

EFFECT OF LETTER FORMATION TEACHING TECHNIQUE IN JOLLY PHONICS INSTRUCTIONAL MODEL ON BASIC ONE LEARNERS' ACADEMIC PERFORMANCE IN WRITING SKILLS IN NORTH-WEST, NIGERIA

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Abstract

This study ascertained the effect of letter formation teaching technique in jolly phonics instructional model on basic one learners' academic performance in writing skills in north-west, Nigeria. The study was guided by the objective; to ascertain the academic performance of basic one learners when taught writing skills using letter formation teaching technique against those taught using sight word technique. Research question and hypothesis were in line with the objective of the study. The study employed a quasi-experimental research design with pre-test, treatment and post-test. The population of the study comprised 12,512,000 basic one learners in public primary schools in north-west, Nigeria. 129 basic one learners from two intact classes were selected as sample. Two schools were selected as experimental and control groups respectively. The experimental group was taught writing skills of giraffe, tortoise and monkey tail letters of alphabets using letter formation teaching technique while, the control group was taught the same content using the sight word technique. Basic One Learners' Academic Performance Test (BOLAPT) was used as the instrument for data collection. Using Pearson Product Moment Correlation, the instrument yielded a reliability coefficient of 0.872. Mean and standard deviation were used to answer the research question while, independent sample t-test was used to test the hypothesis at 0.05 level of significance. Findings of the study revealed that, basic one learners taught writing skills using letter formation teaching technique performed significantly better than those taught using sight word technique. The study concluded that letter formation technique enhances learners' academic performance than the sight word technique. The study recommended that teachers at the basic education level should utilize the letter formation technique in teaching writing skills.

Keywords: Letter Formation, Teaching Technique, Academic Performance, Writing Skills.

Introduction

The basic education level is the stage at which proper foundations are established for the acquisition of basic literacy and numeracy skills. It is obvious that learners at this level spend time on recognition of objects within and around their learning environment. At the early basic school stage, the learner is not only expected to recognize these objects but should be able to write and read these objects in school and at home (Rose, 2024). The need for learners at the basic education level to acquire skills in mastering the letters of the alphabet with accurate formation is paramount to a solid foundation of learning not only in the language, but also all other fields of study. The need to improve literacy coupled with the desire to promote quality of teaching and learning in Nigeria's basic education level, has called for a pragmatic approach

to adoption and utilization of contemporary instructional technique that could help in translation and application of learning experiences. One of such instructional technique is letter formation which aimed at improving learners' skills in the acquisition of appropriate skills in writing.

Letter formation instructional technique involves teaching learners how to write letters of alphabets accurately while associating them with their corresponding sounds. It emphasizes multisensory learning, ensuring learners engage with the process visually, kinesthetically, and auditory to reinforce understanding and precision in writing (Lloyd, 2021). Key aspects of letter formation include: demonstrating how to write letters using proper strokes and directions, starting at the right points and following a logical sequence. For instance, letters like "a" begins with a circular motion, helping learners internalize the shapes (Smith, 2022). In this strategy, learners are encouraged to use their fingers to trace letters in sand, air, or on textured surfaces. This tactile engagement enhances muscle memory, making writing more natural and ensuring learning by doing (McGuinness, 2020). As learners practice writing letters of alphabets, they simultaneously pronounce the associated sounds. This simultaneous action strengthens the connection between phonemes and graphemes, fostering early literacy skills (Brown, 2019). In this process, consistent practice is encouraged to help learner gain confidence and fluency in writing. Activities like writing on whiteboards or worksheets reinforces proper formation (Lloyd, 2021). On the other hand, teachers provide immediate feedback to guide a learner in correcting mistakes and mastering letter formation strategies. Hence, positive reinforcement plays a crucial role in this process (Clark, 2020).

Furthermore, letter formation is the ability to correctly form structure and develop letters of the alphabet. This is an important element for acquisition and improvement of writing skills. It is important that learners are successful in making progress in all aspects of writing including identification, the development of vocabulary and spelling which should also be taught explicitly through letter formation. When learners have the ability to trace, copy and write lines, shapes and patterns, they are ready to learn how to form letters. Hence, the steps taken in forming a letter especially in this instructional strategy will make learners fully engaged in the actions that form teaching and learning process (Ogbemudia & Alasa, 2024). There is no doubt, poorly learned or ineffective development of motor skills can breed negative effects for writing progression. This technique therefore aimed at teaching learners how to write letters with a clear mindset and understanding of how they learn as well as the most effective instructional strategy.

