



EFFECTIVE STRATEGIES FOR IMPROVING READING COMPREHENSION AMONG SECONDARY SCHOOL STUDENTS IN KARU, NASARAWA STATE, NIGERIA

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Abstract

The present research aimed at finding out the possible approaches in improving reading ability of secondary school students in Karu, Nasarawa State, Nigeria. Given that basic reading is an essential academic skill in learning every subject, the study focused on specific difficulties learners encounter in comprehending materials, which can be worsened by instructional flaws, time constraints and resource scarcity. The quantitative and qualitative survey-based approach of the study examined the current understanding of concepts, major challenges, and effectiveness of teaching strategies that include direct instruction, thought modeling, and technology enhanced learning. The study revealed that the average comprehension level of the students is 65.4% and establishes an important relationship between comprehension skills, gender and socio-economic status. The study highlights instructional deficiencies and proposes improvement strategies based on the analysis of students' reading fluency and academic performance using vocabulary and multimedia, interactive learning, and other activities. The results of this study offer useful information for educators and policymakers focused on promoting adequate literacy learning environments across diverse contexts of education.

Keywords: reading comprehension, secondary school, instructional strategies, literacy development, mixed methods.

Introduction

Reading comprehension is a fundamental learning skill known to affect students' achievement across curriculum areas and other domains of life (Osikomaiya, 2019). Due to information overload, competencies in reading comprehension, analysis and interpretation are significant for academics, communication, and decision making (Snow, 2002). However, many secondary school students, especially those in Karu, Nasarawa State Nigeria encounter a lot of difficulty in reading comprehension. They are fundamental literacy deficiencies, lack of exposure to a wide variety of reading materials and inadequate and ineffective instructional methods due to low income level (Humphreys & Crawford, 2015; 2015; Oyetunde, 2009). Such students' problems exist in all academic areas since reading skills are basic to learning Mathematics, Science, and Social Studies (Guthrie & Wigfield, 2000). Successive educational reforms geared towards increasing literacy level in Nigeria have however not greatly addressed the quality of reading (Dike & Amucheazi, 2021).

Statement of the Problem and Objectives

There is a general reading problem whereby many students in secondary schools in Karu, Nasarawa State, find it difficult to comprehend what they are reading which affects their learning in all the subjects they undertake. These are the challenges of inadequate or limited exposure to appropriate reading materials, lack of appropriate instruction, and low levels of literacy. Failure to receive such interventions puts students' education and career in jeopardy. The purpose of this investigation was therefore to establish possible guidelines for enhancing the learning of comprehension in these students through (1) determining their current comprehension level; (2) analyzing barriers; and (3) examining the applicability of materials and methods to help students raise their comprehension levels.

Aim and Objectives of the Study

The study identified and reviewed some of the research-based approaches that might help improve Effective Comprehension and Reading Retention (ECRR) among secondary school

students in Karu and how students could be empowered academically and prepared for the future.

1. To identify and highlight the importance of reading comprehension for students to achieve their academic and professional goals.
2. To demonstrate the importance of acquiring reading comprehension skills as a critical elements in developing valuable critical thinking skills.

Research Questions

This study addressed the following questions:

1. What are the current reading comprehension levels among secondary school students in Karu, Nasarawa State?
2. What major factors contribute to the comprehension challenges of these students?
3. What instructional approaches and materials work to enhance reading comprehension under this circumstance?

Literature Review

There are a number of cognitive–linguistic and contextual factors that play an important role in the acquisition of reading comprehension (Idowu & Ogundeko, 2024). Educators have also fashioned several ways that can aid students' comprehension of materials. One of such ways is the use of modeling – a strategy whereby teachers model sets of skills that are vital in comprehending texts. In their study, Duke and Pearson (2002) proved that inculcating summary, prediction and questioning into explicit practice improves students' comprehension. According to them, students have to understand the teacher using such strategies and subsequently give guided practice till full responsibility is tendered to students. Sibanda and Iwu (2023) opined that effective explicit explanation enhanced the uptake, organization, and storage processes of students.

Strategies that focus on awareness on a student's thoughts and processes were also found to be effective metacognition strategies. In a study by Olatunji (2011), students who ask questions, summarize sections of texts as well as adjust their reading pace were more conscious of their level of

comprehension and even in the areas they seemed to struggle. Ijiga (2014) also supported this, indicating that learners who described metacognitive activities over a text were not just able to read with better ability but also retained what they read for longer periods implying thought process on the information.

Another teaching strategy is the adoption of graphic organizers. Öztürk (2012) reveals that students using graphic organizers, such as concept maps and storyboards, improve their results as to comprehension tests. Graphic organizers are a way to divide the materials into the parts that enables better comprehension and memorizing processes. In a meta-analysis, Jiang and Grabe (2007) stated that graphic organizers are truly helpful in supporting learners with poor comprehension skills or with least prior knowledge.

