

Teachers' Instructional Style Preference and Pupils' Academic Achievement in Ibadan: Another Angle to the Knowledge

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ABSTRACT---- *The most determinant factor of pupils' academic performance at the level of primary education is teacher. Teacher related factors are many some of which are; the teacher's personalities, subject-matter knowledge, method/strategy commonly adopted and also instructional style preference. All these factors are capable of determining the quality of instruction but instructional style has a potential of being the strongest influential factor on quality of teaching. Past scholars depict teaching style in such a way that made it seems not related to the teachers' learning styles. But learning style preference can determine teachers' perception of how learning occur which, in the other hand can determine the style of instructional delivery of the teacher. This study therefore examined the style of instruction delivery from the angle of learning styles of the teacher and termed it 'instructional styles preference'. The influence of instructional style on the academic achievement of the pupils was also determined. Teachers that demonstrated visual-based instructional style produced pupils with highest academic achievement and this style of instruction was recommended for primary school teachers among other recommendations.*

Keywords--- Instructional styles, Primary school teacher, Academic achievement, learning style

1. INTRODUCTION

The quality of learning that occurs in the primary school classroom is too crucial to be unheeded. The implication of the learning to quality of life of the recipients; application of knowledge acquired to real-life situations and the ability of the learning to determine academic achievement which is the yardstick to measure how far the child can go further in education encapsulate the aims of education. Because of this, any study that can shed light on factors or process that will improve the quality of learning at the foundational level of education used to attract the attention of the stakeholders to education generally. Despite the numerous studies on the influence of teacher related factors on pupil academic achievement in primary school, there is still the need to examine these causal-effect relationship further for more revelations, directions and suggestions on how to bring about quality learning in primary education, most especially now that the academic performance of the pupils is below expectation.

Early works on problems of learning from the angle of the teachers examined a myriad of variables including teachers' attitude, competency, qualification, instructional method preference, teaching preparation, personality and subject matter knowledge among others (Amazigbo, 2000; Afolabi, 2009; Guloba, Wokadala and Bategeka, 2010; Metzler and Wressmann, 2010; Kalima, 2012; Arif, Rasheed, Tahira and Akhter, 2012). Another important variable that is capable of determine effectiveness of teaching is the teacher's preferred style of delivering instruction. However, research studies, particularly the ones carried out in Nigerian primary schools are silent about teachers' instructional styles. Instructional style preference is conceived to represent an individual teacher's most preferred way of responding both cognitively and behaviourally to teaching tasks in the classroom irrespective of the subject taught. Specifically, instructional style means teacher's mode of lesson delivery that reflect the teachers learning style. What is common in literature is teaching styles but it has been described in various ways and none of these descriptions present it as trait of the teacher that evolved from the learning style of the teachers. Filonova (2008) states that teaching style is something that defines teacher, that guides and directs the instructional processes and that have effect on the learners and their ability. Just like people have individual learning styles; teachers have individual teaching style that is most preferred. In the same vein, Fischer and Fischer (1979) describe teaching style as classroom mode, a pervasive way of approaching the learners that might be consistent with several methods of teaching.

This instructional style, just like methods varies. While some teachers lecture, others demonstrate or discuss; some focus on rules and others on examples; some emphasize memory and others understanding. This is also applicable to instructional styles. Grasha (2002) asserted that identifying elements of teachers' style of teaching is difficult because the concept of style has been viewed in a pejorative manner. Grasha further explained that teacher's instructional style represents those enduring personal quality and behaviour that appear in how class is being conducted. Therefore, if style is what a teacher is, then, there are potentially as many different styles as there are teachers.

This variation has provides a framework that has enable researchers to provide different teaching styles. Fischer and Fischer (1979) sorted teaching style as task-oriented, cooperative planner, child-centred, subject-centred, the learner-centred, emotionally exciting and its counterparts. Contributing to the classification, Grasha (1994) groups teaching style as formal authority, facilitator, delegator and expert. Meanwhile, MAHEC Office of the Regional Primary Care Education (2001) proposes four teaching styles as assertive, suggestive, collaborative and facilitative. In the year 2002 Grasha categorizes teaching style as analytic/synthetic approach-presents and discuss; organization/clarity-set clear objective and organizes information; teacher-group interaction; teacher-individual student interaction; dynamism/enthusiasm-energetic/stimulating and enjoys teaching; general teaching abilities and overload.

Filonova (2008) identifies teaching styles as being in clusters asexpert/ formal authority (teacher-centred, classroom information is present and students receive knowledge); personal model/experts/formal authority (teacher-centred approach which emphasizes modeling and demonstration); facilitator/personal model/expert (student-centred, model, designed activities, social interaction and problem-solving); delagator/facilitator/experts (collaborator, taking initiative, more responsible).

