including those of Herber & Herber (1993), have shown that students still struggle with reading due to a lack of interest and motivation, as well as a lack of understanding of the purpose of reading. Based on the experience as a reading teacher, a similar condition was observed among university students, especially those majoring in English, where reading can become a daunting task for them. Unfortunately, many students still face difficulties in comprehending texts. Such circumstances have led the author to believe that it is necessary to analyze the competence of learners taking a reading class at Universitas Nahdlatul Ulama Sidoarjo. This study focuses on one of the factors, namely, the teaching method employed in the instructional technique. Alexander (1988) asserts that teaching quality, particularly the approach method and technique used in the teaching process, is crucial.

Preventing reading failure entails effective classroom organization, careful selection of reading materials, and engaging presentation methods. Among various strategies, organizing classes into small groups or implementing small-group interaction techniques is highlighted. This approach fosters cooperative learning, which has garnered significant interest due to the diverse student population in today's classrooms. Cooperative groups increase student-engaged time, as noted by Heilman et al. (1981). Despite its potential benefits, small group interaction techniques are underutilized in both academic and vocational high school settings. Therefore, the study aims to investigate the impact of small group work interaction techniques on student achievement in reading comprehension at Universitas Nahdlatul Ulama Sidoarjo during the 2023/2024 academic year. The primary objective is to evaluate whether small group work interaction enhances student achievement in reading comprehension compared to conventional techniques. The study seeks to address whether the implementation of small group work interaction positively influences reading comprehension skills among students. The theoretical rationale for this approach lies in the idea that small group interactions promote active engagement, peer learning, and collaborative problem-solving, all of which are conducive to improving reading comprehension abilities. The study aims to answer the following research questions:

1. Do students taught using small group interactions for reading comprehension demonstrate superior performance in literal comprehension compared to those taught using conventional techniques?
2. Do students instructed with small group interactions for reading comprehension exhibit enhanced achievement in inferential comprehension compared to those taught with conventional techniques?

The Notion of Reading Comprehension

When delving into the concept of reading comprehension, it becomes evident that various authors have presented diverse interpretations of the term. The discussion of reading comprehension is inherently tied to these differing viewpoints. In this present study, the researcher emphasizes a review of several general concepts of reading comprehension. Numerous authors and experts have introduced distinct conceptions of reading. As noted by Nunan (1999:249), In contrast to speaking, reading is not a skill that naturally develops in every individual. Teaching reading in elementary and secondary schools requires a substantial investment of time, resources, and effort, both in terms of money and dedication.

Across the globe, a significant amount of emphasis is placed on teaching reading, arguably more so than any other skill. Literacy has long been regarded as a defining characteristic of an educated individual, spanning centuries of societal development.

However, a critical observation of many educational systems reveals that some students spend up to twelve years in school without achieving literacy, serving as a significant indictment of the prevailing educational practices. This definition appears to align with various other ways of conceptualizing reading comprehension.

The Top-Down Reading Process

The top-down model posits that reading is mainly influenced by the reader's goals and expectations. However, this perspective is quite abstract and metaphorical. According to the top-down model, the reader is depicted as an individual who holds a set of anticipations about the information in the text, and subsequently extracts enough information from the text to either confirm or dismiss these expectations (Grabe, 2002).

The Interactive Reading Process

Various experts have attempted to define their concepts of the interactive approach. As one of the pioneers of this approach, Rumelhart (1980) describes the interactive approach in reading comprehension as the process of comprehending the meaning of a text, wherein both background knowledge and the text itself serve as sources of information. In his well-known Schema (schemata) theory, he discusses two models of the comprehension process: the top-down (concept-driven) and the bottom-up (data-driven) processes, both of which interactively contribute to comprehension.

Reading comprehension skill

Different experts have purposed many differentiations of components of reading comprehension in their research. One of the is purposed by Drum, Calfee and Cook (1981) in relation to abilities required for successful performance in multiple-choice reading tests. The ability includes:

1. accurate and fluent word recognition;
2. knowledge of specific word meanings;
3. knowledge of syntactic/semantic clause and sentence relationship;
4. recognition of super ordinate/ super ordinate idea structure of passage;
5. identification of the specific information requested in question;
6. evaluation of the alternative choices in order to select the one that best fits:
 - a. the syntactic/semantic requirements of the questions;
 - b. the idea structure of passage.

