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EFFECT OF RHYMES ON PUPILS' ACADEMIC ACHIEVEMENT AND LEARNING RETENTION IN LITERACY IN KANO STATE, NIGERIA

BY

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Abstract

This experimental research aimed to examine the influence of incorporating rhymes into literacy instruction on the learning retention and academic achievement of pupils in Kano State, Nigeria. The study adopted a pretest-posttest control group design and involved 103 pupils (50 in the experimental group and 53 in the control group) selected from primary schools within Kano State. The experimental group received instruction enriched with rhymes, while the control group received conventional instruction. By employing t-tests for comparative analysis of the mean scores between the two groups, the findings revealed that pupils exposed to rhymes during instruction exhibited significantly improved learning retention and academic achievement when compared to those exposed to traditional instruction. This suggests that the incorporation of rhymes in literacy instruction positively impacts pupils' learning outcomes. The implications of these results underscore the advantages of integrating rhymes into literacy education. Such an approach can effectively enhance pupils' engagement and comprehension, contributing to improved learning retention. Moreover, the findings advocate for the adoption of interactive and engaging teaching methods, such as the use of

rhymes, to foster a conducive learning environment. In the context of Kano State, Nigeria, where educational resources may be limited, the incorporation of rhymes represents a cost-effective and culturally relevant strategy for promoting effective literacy instruction and academic success among pupils. These findings serve as a valuable resource for educators and policymakers, highlighting the potential of innovative teaching approaches to advance educational outcomes in the region.

Keywords: Rhymes, Learning retention, Academic achievement, Literacy, Primary Schools, Kano State, Nigeria

Introduction:

The power of literacy lies not just in the ability to read and write, but rather in a person's capacity to apply these skills to effectively connect, interpret, and discern the intricacies of the world in which they live. The internet enables endless educational possibilities with constantly evolving information streams. However, the vastness of the internet can be overwhelming for children who cannot effectively sift through and interpret information, enabling them to utilize the internet to its full potential. In this research, the use of rhymes is employed to enhance pupils' understanding and retention of literacy concepts in a simplified manner.

Literacy development is a critical aspect of education, playing a vital role in pupils' academic achievement and overall cognitive development. In Kano State, Nigeria, there is a growing interest in leveraging innovative teaching methods, such as the use of rhymes, to enhance teaching and learning processes in primary schools. However, there is a dearth of research on the specific impact of rhymes on pupils' learning retention and academic achievement in literacy within the Nigerian context. This study aims to address this gap by investigating the effect of rhymes on pupils' learning retention and academic achievement in literacy in Kano State. Rhymes introduce pupils to a diverse vocabulary, facilitating language acquisition (Vernon-Feagans et al., 2001). In Kano State, with its linguistic diversity, this aspect of rhymes can be particularly valuable. A study by Yusuf and Ahmed (2019) conducted in primary schools in Kano State found that integrating rhymes into literacy instruction significantly improved pupils' phonological awareness, vocabulary, and reading comprehension. According to Lawan, (2023) Rhymes are poem use to impacts knowledge, skills, culture and ideas of a particular society or community especially to the younger generation, many people use rhymes to show the richness and how acceptable the tradition of such community. Orzernov Palchik et. al (2018) suggest a connection among rhymes introduce new words and phrases, and their repetitive nature

means the vocabulary can be picked up faster. As rhymes are read out loud, children are able to hear how the words sound and can practice how to pronounce them easily without the pressure of memorising words directly. According to Jeanne et-al., (2019), Retention of learned information can be defined as having the information stored in long-term memory in such a way that it can be readily retrieved, for example, in response to standard prompts. Gill, Timpane, and Brewer (2016), define academic achievement as measuring achievement through the progress in school, graduates, and the admission to higher education, as well as academic skill and knowledge. Ideally, the measurement of achievement evaluates not only the basic skill in literacy, academic and mathematics, but also the knowledge, cognitive skill, and wider creativity in a wider scope beginning from science up to fine arts.

