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Assessing the Effectiveness of Basal Reading Approach in Enhancing Word Recognition and Fluency Among ND1 Students of Federal Polytechnic Nyak

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This study investigated the effectiveness of the Basal Reading Approach (BRA) in improving word recognition and reading fluency among primary school pupils in Fagge Local Education Authority (LEA), Kano State, Nigeria. The study also explored the perceived challenges and benefits of implementing the approach from the perspective of primary school teachers. The research adopted quasi experimental research design of pre-test and post-test control groups. The population of the study comprised the entire primary four pupils of Fagge LEA numbering 7420 and the specific population used from the two schools selected was 556 pupils. Purposive sampling technique was used to select the participants and the sample size stood at fifty-seven (57) pupils. Four instruments for data collection were used, namely; Identification of Children with Reading Difficulties Checklist (ICRDC), Basal Reading Approach Implementation Questionnaire (BRAIQ), Reading Difficulty Test (RDT) and Reading Comprehension Passage for Word Recognition (RCPWR). The data were collected with the help of two research assistants. The pupils in the control group were taught using conventional method while the pupils on experimental group were taught using Basal Reading Approach. Before the treatment, both groups (experimental and control), were tested using reading difficulty test (RDT). After eight (8) weeks treatment, all the participants sat for reading difficulties test as their post-test. Descriptive statistics in form of mean and standard deviation was used for answering the research question, while inferential statistics using *t*-test for independent sample and PPMC were used for testing the hypotheses. The results indicated that the teachers acknowledged several challenges associated with implementing the Basal Reading Approach, including difficulty in adapting materials to diverse learning needs, limited access to updated reading resources and inadequate teacher training. However, they also recognized significant benefits such as improved pupil reading fluency, support for struggling readers, and a structured framework that enhances literacy instruction. There was significant difference between significant difference was found in word recognition skills between pupils taught using the Basal Reading Approach and those taught using conventional methods, in favour of experimental group ($t(55) = 2.391, p = 0.020 < 0.05$). There is significant difference significant difference in reading fluency scores in favor of the experimental group ($t(55) = 16.314, p = 0.001 < 0.05$). It was also revealed that a strong positive correlation was observed between the effective use of the Basal Reading Approach and overall reading achievement among pupils, ($r = 0.742, p = 0.001 < 0.05$). It was concluded that Basal Reading Approach has significant effects in enhancing word recognition and reading fluency skills among primary school pupils. Based on the findings of this study, it was recommended that; teachers and curriculum planners should consider incorporating BRA into the curriculum to enhance reading proficiency at early stages. Since Basal Reading Approach (BRA) is effective in teaching word recognition and reading fluency, schools should consider training teachers in Basal Reading Techniques to maximize reading outcomes and schools facing challenges with reading proficiency should consider adoption of this method.

INTRODUCTION

In Nigeria, the challenges of reading difficulties among students of tertiary institutions are a pressing concern. Research by Oyetunde and Jegede, (2022) found that many students of tertiary institutions in Nigeria struggle with reading, which can impede their overall educational progress. These challenges can be attributed to several factors, including inadequate teaching methods, lack of reading materials, and limited opportunities for practice (Afolabi, 2020).

The basic reading approach is one method that has been widely used to teach reading among students of tertiary institutions. This approach emphasizes systematic and explicit instruction in phonics, decoding and comprehension skills. According to a study by Duke, et al. (2020), the basal reading approach provides a structured and comprehensive framework for teaching reading, which can help students develop a strong foundation in reading skills. Proponents of the basal reading approach argue that it can be effective enhancing word recognition and fluency among students of tertiary institutions. For example, a study by Musthafa, (2021) found that students who received instruction using the basal reading approach showed significant improvement in their reading skills, including word recognition and fluency. Similarly, research by Lee and Yoon (2022) reported that the basal reading approach was effective in improving students reading comprehension and vocabulary skills. Despite the potential benefits of the basal reading approach, there is a need to assess its effectiveness in the context of students of tertiary institutions.