Moreover, letter formation is a comprehensive and systematic technique for teaching phonics and literacy skills. The technique has a range of benefits for learners, including improved phonics skills, improved writing skills, improved listening skills and confidence. The strategy has a significant relationship with learners' academic performance and writing skills (Cabel & Sonia, 2023). Letter formation instructional technique helps learners develop

phonemic awareness, which is the ability to hear and manipulate individual sounds which is also essential for spelling and writing skills.

In addition, increased decoding skills in letter formation teaches learners to decode letters by writing down individual patterns. This skill helps learners to write with more accuracy and fluency unlike those at conventional sight word. It aids better comprehension and make learners become more confident in their writing skills. To better the handwriting, letter formation include activities that help learners develop their fine motor skills. Improved confidence in letter formation helps learners develop a strong foundation in writing skills, which can lead to increased academic abilities. Research has shown that learners who receive instruction through letter formation tend to perform better academically than those who do not receive such instruction. In line with this assertion, a number of studies have demonstrated the effectiveness of letter formation in improving writing skills and overall academic performance (Cabel & Sonia, 2023, Adamu, 2024 & Ibrahim, 2025). Letter formation can help reduce the academic achievement gap of learners from different socio-economic backgrounds, as it provides a systematic and explicit approach to learning writing skills (James, 2025). Furthermore, a study by Olubinmi (2024) revealed that letter formation instructional strategy was effective in improving writing skills in learners in the early years of basic school. To sum it up, these research evidences suggests that letter formation instructional technique is highly effective for teaching writing skills and have a positive impact on basic learners' overall academic performance.

Moreover, letter formation technique categorized teaching of all the letters of alphabets into giraffe letters, tortoise letters and monkey tail letters. The giraffe letters are tall letters like, b, d, f, l, and h that reach up to the top line on pupils' exercise or note books, similar to the height of a giraffe. They are used to help learners master the skill of writing through fun, the tall, small and the ones that fall below the line. The tortoise letters are letters that looks like a tortoise. These are usually in lower case or small letters: a, c, e, i, m, o, r, s, u, v, w, x, and z. Monkey tail letters are letters that fall below the baseline of the primary writing lines. The letters, g, j, p, q, and y are all considered monkey tail letters.

On the other hand, sight word is considered as the conventional technique used in teaching writing. It is an instructional strategy that attach writing of letters of alphabets to objects. This strategy could not only be boring and time consuming, but also misleading in pronunciation of the letter sound and the objects attached to the alphabets (Kingsley, 2023). The sight word tend to make learners encored the letter symbol and sign, not the sound; and this type of instruction make it double tasking to comprehend the letter name and later to comprehend the letter sound.

An essential requirement for quality education can be reflected in academic performance of learners. Academic performance help revealed the effectiveness of instructional technique which could be evident in the improvement in learners' acquisition of learning experiences. The notion of academic performance according to Sardiman (2022) is the

realization of learning outcomes that have been achieved by learners in the process of imparting learning experiences. In a nut-shell, academic performance represents a set of strategies for the acquisition and application of knowledge, skills, values and activities through tasks that are meaningful and engaging to learners. Teachers can therefore determine the extent to which learners acquire relevant curriculum content by assessing their academic performance.

Statement of the Problem

Literacy, that is, the ability to read and write is one of the major problems bedeviling the Nigeria's education system especially at the basic education level (Ibrahim, 2025). Learners at basic education level spend much of their time in objects recognition within and outside the learning environment. This technique became double tasking on the learners. It is difficult and time consuming for them to integrate, comprehend the letter symbol and letter sound. Similarly, the s technique applied in teaching at basic level resulted to a situation where many learners may not be able to form, spell, read simple word and sentence within the time frame (Awwal & Anas, 2022). It is therefore important to identify the technique that will best be used to enhance learners' words formation skills which in the final analysis lead to improvement in academic performance especially on basic one learners. The problem of this study is therefore to determine the effect of letter formation instructional technique in enhancing basic one learners' academic performance in writing skills.

Objective of the Study

The study was guided by the objective, to:

1. examine the effect of letter formation technique in jolly phonics instructional model on basic one learners' academic performance in writing skills against the sight word technique in north-west, Nigeria.

Research Question

The study answered the following question:

1. What is the effect of letter formation technique in jolly phonics instructional model on basic one learners' academic performance in writing skills against the sight-word technique in north-west, Nigeria?

