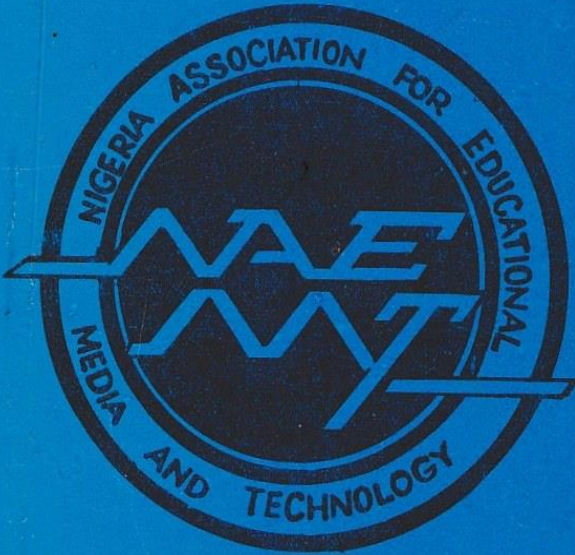


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AN ASSESSMENT OF INSTRUCTIONAL STRATEGIES ADOPTED BY SECONDARY SCHOOL TEACHERS IN NIGERIA.

by

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Abstract

Instructional strategies are plans for teachers to follow in order to realise the stated teaching/learning objective. A good teaching strategy makes the realization of the defined objective very likely, and it is one of the major influencing factors in the type of media a teacher chooses to use. This is an empirical study involving four hundred and thirty four [434] secondary school teachers selected from four Federal Controlled Secondary Schools in Nigeria using both the stratified random and systematic sampling techniques, questionnaire items, interview schedule, observations of teaching session were the instruments for this study. The findings show that there is a close relationship between the subject handled by the teacher under study and the strategies they adopt for use and there is a small class settings. Recommendations on how to use more progressive instructional strategies are given, and tendency for teachers handling large class sizes to adopt instructional strategies that are better handled in small-class-size.

Introduction

“ People can learn without instruction”[Davies, 1981 p. 32].

One may be tempted to ask if learning can go without instruction. What then is the fuse about training and retraining of teachers. Instruction facilitates learning, various teachers adopt diverse strategies, to achieve this goal. The term “ instructional strategy” has been seen in *UNESCO* publication [*IBE* data, 1986] as the overall approach to instruction to be incorporated into the instructional product.

It includes the types of system operation format, stimuli responses, feedback, generalities, instances, difficulties, presentation organization, sequence, scope, size of step and pacing to be used in instructional situation. Thus, it is an all-embracing term taking into consideration in all activities within

In learning environment and Instructional strategies are plans for teachers to follow in order to realise the stated teaching /learning objectives. Instructional strategy is commonly used among Educationists such as (Yorke, 1981; Enswistle, 1981; Davies, 1981; Percival and Ellington, 1988) discussed on teaching methods, teaching method, teaching styles, delivery system, pattern of teaching or instructional techniques. Yorke [1981] identified six main groups of instructional strategies, which he referred to as the pattern of teaching. They are lecture, lesson, demonstration, independent learning, project work and team teaching. Percival and Ellington [1984] also identify instructional strategies under three broad types viz:-

- those strategies associated with mass instruction .
- those associated with group learning and
- those associated with individualized learning .

Similarly, Davies (1981) identified “five principal” methods of instructions.” These are the lecture,

demonstration, discussion, lesson, independent methods. These three scholars acknowledge the fact that there could be more teaching strategies than they have been able to identify. A look at these three groups of examples reveals that they are all interrelated. From Yorke's example a team teaching strategy could be carried out as an independent study. Thus, four examples could emerge from his group of six. Similarly, Percival and Ellington's three broad groups. Hence, Davies' five principal groups appear most embracing in this review and are therefore adopted as the strategies to be investigated in this study.

Selecting an Instructional Strategy:

Davies [1981] observed that some factors do affect the choice of teachers' choice of the strategy he adopts. He maintained that such factors are many, but he listed two major ones as

- The requirements of the task to be mastered. [Tasks that could be mastered on the job, those that require a simulated environment etc.]
- The needs of the student who are to master the task. [Some students may prefer small classes too anxiety-provoking, others may prefer discovery learning etc [Ibid. p.36]

He also acknowledged a teacher's "personal preference" as an influencing factor though he failed to give this factor equal weight with the first two factors.

Entwistle [1981] maintained that choice of an instructional strategy by a teacher is greatly influenced by his view of what the purpose of education is or should be. He identified two conflicting ideologies about the purpose of education thus: -

- Those individuals who see education narrowly as a training which should lead the recipients to some vocational qualifications, Entwistle maintained that the proponents of this view often aim at providing ways of improving the efficiency of teaching methods that emphasize "control and tight structure" on the learning environment. Such control may be by the teacher himself or machines like the recent educational innovations of programmed learning or Computer Assisted Learning (CAL).