This study aims to assess the effectiveness of the basal reading in enhancing word recognition and fluency among ND1 students of Federal Polytechnic Nyak Shendam, Plateau State. Specifically, the study will investigate the impact of basal reading approach on students' word recognition skills, reading fluency and overall reading achievement. The findings of this study can provide valuable insight for educators, policymakers, and stakeholders in the education sector, ultimately contributing to improved reading outcomes for students of Federal Polytechnic Nyak, Shendam and beyond.

STATEMENT OF THE PROBLEM

The ability to read is fundamental skill that play a critical role in the academic success and personal development of students of tertiary institution. Despite its importance, many students in Nigeria, particularly ND1 students in Federal Polytechnic Shendam, struggle with reading, including word recognition and fluency. This challenge is pressing concern, as it can impede students 'overall educational progress and limit their opportunities for future success.

The basal reading approach emphasizes systematic and explicit instruction in phonic, decoding and comprehension skills. However, despite its widespread use, there is limited empirical evidence to support its effectiveness in the context of tertiary institutions. The few studies that have been conducted on the basal reading approach in Nigeria have yielded mixed result, and none have specifically examined its impact on word recognition and fluency among ND1 students in Federal Polytechnic Nyak, Shendam.

OBJECTIVES OF THE STUDY

The study is guided by the following research objectives:

1. To assess the effectiveness of the basal reading approach in enhancing word recognition skills among students of ND1 in Federal Polytechnic Nyak, Shendam.
2. To investigate the impact of the basal reading approach on reading fluency among students of ND1 in Federal Polytechnic Nyak, Shendam.
3. To identify the challenges and benefits of implementing the basal reading approach among students of ND1 in Federal Polytechnic Nyak, Shendam.

RESEARCH QUESTIONS

1. What is the effectiveness of Basal reading approach in enhancing word recognition skills among students of ND1 in Federal Polytechnic Nyak, Shendam?
2. What is the impact of the basal reading approach on reading fluency among students of ND1 in Federal Polytechnic Nyak, Shendam?
3. What are the challenges and benefits of implementing the basal reading approach among students of ND1 in Federal Polytechnic Nyak, Shendam?

METHODOLOGY

This section focuses on research design, population of the study and sampling, instruments for data collection.

Research Design

This study used quasi experimental research design involving pre-test and post-test of experimental and control group. According to Kothari and Garg (2014) research design refers to the advance plan that guides the data collection and data analysis processes. The researcher chose pre-test post-test design in order to see the effects or otherwise of the intervention between the experimental and the control group before and after the treatment. Participants in the experimental group received treatment using Basal Reading Approach while the control group were taught using conventional method of teaching.

Population of the Study and Sample

The general population of the study consists of the entire ND1 students of Federal Polytechnic Nyak, Shendam, (450 students).

Sample size is the total number of units or items used to represent the characteristics of whole population (Kothari, 2004). After identification of the students with reading difficulties it was found that fifty-seven (57) students were having reading difficulties from the department of Electrical and Electronics and (44) students from the department of Business Management. Therefore, the sample for the study made up of thirty (57) students from department of Electrical and Electronics and (44) students from the department of Business Management respectively.

Instrument for Data Collection

Three instruments for data collection used namely: Identification of students with Reading Difficulties Checklist (ICRCD), Basal Reading Approach Implementation Questionnaire (BRAIQ), Reading Difficulty Test (RDT) and Reading Comprehension Passage for Word Recognition (RCPWR).

Description of Identification of students with Reading Difficulties Checklist (ICRDC) For the purpose of this study, the checklist titled “Identification of students with Reading Difficulties Checklist (ICRDC)” in order to identify the pupils with reading difficulties was used. The checklist consists of four points rating scale from 1(Rarely); 2 (Occasionally); 3 (Often); and 4 (Frequently). This instrument is meant to ascertain the students who are identified by the researcher as having reading difficulties. This is to ensure that the students identified possess the characteristics of reading difficulties as contained in the checklist.