A critical examination of various classifications as proposed by scholars and presented above depict teaching style as if it is not related to teacher own learning style. Whereas, the teacher's preferred learning style is capable of influencing the teacher's perception of how learning occur. Logically, the perception of how learning occurs is expected to affect the style of lesson delivery. Based on this there is a great possibility of teacher's learning style to dictate the instructional style preference of the teacher which is also expected to favour learners with such learning style. Therefore, it is not out of place to examine teacher's preferred style of lesson delivery from the perspective of the learning styles which is what this study termed instructional styles.

Again, how much a given child learns in a class is governed in part by that child's native ability and prior preparation but also by the compatibility of his or her characteristic approach to learning and the teacher's characteristic approach to teaching (Wilson,2012). Most teachers will teach the way they learnt, even to the detriment of pupils learning. Congruently, serious mismatches may occur between the learning styles preference of pupils in a class and the instructional style of the teacher with unfortunate potential consequences. In order to be able to match the instructional styles and learning styles of the pupils in primary schools, this study therefore identifies the following instructional styles using the widely known learning styles: Tactile-based, Visual-based and Auditory-based instructional styles.

Tactile-based instructional style is demonstrated by teachers who are mobile while teaching and encourage mobility in learners too. Any teacher using this style encourages "do", that is, hand-on/minds-on activities. Such teacher gives projects, assignment and various hands-on activities to learner; outdoor learning activities are preferable to passive classroom learning and such teacher like activity-based instructional methods. Visual-based instructional style is demonstrated by teachers who believe in seeing. Such teachers present visual aids, do not believe in outdoor activities but sight seen, present pictures, graphics, charts, drawing and real objects of what is being taught to learners to see. Such teachers give less hands-on activities and give short explanations. Teachers with visual-based instructional styles demonstrate more in class and write on the board to aid learning while delivering lesson. While auditory-based instructional style is characterized by presentation and detailed explanation, allows learners to share ideas, encourages talks and discussion as well as the use of audio ICT gadget to aid the instructions.

With the distinctive features of the three instructional styles identified, this study seeks to identify which of these teachers' instructional styles is common to Nigerian primary school teachers as observed in Ibadan metropolis in Oyo State. The study also took a step further to determine which of the styles influences pupils' academic achievement mostly in primary schools

2. RESEARCH QUESTIONS

The following research questions are generated to guide the study:

- I. Which instructional style is most prevalent among primary school teachers in Oyo-State?
- II. What is the level of academic achievement of primary school pupils taught with different instructional styles?
- III. Is there significant difference among the pupils taught with different instructional styles in their academic achievement?

3. METHODOLOGY

The research design employed in this study was a descriptive survey research design which involves the use of a questionnaire. This research design is considered suitable for this study because it describes existing teachers' instructional style preference, classifies them and determines the academic achievement of the pupils taught by teachers with different styles.

The population of this study included all private and public primary schools teachers and pupils in Ibadan, Oyo State. Purposive sampling technique was used to select five Local Government Areas (LGAs) out of the existing eleven LGAs in Ibadan land. The criteria used for the selection was that the selected five LGAs are the ones that make the Ibadan Metropolis. Stratified random sampling technique was also used to sample one public and two private primary schools in each of the sampled LGAs to give a total of 15 schools sampled for this study. A total of 15 teachers were targeted in a sampled school (3 preschool teachers and 12 primary school teachers) but the number of teachers met varied, most especially in the private schools. At the end, a total of 213 teachers fully participated in the study. A systematic sampling technique was used to select 10 learners out of those taught by each teacher and this resulted in a total of 2130 pupils that participated in the study.

One response instrument and record of past academic achievement of the pupils were used to gather data for this study. The response instrument was a questionnaire titled "Teachers' Instructional Strategies Preference (TIS-P)" It contains two sections; Section A was based on socio-demographic data of the respondents. Section B has 18 items which considered teachers' instructional preference based on their own learning style: Visual, Auditory and Tactile/Kinaesthetic. Each learning style has 6 items which present the major features of the style and this was design on 3-point Likert scale. This instrument was mathematically constructed such that mark obtainable on section of each style was 18 (6 items on maximum of 3 marks each). The best style of a participated teacher was picked based on which section the teacher has the highest mark. There were some cases when a teacher has same higher mark in two different sections. What was done was to examine in which of the two sections did the teacher had higher frequency of 3 marks and that section was picked as the style of the teacher.

Data on pupils' academic achievement for their first and second term in English Language, Mathematic, Basic Science and Social Studies were gotten from their school mark sheets for the 2013/2014 academic session. The weighted average of these scores were computed for each pupil and termed academic performance which was in percentage.

However, TIS-P was subjected to face and content validity. The reliability of the instrument was estimated by first trial testing it on 20 respondents outside the sample used for the study and Cronbach alpha technique was used which gave a coefficient of 0.70. The data collected were analysed using descriptive statistics, bar chart and Analysis of Variance.