Thus, such teachers are likely to adopt "formal or traditional teaching methods" (Entwistle, 1981 p226)

- Other individuals with wider view of the purpose of education, as a design to develop pupils' independence and individuality will adopt the "informal, open or progressive methods of teaching". (Bennett, 1976 and Entwistle 1981).

A look at Davies' five basic instructional strategies and all other examples prove that instructional strategies may be described on continuum from the extreme formal type where the teacher is solely in control, to the extreme informal where the pupils are in control. The differences between these strategies as Yorke (1981) observed, lie mainly in the nature of the interaction between the teacher and the learners.

The Problem

A closer look at our secondary schools will reveal that there is increase in students' population following the introduction of the Universal Primary Education (UPE) Scheme in 1976. The teachers are gradually failing in their effort to realize their stated teaching /learning objectives and there is much wastage due to increasing failure rate at the West African School Certificate Examination (WAEC) (Institute of Education, 1976, Ezeobor, 1983). Hardly does one find students who have five credits in School Certificate Examination at one sitting. These problems call in part, for the use of appropriate teaching strategies and media resources that might put quality into

the mass education provided, and raise the standard of performance in external examinations. These problems presented are implicating to the teaching /learning processes and need to be investigated.

Research Questions

This study will strive to answer the following questions: -

- a. What teaching strategies do secondary school teachers in Nigeria use in their teaching \ Learning processes?
- b. Do factors like class size, learning environment, [availability or non availability of relevant media resources] years of teaching experience, teachers' ideology and subject area handled etc. influence the choice of instructional strategies used?
- c. Is there any relationship between any of the two factors and the teaching strategy adopted for use?

The Survey: Population and Sample

The population for this study consists secondary school teachers. In Nigeria, Four hundred and thirty four [434] secondary school teachers selected from sixteen states and four Federal Government Controlled Colleges. A stratified random sampling technique was used in selecting the required number of cases.

Instrumentation:

Both questionnaire and a checklist/rating schedule were the main instruments adopted for this study. The two instruments were designed in two sections. Section A provided demographical information about the 434 respondent used. Section B was designed using open – ended and rating scales. The instrument was piloted for content and construct validity using twenty teachers who were not part of the study cases. The two instruments aimed at eliciting from the respondents the teaching strategies teachers in secondary schools used in their teaching \ learning sessions and factors for their choice. Four inspectors of Education were also interviewed. The use of these triangular techniques is suitable when a more holistic view of educational outcomes is sought.

Data Analysis: Demographical Information

Four hundred and thirty four secondary school teachers in Nigeria took part in the study. Eight two [82 or 23.9%] of them came from four Federal Government Colleges, while three hundred and fifty two [352 or 81.1%] came from sixteen states controlled schools. Their years of teaching experience range from less than one year to over ten years with 35% of the respondents having taught for more than ten years. These teachers handle a range of secondary school subjects, which had been grouped into science, arts, social science, vocational and technical for ease of computation. The frequency distribution of these teachers by the subjects handled gave this spread;

Science teachers	—	183 or 42.1%
Arts teachers	—	104 or 23.9%
Social science teachers	—	72 or 16.6%
Vocational Technical teachers-		71 Or 16.6%

Majorities of the teachers, 213 respondents representing 49% of the entire sample were holders of the Nigeria Certificate in Education (*NCE*) and 183 respondents or 42% had at least a first degree.

Data Presentation And Discussion:

The researcher decided to start this analysis from the inspectors' views. Instructional strategies adopted by teachers as observed by the inspectors of Education was mainly the lecture methods which they all termed, "just talk and chalk". One of the inspectors observed that the teaching methods used by all the teachers "appear too much the same across all the schools" he oversees. Another inspector blamed "horizontal" deployment of teachers' and lack of relevant media resources in schools for teacher's complete reliance on this teaching method. This inspector stressed that apart from making the staff concerned bored, "frequent repetition of similar content" in all sections of a particular year group could give a teacher the false impression that his students understand and therefore he makes no effort to vary his teaching strategy. Beside, students from the same year group have a habit of comparing notes, thus when variety and novelty is found lacking in their teachers' methods or in the subject content handled, they may lose interest and fail to attend the class regularly. Such monotony can be a strong deterrent to students learning.