Recent studies have also aimed at incorporating technology in reading comprehension strategies. Silverman, Keane, Darling-Hammond and Khanna (2024) explored the effects of technology enhanced learning with reading platforms which include quizzing and feedback more specifically on comprehension. What they discovered was that computerized reading comprehension programmes increase motivation and learning as compared to conventional reader programmes or exercise. Evidently, this is more beneficial to students who have low interest in conventional reading activities. From this study, it will be clear that digital tools have the ability to address students' learning styles and as well offer feedback immediacy so that students can know what they are studying in the moment.

In general, these studies highlight intention towards use of multiple practices for enhancing comprehension skills. According to the findings illustrated in the studies, elements of the process emphasize the teaching intervention kinds, instructional methods and learning skills, such as metacognitive skills, graphic-structural aids, and instruction. Used in a classroom setting, these approaches help prepare learner for better understanding of texts when implemented in the learning process. The addition of technology as an emerging approach specifies the dynamic nature of the literacy education given the digital-native

learners needed when the approach was integrated.

Effective Strategies and Research Trends in Reading Comprehension

Tackling difficulties in reading has been redesigned to concentrate on methods proved by studies to spur students' interest in reading. The educational strategies for implementation include the consensual approach, the teaching approach and the graphic approach (Sani, Amina, Aishatu and Abubakar, 2017). Direct teaching means intervention directly by the teachers and it contains skills like summarizing and questioning. Duke and Pearson (2002) have shown that appropriate modeling helps improve understanding. Meta cognitive mechanisms outlined by Olatunji (2011) enhance learners' ability to self-regulate through self-questioning and summary, leading to better students' assimilation of content. Such recent movements also stress the adoption of ICT, which include, for instance, the use of discussion forum which improves interaction and offers feedback (Silverman et al., 2024). Such an approach is synchronous with the changes in the orientation toward the individualization of teaching, learning needs, and the overall construction of meaning.

Gaps in the Literature

Despite years of experimental and quasi-experimental research in reading comprehension, there are gaps when it comes to the long-term effectiveness of interventions, cultural contexts, and technology integration in diverse educational settings (Gopalan, Rosinger and Ahn, 2020). Although research shows that explicit instructions, metacognitive strategies and graphic organizers improve reading comprehension, these intervention approaches have not been investigated concerning their other proximal and distance effects. For example, Duke and Pearson (2002) provide some evidence of short-term positive effects of explicit instruction but a few research do not examine the long-term storage and retrieval of such skills and their impact on learning. It means that more longitudinal research has to be conducted in order to evaluate the effectiveness of these interventions in the long run, as well as the levels of maintenance they

demand. Moreover, most studies have been undertaken in the western settings, meaning little is known on the matrix of students in developing countries or non-English speaking countries. Further research on these variables should be done at the institution level and in different settings with the Nigerian context and other African countries given consideration.

Methodology

This research used an explanatory mixed method research design to explore the nature of reading comprehension difficulties and instructional practices influencing this aspect among the target secondary school students in Karu, Nasarawa State. The quantitative part includes post-reading tests with 200 students, concentrating on comprehension, and looking at the relationships with predictors. Open-ended surveys such as interviews and focus group discussions were used to interview students and teachers with a view to eliciting their perceptions of challenges and teaching approaches. To this end, 20 purposefully selected students were interviewed through semi structured questionnaires and focus group discussions to give a background into the

Descriptive Statistics

In total, 200 students from the secondary school completed the standardized reading comprehension test. The results were calculated as the total average score in percentage which was 65.4 with a standard error of 12.3 which only moderately targeted comprehension skills of the students. The distribution of scores is depicted in the graph below tabulated in table 1 below.

Table 1: Summary of Reading Comprehension Scores

| Score Range | Frequency | Percentage |
|-------------|-----------|------------|
| 0-49 | 30 | 15% |
| 50-69 | 80 | 40% |
| 70-89 | 70 | 35% |
| 90-100 | 20 | 10% |

The largest percentage of students (40%) achieved a percentage between 50-69 percent, therefore close to, and including half the student population has a problem with reading comprehension. Each question has been graded

instructional procedures and problems noticed by 30 students and 20 teachers. This combination provided an opportunity to understand reading comprehension in Karu in depth.

To conduct the analysis, data collected from standardized tests for reading comprehension were entered in software like SPSS or R and descriptive analysis were conducted to summarize the scores of the students and inferential statistics such as t test and ANOVA were conducted to understand differences based on variable like gender and others. Pearson correlation coefficients will be used to analyze the extent of the relationship between these factors and reading comprehension performance. Also, qualitative data collected from seven semi-structured interviews with teachers and ten focus group sessions with students will go through the process of transcription of the interviews and focus group discussions, encoding data and identifying themes revolving around perceived reading comprehending difficulties and useful approaches.

Results

Quantitative Findings

on a scale between 90 and 100; only 10% of students made it to the first quartile of high proficiency.

Inferential Statistics

In order to examine the subject's reading level and compare reading achievement based on demographic data, analysis of variance was performed. The inference made raised marked sex variations in expectancy for computation of results for reading comprehension tests ($F(1, 198) = 5.67, p < 0.05$). Female students were more knowledgeable than male students $t(724) = 6.14, p < 0.05; F = 68.2, SD = 11.8$ than male students $F = 63.1, SD = 12.5$.