In contrast, learning retention significantly influences academic achievement by enhancing knowledge acquisition, facilitating the application of knowledge, supporting critical thinking skills, enabling cumulative learning, improving test performance, boosting confidence and motivation, and fostering lifelong learning. Emphasizing effective learning strategies that promote retention can lead to improved academic outcomes and student success. Learning retention involves the transfer of knowledge and skills to new and unfamiliar situations. Primary pupils who have strong learning retention can use their acquired knowledge and apply it in different subjects or real-life scenarios, showcasing the ability to generalize and adapt their learning (Lawan et-al 2023).

Learning retention based on pupils' literacy refers to the ability of students to retain and remember literacy-related knowledge and skills over time. It focuses specifically on their capacity to retain and apply concepts and skills related to reading, writing, and language development. Pupils with strong learning retention in literacy can remember and understand what they have read in story or rhymes. They can recall key details, make inferences, draw conclusions, and summarize information from various texts. Learning retention in literacy includes the ability to retain and expand one's vocabulary. Pupils can remember new words they encounter and understand their meanings in different contexts. They can apply these words in their reading, writing, and oral communication. Pupils can retain and apply strategies such as making predictions, using context clues, summarizing, and visualizing enhancing their reading (Jibrin 2023).

Learning retention is an individual's ability to remember and recall information, materials and experiences learn over time. This acquired materials in the mind need to be preserved in form of images for knowledge to develop. When a stimulating situation

occurs, retained images are revived or reproduced to make memorization possible (Morris, 2000). Concepts therefore, need to be presented to the learners in a way or method that touches their subconsciousness, which can trigger quick recalling of the concept being taught or learnt. Okeke (2004) stated that teachers could improve learning retention of concepts and information by explicitly creating memorable events involving visual or auditory images with projects, plays, simulations and other forms of active learning, to boost pupil's retention of the concept. Okeke (2004) further stated that whatever pupils have retained for about 12 to 24 weeks after instruction, they might retain forever. In addition, the more time that passes after learning, the less information will be remembered. Okoye (2012) refers to learning retention as the process of maintaining the availability of new meanings or some part of them. It may be suggested that the amount of the original meaning that will be retained at any given point in time is a variable quantity. Forgetting represents a decrement in the availability of an acquired meaning that describes the loss in availability that occurs between the original establishment of the meaning and its later reproduction. Considering the two terms, retention is seen as a positive aspect of memory while forgetting is seen as the negative aspect. Frequent reviews and tests, elaborated feedback and active involvement of students in learning projects have been associated with longer retention.

Theoretical Framework

The incorporation of rhymes into literacy education aligns with constructivist and socio-cultural theories. Constructivism emphasizes that learners actively construct knowledge through interaction and engagement. Rhymes facilitate active participation and the development of literacy skills. Socio-cultural theory underscores the importance of social and cultural contexts in learning, making rhymes, often rooted in local culture, particularly relevant to pupils in Kano State. Vygotsky's ideas and work continues to be disseminated through efforts of scholars such as Cole, Wertsch, John-Steiner, Lantolf, and Rogoff (Miller, 2011). Vygotsky's ideas markedly influenced theories of psychology and education (Driscoll, 2000) and continues to significantly affect educational practices today (Miller, 2011). Vygotsky's theories are often contrasted with Piaget's theories mainly because both psychologists focused on understanding cognitive processes and development in children. However, their theories were described by Bruner as incommensurate because they highlight “two ways human beings can make sense of their world: by means of logical necessity (Piaget) or by means of interpretive reconstruction of circumstances (Vygotsky)” (Driscoll, 2000, p. 240). Generally, Vygotsky's theories are

viewed as complementary to Piaget's and other Western approaches since the broad sociocultural perspective balances the focus on the individual (Miller, 2011).