Teachers' views of the instructional strategies they used: A questionnaire item including a list eight broad method of teaching was administered to the 434 respondents. This was designed to elicit from them, those methods they adopt and the frequency of their use within a period of one school term. The responses to each listed method were allotted weightings Of 4 — 1. The different categories signifying their frequency of use is seen in Table 1

Table 1: Instructional Strategies And Frequency Of Use
N= 405

Instructional Strategies	Very Often f(%)	Fairly Often f(%)	Not Often f(%)	Not At All Often	EF	Xw
Demonstra (M2)	* ⁽⁴⁾ 236 (57.0)	(3) 138 (33.3)	(2) 36 (8.7)	(1) 4 (0.9)	414	3.46
Lesson method (M4)	214 (54.6)	119 (30.4)	41 (10.5)	18 (4.6)	392	3.34
Discussion/ Debates (M3)	111 (27.8)	193 (48.3)	79 (19.8)	17 (4.3)	400	2.99
Student Independent Learning (M6)	52 (13.1)	163 (41.0)	148 (37.2)	35 (8.8)	398	2.58
Lecture Methods (M1)	114 (28.1)	84 (20.7)	107 (26.4)	100 (24.3)	405	2.45

Instructional Strategies	Very Often f(%)	Fairly Often f(%)	Not Often f(%)	Not At All Often	EF	Xw
Project work (M5)	40 (10.4)	140 (36.6)	155 (40.5)	47 (12.3)	382	2.26
Small group Games (M7)	38 (10.0)	113 (29.8)	136 (35.9)	92 (24.3)	379	2.26
Dramatization (M6)	34 (9.0)	102 (27.0)	128 (33.9)	114 (30.2)	378	2.15

* Scales of weightings 1-4

** Arranged according to the rank order of frequency of use, using Xw value as criteria.

From Table 1 demonstration method is the most frequently used method of teaching. 57% of the teachers claimed they use it very often respectively. The least used method is the dramatization indicated by just 9.0% of the respondents as their most frequently used method.

Instructional strategies adopted by teachers in this study were viewed in relationship with 4 identified subject groups (Science, Arts, Social Science, Vocational and Technical). It was observed that teachers handling the 4 subjects areas basically adopt similar teaching strategies but in varying proportion.

- Lecture method (M2) was adopted by 88.9% of the Social Science teachers.
- Demonstration (M2) though identified by all the teachers as the method they use most often is largely used by the Art teachers. Discussion/debates (M3) and Lesson methods (M4) are similarly used largely by the Art teachers.
- Project work strategy (M5) is adopted by 81.9% of the science teachers.
- Vocational and Technical teachers tend to adopt all the listed teaching strategies without exclusively relying on any of the relationship between the subjects handled by the teachers and the strategies they adopt for use. For instance, it can be noted that discussion/ debates and dramatization strategies lend themselves better to the teaching of subjects that are literary in nature, while project work lends itself to the teaching of subjects that demand a high percentage of learners' involvement, as in practical learning activities. Hence there is a close relationship between the adoption of lecture method by the social science teachers, project work by the science teachers., small groups games and dramatization strategies by the Arts teachers.

It was needful to verify it's class size (No of students in each class could have been an influencing factor in the adoption of these strategies . From the findings, there appeared to be a relationship between class size and the teaching strategies teachers used. Lesson method (M4) is Adopted largely for class of < 20 - 30 students. This teaching strategies encourages, demands and sustains group activity and student participation and is best handled in a class size as small as 20 students or less. However, it might be difficult to use class size to predict the teaching strategies in this study because most of the classes (77.5%) were on the large side while only 22.5% of the teachers handled class sizes that may be considered small. The use of lecture method by teachers

Handling class sizes as small as (20-30) students may be explained in the light of teachers' preference. Davies (1981) that although there are a variety of teaching methods, often teacher find it hard to resist the temptation of over using one particular method. Similar observations were made by Vonk and Schras (1987) when they noted that the traditional methods of classical teaching gave most teachers a certain feeling of security hence some of the teachers have never tried other teaching methods.

To further delineate the specific groups of subject areas which might possibly be handled in various class sizes, subject areas were cross-referenced with the four specified class sizes (See Table 11)

Table 11: Frequency Of Class Size In Each Subject Area
N = 425

CLASS SIZE	SC = 172 f (%)	ARTS = 103 f (%)	SOC/ SD = 72 f (%)	VOC/ TECH = 71 f (%)
20— 30	28(15.6)	18 (17.5)	23 (31.9)	29(40.8) *
31—40	82(45.8)*	34 (33.0)	28(38.9) *	22(30.9)
41—50	55(30.7)	37(35.9)*	16(22.2)	17 (23.9)
50+	14(7.8)	14(13.6)	5(6.9)	3(4.2)
Mean Class Size	\bar{X} =39	\bar{X} =40	\bar{X} = 36	\bar{X} =33

(\bar{X})

$\chi^2 = 28.428$ en adf $P = 0.002$

* indicates most prevalent class size per subject group. From Table 11 it is obvious that four subject areas tended to be held in class sizes that cluster around 31 — 40 students, albeit in varying means of class size. The chi -square value for teachers' responses for these two variables (class size subject area) was significant at $P = 0.002$ level. While it is not rewarding to use class size as a criteria for any prediction since majority of the classes were large , there is however some indication that if the subject handled was Arts or Science, there was a high probability that the class size will be larger than if the subject was social science or Vocational and Technical.