Basal Reading Approach Implementation Questionnaire (BRAIQ)

The second instrument used for data collection in this study is a structured (close-ended) questionnaire titled “*Basal Reading Approach Implementation Questionnaire (BRAIQ)*”. It is a researcher-made instrument constructed to sought the opinions of teachers on the challenges and benefits of implementing the Basal Reading Approach in tertiary institutions. The instrument consisted of two sections ‘A’ and ‘B’. Section ‘A’ sought information on the personal data of the respondents, while section ‘B’ dealt with information on issues raised in the research question 1. Responses to the items were set on a four-point Likert scale of strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD) which will be weighted 4,3,2, and 1 respectively. Scores obtained for each respondent were summed up into frequency and percentage. The decision rule reads that any mean score above 2.50 is regarded as agreed, while less than 2.50 is regarded as disagreed.

Description of Reading Difficulties Test (RDT)

For the purpose of this study, Reading Difficulties Test (RDT) was conducted in order to identify those pupils experiencing reading difficulties among the ND1 students in the schools. The Reading Difficulties Test (RDT) is an adapted reading test, named “*Gates-MacGinitie Reading Tests (GMRT)*”. The researcher adapted the instrument from the work of Maryam, Abdullahi Isah (2022), “Effect of Phonics Methods on Reading Difficulties of Primary 5 Pupils in Rijiyar Zaki Special Primary, Kano State”. Gates-MacGinitie’s Reading Test is a research-based reading test that teachers and researchers use for assessing reading difficulties in schools particularly at higher levels. It was developed by an American Educational Psychologist Walter H. MacGinitie.

The test consists of ten (10) items with total mark of 20 marks having each item 2 marks. While a child reading, the researcher observed the signs and symptoms of reading difficulties, such as inability to decode words or read accurately. The researcher should carefully observe the strategies and techniques a child used to read.

DATA PRESENTATION AND ANALYSIS

The data collected in both pre-test and post-test sessions from the experimental and control groups were scored for analysis. The research questions were answered using descriptive Mean ($\bar{X}$) and Standard Deviations (SD). Also, inferential statistics were used in testing the hypotheses; the analysis was done by using the independent sample *t*-test and Product Moment Correlation coefficient (PPMC) statistics. All hypotheses were tested at 0.05 level of significance.

Data Analysis

Research Question One: What is the effectiveness of Basal reading approach in enhancing word recognition skills among students of ND1 in Federal Polytechnic Nyak, Shendam?

Table 1.1

Variable	Group	N	Mean	Std. Dev	Std. Err	Df	t-Cal	Sig (p)	Decision
Word Recognition	Experimental	26	52.08	12.74	2.498	55	2.393	0.020	Rejected
	Control	31	41.19	8.89	1.598				

***Significant at $P > 0.05$**

An independent samples *t*-test was computed to assess the effectiveness of Basal Reading Approach (BRA) in enhancing word recognition skills among ND1 students of Fedral Polytechnic Nyak Shendam, Plateau State. The results revealed a statistically significant difference in word recognition skills between the experimental group ($M = 52.08$, $SD = 12.74$) and the control group ($M = 41.19$, $SD = 8.90$), $t(55) = 2.39$, $p = 0.020 < 0.05$. Hence, the null hypothesis is rejected. This means that students taught with Basal Reading Approach showed a significant improvement in their word recognition skills compared to those taught with conventional methods.

Research Question Two: What is the impact of the basal reading approach on reading fluency among students of ND1 in Federal Polytechnic Nyak, Shendam?

Table 1.2

Variable	Group	N	Mean	Std. Dev	Std. Err	Df	t-Cal	Sig (p)	Decision
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	Experimental	26	52.07	12.74	0.893				H0 ₂
Reading Fluency						55	16.314	.001	Rejected
	Control	31	11.54	4.972	2.498				

***Significant at $P > 0.05$**

Results in table 1.2 revealed that there is significant difference between the posttest reading fluency mean scores of pupils taught reading using Basal Reading Approach (BRA) and those taught using the conventional method. This was because the t -calculated of 16.314 at 55 degree of freedom; the p -value 0.001 is less than 0.05 level of significance. And the calculated mean and standard deviations scores were ($M=52.02$; $SD=12.74$) for experimental group, and ($M=31.54$; $SD= 4.97$) for the control group. Therefore, the null hypothesis was rejected, and concluded that there is a significant difference in the performance of primary four pupils taught with Basal Reading Approach on word reading fluency and those taught with conventional method. By implication the results clearly indicated that the basal reading approach (BRA) had a highly significant and strong impact on reading fluency among students.