Statement of the Problem

The literacy levels of primary three students in Kano State, Nigeria, indicate a pressing need for improvement. Many students encounter difficulties in acquiring fundamental literacy skills, including reading, writing, and comprehension. Rectifying this issue is essential to ensure that primary three students attain the required literacy standards, thus bolstering their overall academic performance. Despite the crucial role of literacy skills in academic achievement, students at the primary three level in Kano State face obstacles in both retaining what they learn and excelling in literacy. The primary concern lies in the efficacy of the teaching methods employed, which often fail to effectively engage students, resulting in diminished learning retention and impeded progress in literacy. Furthermore, the integration of innovative teaching techniques, notably the incorporation of rhymes, remains limited in the literacy instruction provided to primary three students in Kano State. Consequently, there exists a significant imperative to investigate the potential of rhymes in addressing these challenges and enhancing students' academic accomplishments and retention in literacy.

Research Hypotheses

H1: There is no significant effect of rhymes on pupils' academic achievement in literacy in Kano State, Nigeria.

H2: There is no significant interaction effect of rhymes and gender on pupils' academic achievement in literacy in Kano State, Nigeria.

Methodology:

The research design adopted for this study is a pre-test, post-test, nonequivalent control group quasi-experimental research design. There was no randomization of the pupils because intact classes were used. The design allowed for the experimental group to receive instruction with rhymes, while the control group received traditional instruction. Both groups were administered pre-tests and post-tests to measure their learning retention and academic achievement in literacy. The data collected were analyzed using independent sample t-tests.

Results

Research Hypothesis One: There is no significant effect of Rhymes on pupils' academic achievement in literacy in Kano State, Nigeria.

Table 1: ANCOVA table showing effect of Rhymes on pupils' academic achievement in literacy in Kano State, Nigeria

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	11524.445[a]	4	2881.111	192.481	.000
Intercept	17.583	1	17.583	1.175	.281
Pretest	8.969E-005	1	8.969E-005	.000	.998
Treatment	10986.300	1	10986.300	733.970	.000
Treatment * Gender	10.335	1	10.335	.690	.408
Error	1466.895	98	14.968		
Total	440659.000	103			
Corrected Total	12991.340	102			

Table 1 shows the effect of Rhymes on pupils' academic achievement in literacy in Kano State, Nigeria. There was significant effect of Rhymes on pupils' academic achievement in literacy in Kano State, Nigeria ($F_{(1;98)} = 733.970$; $p < 0.05$). The null hypothesis is therefore rejected in the light of the result since the significant value (.000) is less than 0.05. This implies that treatment had significant effect on pupils' academic achievement in literacy in Kano State, Nigeria. The source of the significant difference is presented in table 2 below.

Table 2: Summary of Bonferroni's PocHoc Pairwise Comparison of the scores between the two groups

Treatment	Mean Difference	Experimental	Control Group
Rhymes	75.30	*	
Conventional Method	54.15		*

Table 2 revealed that the significant effect revealed by table 1 is as a result the significant difference between Rhymes and conventional method. Rhymes refers to experimental group, while conventional method is known as control group. This implies that those exposed to Rhymes (75.30) performed significantly better than those exposed to conventional method (54.15).

Research Hypothesis One: There is no significant interaction effect of Rhymes and gender on pupils' academic achievement in literacy in Kano State, Nigeria.

Table also showed that there was no significant interaction effect of Rhymes and gender on pupils' academic achievement in literacy in Kano State, Nigeria. There was no significant interaction effect of Rhymes and gender on pupils' academic achievement in literacy in Kano State, Nigeria ($F_{(1; 98)} = .690$; $p < 0.05$). The hypothesis is therefore not rejected in the light of the result since the significant value (.408) is greater than 0.05.

The results showed a significant effect of using rhymes on pupils' academic achievement in literacy in Kano State, Nigeria ($F(1; 98) = 733.970$; $p < 0.05$). Pupils who received instruction with rhymes performed significantly better than those who received traditional instruction. There was no significant interaction effect of using rhymes and gender on pupils' academic achievement in literacy.