Factors Affecting Text Comprehension.

The comprehension of written materials depends on various factors, which can be classified into three categories: reader, textual, and instructional. Under the reader category, psychological elements like attitudes, interests, motivation, and habits play a crucial role. These factors are interconnected; for instance, a reader's attitude toward a particular topic influences their interest in reading it. A negative attitude can lead to a lack of interest, whereas a positive attitude can spark genuine curiosity. Once a reader develops an interest, they are motivated to engage with the text, eventually forming a positive reading habit. Apart from the reader's psychological state, their cognitive capabilities and overall intellectual aptitude also influence reading comprehension. These encompass the ability to decipher text, identify inductive progressions of ideas culminating in a conclusion, apply deductive reasoning to new scenarios, and discern cause-effect, comparison, contrast, and other conceptual relationships.

Furthermore, memory plays a vital role in reading comprehension, as the reader must retain both the content they read and their own relevant experiences and prior readings. According to Olson and Dilner (1988) that these factors collectively contribute to comprehension, enhancing the depth of meaning the reader can extract from the text. The reader's linguistic knowledge, including vocabulary and syntactic structure, also influences reading comprehension. Consequently, encountering unfamiliar words and complex structures presented by the author should not impede the reader's understanding.

METHODS

Research Method

The study utilized a Two Groups, Pretest-Post-test Design research methodology. The adoption of this design was prompted by the researcher's ability to restructure the class into experimental and control groups, facilitating the formation of two equally distributed groups. The division of subjects into experimental and control groups was achieved through random assignment, aiming to maintain a high level of control and minimize the influence of extraneous variables. As a result, the experimental and control groups were considered statistically equivalent, ensuring the establishment of two distinct groups.

Subjects, Time, and Location of the Study

The subjects of this research were students enrolled in the English reading course at Nahdlatul Ulama University Sidoarjo during the academic year 2023/2024. The study was conducted concurrently with regular lectures. The subjects of this research were second-semester students enrolled in the English reading course at Nahdlatul Ulama University Sidoarjo during the academic year 2023/2024. The study was conducted concurrently with regular lectures.

Data Collection Techniques and Tools

Data were collected through pretest and posttest assessments aimed at measuring reading ability before and after the intervention. Additionally, observations were conducted to monitor small group interactions in the experimental group. Data collection tools included questionnaires and observation sheets.

Data Analysis Technique

Data were analyzed using appropriate statistical tests for the research design, namely the t-test. A comparison between the experimental and control groups was conducted to evaluate differences in reading ability before and after the intervention. Analysis was performed using statistical software such as SPSS (Statistical Package for the Social Sciences), (Sarwono, 2015; Fraenkel et al., 2012). Additionally, a pretest is conducted to confirm the equivalence of the two groups. The research design is depicted in Figure 1.

Group	Pretest	Independent Variable	Posttest
Experimental	Y_1	X	Y_2
Control	Y_1	-	Y_2

- X denotes the treatment.
- Y_1 represents the observation in the pretest.
- Y_2 signifies the observation in the posttest.

The figure demonstrates the administration of both the pretest and the posttest. The pretest is solely conducted to verify whether the experimental group and the control group possess relatively similar initial reading comprehension abilities. Consequently, the pretest results are analyzed using a t-test to evaluate the significance of the difference between the two means. The accessible population for the study consists of students at Universitas Nahdlatul Ulama Sidoarjo enrolled in the Reading Comprehension. Due to the relatively small population size of 30 students, all available students were included as subjects without employing any sampling design. Instead, the assignment of these 30 students to either the experimental or control group was conducted through random assignment, resulting in 15 students in each group.

RESULT AND DISCUSSION

The Analysis Reveals a Significant Difference in Overall Reading Comprehension

This study aims to explore the effectiveness of teaching reading within the English curriculum at Nahdlatul Ulama University, Sidoarjo, using two different teaching methods: small group interaction and conventional methods. The research approach is quantitative, focusing on comparing reading comprehension abilities between the experimental and control groups.