However, during the researchers' observation of the thirteen teaching sessions, the arts classes had an average of 43 pupils, science had 20 pupils in attendance. The most frequently used teaching strategy was the lecture method which was employed by thirteen teachers at various stages of their instructional processes. From the researcher 's observation , there is a marked difference in ranking of the instructional strategies that teachers claimed they use and what they were actually found using in real teaching sessions. The strategies indicated by them gener-

ally were mainly those that call for a **great deal of participation** between teachers and pupils. Methods like demonstration, lesson, discussion / debates and students independent learning were cited as the most frequently adopted strategies, but the methods they actually used were largely expository which focused mainly on the teachers themselves.

Similar findings as the one reported in this study was recorded by Chandra (1987) in a case-study conducted in a Comprehensive school in the U.K. In the findings, the dichotomy between the teaching methods teachers proposed to use in the "ideal world where everything that was needed was available, and what actually used in the" real world" widened from the humanities to the science fields. It is, however, difficult to make any strong conclusion as regards such dichotomy in this study due to the small sample of teaching sessions (13) actually observed. It will be expedient to verify this further in another research using a larger sample size and possibly, noting the instructional stage where specific teaching approach is adopted.

Suitability Of The Teaching Strategies Used

A pattern of instructional strategies used by teachers in this study is a tendency for teachers handling large class sizes of 31 –50 or more to adopt instructional strategies that are better handled in small class settings. Secondly, the use of demonstration strategies by 410 or 94.5% of the entire teachers, irrespective of the size of class in an indication of the teachers' desires concretize learning in their students. However, demonstration method with a class as large as 30 –50 students may be considered unsuitable for all learners. In analysing appropriate class size for various teaching strategies, Davies (1981) maintained that a demonstration strategy is best handled in a class size of 3 –10 students. In this study, the smallest class setting was a class of 20 students. Similarly, discussion / debates strategies which 88.6% of the teachers within various class size claimed to use should ideally be used within a class setting of 3 –7 students (Davies, 1981 p. 118). The prioritized use of project work by 81.9% of the science teachers was quite significant in this study in view of the fact that science teaching involves a lot laboratory learning activities. Thus from the inspectors' view point and from the researcher's observation, the level of suitability of the various instructional strategies adopted by the thirteen teachers is only fair.

Rational For The Strategies Used

"Constraint of time" was given prominence and class size handled is the least considered factor. Some of the teachers interviewed admitted that the requirements of the national examination body (The West African Examination Council) and the university admission body. The Joint Admission and Matriculation Board, (*JAMB*) obviously have put some pressure on the teaching strategies they used. Similar observation was made by Ogunbi (1986) when he indicated that *NETC* resources were not used by teachers because they were not regarded as essential to the completion of the examination oriented syllabuses (1986, p. 180). These findings are contrary to what Davies (1981) proposed while analysing the factors that affect choice of instructional method. He suggested that to select an appropriate instructional method, teachers should consider the "two most important factors" like:

- (a) the requirements of the task to be mastered;
- (b) the needs of the students who are to master the task.

(Ibid. p. 36)

Implication Of Findings On Media Utilization

Teachers in the present study have all tended to seize on familiar teaching strategies that

increase their efficiency in managing students in large groups (though they tend not to acknowledge the influence of class size on their chosen strategies. This is probably because these teachers have never managed smaller classes hence, they tend to accept a class size of 31 –50+ as a norm) . They have neither the time nor expertise to use less formal teaching strategies that could allow them to monitor individual learners' work. The implication of this finding on media utilization is that the inadequate provision of media resources in all schools will not be seen as a problem. Teachers may feel what they are operating is the norm, and the few teachers who would want to explore their environment for media resources to use may be greatly discouraged.

conclusion

This study has revealed that most teachers in this sample see education narrowly as a training which should lead the recipients to some vocational qualification . Hence , they adopt instructional strategies that emphasize control and tight structure on the learning environment. Plus the fact that our learning environment is not richly planned. On the contrary it is mainly the use of informal and progressive teaching strategies that will develop in our learners high order skills required for creative / discovery learning . Without which Nigeria students will not be able to face the challenges of the 21st century . Head teacher should therefore desist from horizontal deployment .Teachers should be vertically deployed so that they may face new challenges which will make them explore their environment for media resources to enrich their teaching.

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