Discussion

The findings of this study support the hypothesis that incorporating rhymes in literacy instruction can enhance learning retention and academic achievement among pupils in Kano State, Nigeria. Rhymes provide an interactive and engaging learning environment that captures pupils' attention, promotes comprehension, and facilitates knowledge retention. These findings have implications for educators, emphasizing the potential benefits of integrating rhymes into the curriculum to enhance literacy outcomes. The statement suggests that the inclusion of rhymes in literacy instruction has positive implications for learning outcomes, specifically in the context of Kano State, Nigeria. This finding aligns with various theories and research in education and psychology that highlight the significance of interactive and engaging learning methods for enhancing retention and academic achievement.

The use of rhymes in literacy instruction can serve as an effective tool for promoting active student engagement. Rhymes often have a rhythmic and melodic structure that appeals to children's auditory senses, making the learning process more enjoyable and memorable. This engagement can lead to increased attention and

participation among pupils, fostering a conducive environment for effective learning.

Furthermore, the interactive nature of rhymes can contribute to improved comprehension. The rhythmic patterns and repetitive elements in rhymes aid in the development of phonological awareness, which is crucial for early language acquisition. By exposing pupils to rhymes, educators can help develop their phonemic skills, supporting them in recognizing and manipulating sounds, which are fundamental aspects of literacy development.

Additionally, the statement suggests that the use of rhymes facilitates knowledge retention. When information is presented in a rhythmic and memorable form, it is more likely to be retained in students' long-term memory. This is because the rhythmic structure of rhymes aids in the creation of cognitive connections, making it easier for pupils to recall and apply the information they have learned. Considering the context of Kano State, Nigeria, where educational resources and infrastructure may vary, incorporating rhymes into the curriculum can serve as a cost-effective and culturally relevant approach to improving literacy outcomes. It can be a practical strategy to foster a strong foundation in language and literacy skills, ultimately contributing to the overall academic achievement of pupils.

These findings hold significant implications for educators and policymakers. Educators can use this evidence to advocate for the integration of rhymes and other interactive learning methods in literacy instruction. It emphasizes the importance of creating a dynamic and engaging learning environment that caters to diverse learning styles and promotes active participation. Policymakers can consider these findings when designing and implementing educational policies aimed at improving literacy rates and educational quality in the region. Overall, the integration of rhymes in literacy instruction represents a promising approach to enhance learning outcomes and contribute to the academic success of pupils in Kano State, Nigeria.

Conclusion

In conclusion, the integration of rhymes into literacy education in Kano State, Nigeria, holds significant promise for improving academic achievement and learning retention among pupils. To realize these benefits, it is imperative to follow the recommendations outlined in the article. By doing so, Kano State can foster a more engaging and effective learning environment, ultimately contributing to the overall educational development of its students.

Recommendations:

Schools across Kano State should consider integrating rhymes into their curriculum as a fundamental component of literacy education, recognizing the benefits of this engaging and effective learning tool for students. It is essential for educators in Kano State to undergo comprehensive training on how to skillfully incorporate rhymes into their teaching methods, ensuring that they are equipped with the necessary knowledge and techniques to maximize the educational impact of rhymes. Initiatives aimed at enhancing the availability of resources, particularly rhyme materials, within schools throughout Kano State should be prioritized to facilitate the seamless integration of rhymes into literacy education and create a more conducive learning environment. The content used in literacy education must be culturally relevant and tailored to the specific needs and cultural backgrounds of students in Kano State, recognizing the importance of incorporating local context and values into the learning materials. Continuous monitoring and evaluation of the implementation of rhymes in literacy programs are of utmost importance in Kano State, allowing for the assessment of effectiveness and the identification of areas for improvement, ultimately ensuring the sustained success of these educational initiatives. Active engagement of parents and the local community should be encouraged to provide support for the use of rhymes in literacy education in Kano State, recognizing the significance of collaborative efforts in promoting a holistic learning experience for students.

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