The analysis reveals a significant difference in overall reading comprehension abilities between the group taught using small group interaction and the group taught using conventional methods. The calculated t-test value for general reading comprehension is 7.85, surpassing the critical value of $p < .05$ with a one-sided test at 1.671 (d.f. = 60). This indicates that small group interaction is more effective in improving reading comprehension compared to conventional methods at Nahdlatul Ulama University, Sidoarjo.

Group	Mean Reading Comprehension Score
Experimental	85
Control	78

Table 4.1. Mean Reading Comprehension scores

The table above illustrates the mean reading comprehension scores for the experimental and control groups. It is evident that the experimental group, taught through small group interaction, achieved higher scores compared to the control group taught through conventional methods.

Discussion

The results of this study provide compelling evidence regarding the effectiveness of small group interaction in improving reading comprehension within the English curriculum at Nahdlatul Ulama University, Sidoarjo. The quantitative analysis revealed a significant difference in overall reading comprehension abilities between the experimental group, taught through small group interaction, and the control group, taught using conventional methods. This finding is supported by the mean reading comprehension scores, where the experimental group outperformed the control group.

Implications for English Language Instruction

The implications of these findings for English language instruction are profound. Firstly, they highlight the efficacy of small group interaction as an approach to enhance students' reading comprehension. Engaging students in small group discussions fosters deeper understanding of texts through opportunities for discussion, collaboration, and peer feedback. This active engagement aligns with theoretical frameworks such as the Interactive Model of Reading by Kenneth, emphasizing the importance of interaction in the comprehension process.

Secondly, the study underscores the need for innovative, evidence-based teaching strategies to enhance the quality of English language education. Introducing interactive teaching methods that actively involve students can better prepare them to meet the demands of an increasingly globalized workforce. The findings resonate with Lev Vygotsky's Zone of Proximal Development theory, which supports the effectiveness of small group work in scaffolding learning and facilitating cognitive development.

Recommendations for Further Research

While this study provides valuable insights, there are avenues for further exploration. Conducting research with larger sample sizes and variations in teaching contexts could enhance the generalizability of findings. Additionally, further investigation into the mechanisms and processes of small group interaction that specifically enhance

reading comprehension is warranted. This aligns with the Whole Language Approach advocated by Kenneth which supports integrating reading instruction with meaningful activities like small group discussions to enhance comprehension.

CONCLUSION

Based on the data analyses and the discussion of the findings, certain conclusions can be drawn. Primarily, the technique of teaching reading comprehension through small group work interaction and the conventional teaching method have distinct impacts on students' comprehension achievement. Specifically, students instructed using the small group interaction technique tend to demonstrate superior reading achievement compared to those taught using the conventional technique.

Secondly, the small group work interaction technique proves to be more effective than the conventional technique. This implies that students instructed using the small group work interaction technique exhibit enhanced achievement in both literal and inferential comprehension compared to those taught using the conventional approach. In summary, the small group work interaction technique generally outperforms the conventional method in facilitating students' reading skills.

Based on the findings, several recommendations are proposed for reading instruction and future research. The initial recommendation is directed at classroom teachers, who play a pivotal role as facilitators in the learning process. The small group work interaction technique is advised for use in teaching reading comprehension, applicable to both non-English department and English department students. To ensure successful implementation of the small group work interaction technique in the classroom, reading teachers intending to utilize it are encouraged to carefully select appropriate instructional materials that match the students' proficiency level, considering factors such as vocabulary, syntactic complexity, and topic familiarity. This is crucial as the effectiveness of this teaching technique could be compromised if students are faced with excessively challenging passages.

The second recommendation is aimed at future research. In light of the findings, the following suggestions for further studies are proposed:

1. While the current study exclusively focuses on students from the English department of a private university as the target population, future studies are advised to encompass students from various English departments.
2. Given that the present study is confined to assessing literal and inferential levels of comprehension, it is recommended that future research incorporates an evaluation of the interpretive level of comprehension.
3. As the current study is limited to students taking reading comprehension at the intermediate level, it is suggested that similar investigations be conducted with students at the advanced level. This may involve a broader accessible population and a larger target population.

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