4. RESULTS

Research Question I: Which instructional style is most prevalent among primary school teachers in Oyo-State?

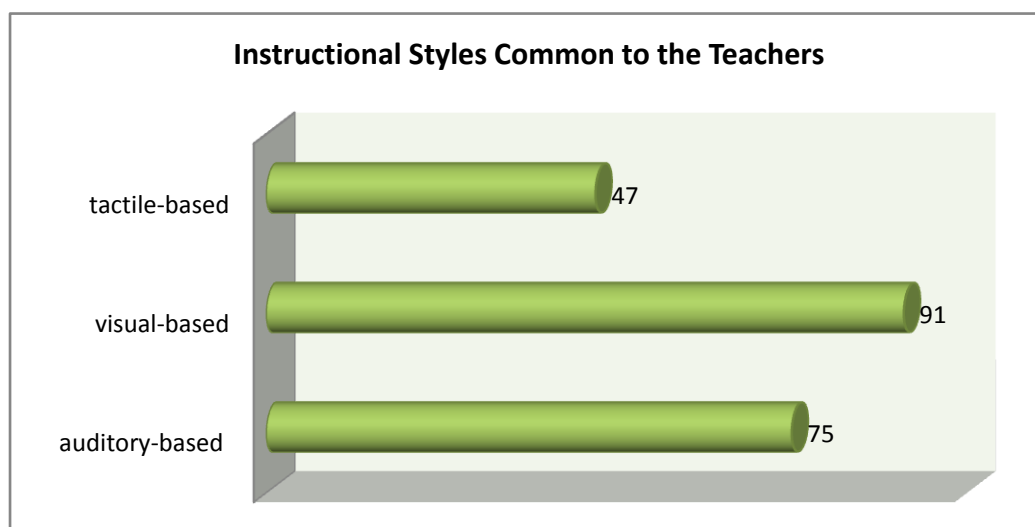


Fig. 1: Common Instructional Styles among Primary School Teachers in Ibadan

Figure 1 reveals the instructional styles common to the primary school teachers. The largest proportion- 91 (43%) of the teachers adopted visual-based instructional style, 75 (35%) adopted auditory-based instructional style while 47 (22%) adopted tactile-based instructional style. It can then be inferred that the common instructional style adopted by most primary school teachers in Ibadan is visual-based though the proportion of teachers that adopted other styles is still much.

Research Question II: What is the level of academic achievement of primary school pupils taught with different instructional styles?

To answer this question, descriptive analysis of stem and leave was used and the summary was presented by table 1 because of the large number of the pupils involved.

Table 1: Different Instructional Styles and the Academic Achievement of the Pupils

Score levels	Auditory-based		Visual-based		Tactile-Based	
	Freq.	%	Freq.	%	Freq.	%
10s	10	1.3	-	0.0	-	0.0
20s	18	2.4	07	0.8	-	0.0
30s	67	8.9	38	4.2	50	10.6
40s	160	21.3	205	22.5	100	21.3
50s	240	32.0	59	6.5	100	21.3
60s	185	24.7	461	50.7	150	31.9
70s	70	9.3	128	14.1	70	14.9
80s	-	0.0	12	1.3	-	0.0
Total	750	100.0	910	100.0	470	100.0
Mean	53.83		59.58		56.90	

Table 1 reveals that of all the pupils taught by those teachers that adopted auditory-based instructional style, 9% had distinction, 25% had upper credit, 32% had lower credit, 21% had pass while 13% had failed grade. Of the pupils taught by the teachers that adopted visual-based instructional style, 15% had distinction, 51% had upper credit, 7% had lower credit, 23% had pass while 5% had failed grade. Of those pupils taught by teachers that adopted tactile-based instructional style, 15% had distinction, 32% had upper credit, 21% had lower credit, 21% had pass and 11% had failed grade. The average scores of the pupils taught by teachers that adopted auditory-based, visual-based and tactile-based instructional style are 54%, 60% and 57% respectively. This implies that the academic performance of pupils taught by teachers that adopted visual-based instructional style is the highest, followed by those taught by teachers that adopted tactile and the pupils of teachers that adopted auditory had the least.

Research Question III: Is there significant difference among the pupils taught with different instructional styles in their academic achievement?

To answer this research question, analysis of variance was used to compare the mean scores of the three groups. Table 2 presents this information.

Table 2: Summary of Analysis of Variance (ANOVA) Showing Difference among the Groups in their Mean Scores

Instructional Styles	N	Mean	Std.D	F	Df	Sig.
Auditory-based	750	53.83	12.15	4.886	2/210	.008
Visual-based	910	59.58	11.64			
Tactile-based	470	56.90	11.49			
Total	2130	56.77	11.16			

Table 2 reveals that there is a significant difference among the three groups of pupils (Those exposed to auditory-based, visual-based and tactile-based instructional styles) in their academic achievement ($F_{(2,210)} = 4.89$; $p < 0.05$). Table 3 presents the Scheffe's post-hoc analysis that reveals the source of the significant difference.