4. **Research Question Three:** What are the challenges and benefits of implementing the basal reading approach among students of ND1 in Federal Polytechnic Nyak, Shendam?

5. Variable	N	$\bar{x}$	SD	r -cal	p -value	Decision
Basal Reading Approach	57	48.33	11.26	0.742	0.001	Reject H0 ₃
Overall Reading Achievement	57	30.04	22.37			

**, Correlation is significant at the 0.05 level (2-tailed).

A Pearson's correlation analysis was conducted to examine the relationship between the basal reading approach and students' overall reading achievement in Federal Polytechnic Nyak Shendam. The results revealed a statistically significant positive correlation between use of basal reading approach students' overall reading achievement in Federal Polytechnic Nyak Shendam ($r(57) = 0.742$, $p=0.001<0.05$). This indicating a strong positive relationship between the two variables.

SUMMARY OF THE FINDINGS

Based on the above results, the following are the major findings emanated from the study:

1. There was a statistically significant difference in word recognition skills between students taught using the Basal Reading Approach (BRA) and those taught with conventional methods, in favor of experimental group ($t(55) = 2.329$, $p = 0.020<0.05$).
2. There is a highly significant difference between the posttest reading fluency mean scores of students taught using Basal Reading Approach (BRA) and those taught using the conventional method ($t(55) = 16.314$, $p = 0.001< 0.05$).
3. There was a statistically significant positive correlation between use of basal reading approach and students' overall reading achievement ($r(57) = 0.742$, $p=0.001<0.05$).

CONCLUSION

Based on the findings from this study, it can be concluded that Basal Reading Approach has significant effects in remediating reading difficulties and increase the reading skills among tertiary institution students. The findings of this study provide strong empirical support for the effectiveness of the Basal Reading Approach in enhancing word recognition and reading fluency among ND1 students of Federal Polytechnic Nyak, Shendam LGA, Plateau State. The statistically significant improvements in key literacy indicators observed in the experimental group suggest that BRA provides a structured, sequential, and supportive framework for developing foundational reading skills. Thus, it is concluded that Basal Reading Approach enhanced and improved the performance of ND1 students' reading ability and proficiency in Federal Polytechnic Nyak, Shendam.

Moreover, the positive perceptions expressed by teacher despite noted challenges indicate that BRA has the potential to address critical gaps in early-grade reading instruction, especially for pupils who struggle with decoding, word recognition and fluency. However, the implementation of the approach is not without its limitations. The effectiveness of BRA is undermined by contextual barriers, including insufficient teaching materials, lack of differentiated instructional practices, and inadequate teacher preparation. Therefore, maximizing the full potential of the Basal Reading Approach will require institutional investment, teacher support, and contextual adaptation.

RECOMMENDATIONS FROM THE STUDY

Based on the findings and conclusion of the study, the following recommendations are made:

1. Policymakers should consider allocating more resources for teacher training and curriculum development to facilitate the widespread implementation of structured literacy programs like Basal Reading Approach.
2. In-service teacher training and professional development programs should be provided to build teachers' pedagogical knowledge and technical competence in using the Basal Reading Approach effectively. Such programs should include modules on adapting BRA for inclusive education and differentiated instruction.
3. As the findings proved that basal reading approach is effective in enhancing word recognition and fluency among students. The researcher recommended that schools facing challenges with reading proficiency among their students should consider adoption of this method.
4. School administrators should create enabling environments for the adoption of BRA by encouraging its use, allocating instructional time and supporting collaborative lesson planning among teachers.
5. Teachers should be empowered to adapt basal materials to the linguistic backgrounds and reading levels of learners, particularly in multilingual and resource-constrained classrooms.

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