Furthermore, the bivariate analysis was conducted to investigate the level of association between socioeconomic status (SES) and the score of reading comprehension. Based on the findings, there was weak positive relationship with both the variables. The findings revealed moderate positive correlation, $r = 0.45, t = 3.53, p < 0.01$ suggesting that students from high SES have better reading comprehension than low SES students.

Qualitative Findings

Themes

Challenges in Reading Comprehension

Limited Vocabulary: A number of students said that inadequate vocabulary prevents them from interpreting texts. These students said they had problems in understanding connotation and general meaning of words and phrases used in text.

Inadequate Instructional Methods: Many teachers reported that their approach of en masse education style that only involve memorization fails to favourably impact on students' facilitation abilities. For instance, the students and teachers pointed out that there is need to incorporate more activities based teaching and learning environment.

Effective Strategies

Interactive Reading Activities: Students found that they benefited from the group reading as well as the completion of questionnaires during a course of texts. What was particularly emphasized by the teachers were the possibilities of learning in cooperation, as well as peer tutoring as valuable methods encouraging the comprehension.

Use of Multimedia Resources: Multimedia resources including videos and interactive software were recommended as the best ways through which the students could be engaged and their understanding improved. Students valued graphic and media products as the additional form of content that helped them along with text.

Quotes from Participants:

A student said, "When we all read and follow the story together, then I comprehend the content better than when I am reading it alone." One teacher said, "With videos and discussions students are able to relate. Here they are more interested, and ready to get involved."

Analysis

The information provided in this research highlights very pertinent findings regarding the reading comprehension skills of secondary school students in Karu, Nasarawa State- both the strength and weaknesses. The mean score of 65.4 underscores the fact that some students demonstrate adequate comprehension skills, while the majority struggle with comprehension. Only 10% of learners were found to be at a high level of reading and as such there is need to increase focus on intervention of learners' reading skills (Guthrie et al., 2004).

In particular, female students performed better in lieu of the literature on gender differences in reading comprehended scores than male students (McGeown, Goodwin, Henderson and Wright, 2012). Similarly, a study of the interaction between socioeconomic status (SES) and comprehension in reading shows the effect of other factors on student performance (Bradley & Corwyn, 2002; Sirin, 2005). This sign can be well illustrated by the fact a student with a higher socioeconomic status (higher SES) was more likely to be equipped with better books and education support than a student with a lower socioeconomic status (SES), suggesting the importance of controlling for sample SES.

Quantitative findings include the following; Low verbal reserve and poor teaching techniques (Kamil, Borman, Dole, Kral, Salinger & Torgesen, 2008). The demand for teaching tactics that involve interaction and multimedia content imply that better and engaging teaching methods

could greatly enhance understanding. Altogether, the study also notes the need for promoting the professional development of teachers and well-designed educational interventions to improve the students' learning and their lifelong achievement in Karu.

Discussion of Findings

The outcome of the study has a correlation with prior research reading comprehension among secondary school students. For example, Oakhill and Cain (2012) indicated that word knowledge is a strong determinant of comprehension, a finding endorsed by our participants who said they could not comprehend many texts because of their small word bank. In the same way, the gap between male and female on reading scores reflects the research done by McGeown et al., (2012) which showed that girls perform much better than boys in reading comprehensions, because of the difference in the level of interest and motivation to read.

In addition, the relationship between socioeconomic status (SES) and reading skills is an endorsement of Sirin (2005) whose study showed that students from higher SES perform better than their counterparts with lower SES in reading skills. This calls for educational interjections that will seek to address these aforesaid disparities. Other aspects of the study, such as the focus on interactive and multimedia learning in the present study is also in tandem with the guidelines presented by the National Reading Panel (2000). Cumulatively, these comparisons underscore the need to target within- and between-student factors to enhance reading comprehension among secondary school students, which suggests the significance of our study in the educational literature.

Overall, there are implication for both educators and policymakers. For educators, there is a need to integrate interactive teaching methods. These methods like interactive reading and group work are well illustrated in the study. There is need to encourage group undertaking and peer teaching so as to enhance students' interaction and learning. Also, educators should incorporate digital techniques in their teaching styles. For instance, using video clips, audio tapes and computer programmes can help students who

have a lot of difficulties learning with books, notebooks, blackboards to learn. Implementing such resources also requires preparation with the teachers and the students. Furthermore, there is reasonable evidence as to how limited word reserve was considered as an impeding factor for reading and comprehension. Teachers should incorporate initiative, inference, elaboration, and extension of words into definite teaching, contextual learning and promoting extensive reading across different types of books. Notwithstanding, there are several roles for policymakers to change this narrative as well. First, the findings of the study showed why policies on education inequalities are important. Funding should be directed to lower income schools, and it is very important that children get books. These is also the need for policymakers to put in measures that will enable the professional development of teachers. Policy makers should ensure that the teachers receive refresher courses to enable them to be armed with such traits. Lastly, instructional content like the curricula should be reviewed regularly. This would help pinpoint gaps in terms of reading approaches to text.

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