Table 3: Summary of Scheffe's Post-Hoc Pair-wise Comparison

Styles	Mean	Auditory-based	Visual-based	Tactile-based
Auditory-based	53.83		*	
Visual-based	59.58	*		
Tactile-based	56.90			

Table 3 shows that the significant difference revealed by table 2 was as a result of the significant difference between the mean scores of the pupils exposed to visual-based and auditory-based styles. This implies that those exposed to visual-based and tactile-based in one hand and those exposed to tactile-based and auditory-based in the other hand are not significantly different from one another. In other words, visual-based instructional style enhances pupils' academic achievement significantly better than auditory-based.

5. DISCUSSION OF FINDINGS

The first finding of this study reveals that the largest proportion of primary school teachers in Ibadan, Oyo State of Nigeria adopted visual-based instructional style. Though the two other styles, that is auditory-based and tactile-based are also adopted by good numbers of teachers. This finding should not be discarded because it might be as a result of the fact that visual-based instructional style is the style of teachers that try to provide additional instructional aids to complement their teaching. For instance, such teachers provide drawing, pictures and realia to support the writings given to the pupils. These are the common things those teachers that have passion for their work and would not mind giving extra effort do to ensure that their pupils perform well. This style is also in tandem with the Piaget submission of cognitive development of children who claimed that primary school pupils are at the stage of pre-operational and concrete operational stage (Oduolowu, 2011). The other instructional style that was common among the primary school teachers is the auditory-based. These are the teachers that concentrate their energy on note dictation, reading for pupils, given instruction and detailed explanation. They are found of given instructions, command pupils and their lesson is always full of rules and regulations about the content being delivered. This set of teachers does not use instructional resources under the pretence that resources are not provided by the school. These teachers are more in the public schools than in the private in Nigeria (Salami and Peluola, 2012). The least adopted instructional style is the tactile/kinaesthetic and the reason for this is not farfetched. Most of the teachers do not have the technical know-how of delivering activity-based instructions and also the resources for such lesson are not available in most of our schools. It is not a gainsay also that when these resources are made available, most of the primary school teachers cannot successfully use them to teach (Aremu and Salami, 2012; Salami and Egiethua, 2012; Salami, 2014).

The second finding of this study was that teachers that adopted visual-based instructional style produced pupils with the highest academic achievement. This result should not be jettisoned too because it is a confirmation of the effectiveness of the activities of teachers that adopted this style. The act of supplementing instructional delivery with visual experience enables the pupils to gain more understanding of the subject matter. These teaching practices enable the pupils to learn with many senses unlike when the instruction is based on 'telling' only (Salami, 2014). The instructional style that produced pupils with better academic achievement was tactile/kinaesthetic style. This is also expected because pupils taught with activity-based strategy tend to learn better (Salami and Egiethua, 2012; Salami, 2014) but in this case, its being the second best could only be accounted for by the teachers lack of technical know-how of delivery this style as explained earlier. The finding that auditory-based style produced pupils with least academic achievement might have be the result of the fact that this style is more of teacher-centred which render the pupils passive during teaching/learning activities (Aremu, Salami and Ishola, 2012).

6. CONCLUSION

This study has been able to identify instructional styles of primary school teachers in tandem with the known learning styles. In this sense, all the styles of instruction found adopted by the primary school teachers were classified into three namely visual-based learning, auditory-based and tactile/kinaesthetic-based instructional styles. This seems another dimension to the explanations to different styles of teaching compared to what many authors presented in the literature. Again, the academic performances of pupils taught with these styles were examined and visual-based and tactile-based instructional styles were found enhancing academic performance of the pupils better. It is therefore concluded that instructional styles of primary school teachers can also be explained through the learning styles of the teachers.

7. RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

1. Scholars in the field of education need to research more on instructional styles which are based on the known learning styles. As used in this study, the instructional styles are auditory-based, visual-based and tactile-based instructional styles.
2. Visual-based instructional style produced pupils with highest academic performance. The features of visual-based include the use of various instructional resources that will enable the learners to see what they are learning. Based on this finding, primary school teachers are enjoined to adopt visual-based instructional style which is also in support of Jean Piaget cognitive development which says primary school pupils are in pre-operational and concrete operations stage. Here the pupils learn better on concrete objects.
3. Primary school teachers are also enjoined to adopt tactile-based instructional strategy. It will also be better if the teachers combine tactile-based and visual-based strategies because these two strategies produced pupils with highest academic performance.

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