Hypothesis

The following hypothesis was formulated and tested at 0.05 level of significance:

1. There is no significant difference in basic one learners' academic performance in writing skills when taught using letter formation technique in jolly phonics instructional model and those taught using sight-word technique in north-west, Nigeria.

Methodology

The study employed quasi experimental research design with pre-test, treatment and post-test. Two primary schools were selected and assigned as experimental and control groups. The experimental group was taught writing of giraffe, tortoise and monkey tail letters of alphabets using letter formation instructional technique while, the control group was taught the same content using conventional sight word instructional strategy. The population of the study

comprised 12,512,000 basic one learners in public primary schools in north-west, Nigeria. 129 basic one learners from two intact classes were selected as sample. Basic One Learners' Academic Performance Test (BOLAPT) was used as the instrument for data collection. The instrument contained thirty two items and was validated by experts in English language education, curriculum and instruction and educational measurement and evaluation. Using Pearson Product Moment Correlation, the instrument yielded a reliability coefficient of 0.872. At the initial stage, a pre-test was administered to both groups to ascertain the entry behavior of the participants. After six weeks of treatment, a post-test was also administered. Mean and standard deviation were used to answer the research question while, independent sample t-test was used to test the hypothesis at 0.05 level of significance.

Results

Research Question: What is the effect of letter formation technique in jolly phonics instructional model on basic one learners' academic performance in writing skills against the sight-word technique in north-west, Nigeria?

Table 1: Mean and standard deviation of students' performance taught writing skills using letter formation and sight word

Groups	N	$\bar{X}$	SD	Mean Diff.
Experimental	67	57.11	3.01	26.06
Control	62	31.05	3.71	

Table 1 revealed that there is a statistical difference in the mean score and standard deviation between the experimental and control groups. The experimental group has mean score of 57.11 and the standard deviation of 3.01 while, the control group has mean score of 31.05 and the standard deviation of 3.71. A mean difference of 26.06 was calculated in favor of the experimental group. This finding implies that basic one learners taught writing skills using letter formation instructional technique performed better than those taught using sight word technique.

Hypothesis: There is no significant difference in basic one learners' academic performance in writing skills when taught using letter formation technique in jolly phonics instructional model and those taught using sight-word technique in north-west, Nigeria.

Table 2: t-test analysis of students' performance taught writing skills using letter formation technique and sight word

Group	N	$\bar{X}$	SD	df	t- cal	t-crit	p-value
Experimental	67	57.11	3.01	127	30.93	2.18	0.001
Control	62	31.05	3.71				

Table 2 displayed the t-test analysis of significant difference in students' performance in the experimental and control groups. Result of the analysis indicated that the P-value= 0.001 is less than the alpha 0.05. The t-calculated 30.93 is greater than the t-critical 2.18 at degree of freedom of 127. The hypothesis which stated that there is no significant difference in basic one learners'

academic performance in writing skills when taught using letter formation technique in jolly phonics instructional model and those taught using sight-word technique in north-west, Nigeria is rejected. The result revealed that the treatment using letter formation technique has effect on students' performance. $P\text{-value}=0.001 < \alpha=0.05$.

Discussion of Findings

The finding of this study revealed that there is a significant difference in the academic performance of basic one learners taught writing skills using letter formation and sight word techniques. Basic one learners taught writing skills using letter formation technique performed significantly better than those taught using sight word technique. This finding is in line with the findings of Cabel and Sonia (2023) that effective letter formation technique for teaching writing skills have a positive impact on basic learners overall academic performance. In addition, Olubinmi (2024) maintained that fluent and effective writing skill at the basic education level could be realized with hands-on instructional techniques of which letter formation is integral. Adamu (2024) disclosed in his findings that, when learners are given the opportunity to learn to write through letter formation, their ability to write with precision could be made easier. The findings of this study is also in agreement with the findings of Ibrahim (2025) who reported that letter formation technique make basic one learners practice effectively and increases their talent and academic performance.

Conclusion

Based on the findings, the study concluded that letter formation teaching technique enhances basic one learners' academic performance in writing skills than the sight word technique. Letter formation technique promotes basic one learners confidence, precision and effectiveness in writing skills.

Recommendations

Based on the findings and the conclusion drawn, the study recommended that:

1. Teachers of English at the basic education level should employ letter formation technique in teaching writing skills as it was proved to be effective in enhancing basic one learners' writing skills.

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