A Perspective on the Use of Relevant Instructional Materials for the Teaching of the Subject Viz Response of Professional vs. Non-Professional Teachers

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***Abstract*– It's been entrenched that the use of instructional materials of diverse forms enhances the effective teaching of Physics and foster sound comprehension of the subject by students. The response of professional and non-professional teachers on the use of instructional materials is sought here as well as students based on a random pool conducted in Ile-Ife, Nigeria. The investigation indicate 13 teachers had professional qualification comprising holders of B.Sc Ed (5%), three (16.9%) having PGDE and one NCE (5.5%), 5 (27.8%) had non-professional qualifications (B.sc) of the 18 teachers interviewed. It would be deduced that majority of the teacher respondents are professionally qualified and inherently had training in the use of instructional materials in disseminating the subject. Further more, the investigation revealed that all the teachers regard the use of instructional materials as requisite to the teaching of the subjects as ten teachers (85.6%) regard instructional materials as ''very essential'', while eight teachers (44.4%) regard it as merely ''essential''. This trend indicate that for teaching of Physics some teachers may not be worried ; neither would they see it as a faux pass, if they are teaching the subject without the use of appropriate instructional materials.**

***Keywords*– Instructional Materials, Non-Professional and Professional Teachers, Physics Teaching and Real Objects**

I. INTRODUCTION

The study involved the response of professional and non-professional teachers on the use of instructional materials towards effective teaching of Physics and also students' response to facilitate effective learning.

Undoubtedly, the use of instructional materials would make the teaching and learning of physics exhilarating. It could be deduced that Physics classes where instructional materials are rarely or not used at all is bound to produce, ill-equipped and faulty Physics students.

The utmost aim of every teacher is to impact knowledge where the aspiration of every student is to learn as much as possible from the learning-teaching process. The best way by which pupils could be assisted is to make the learning-teaching process a pleasurable activity through the use of appropriate instructional materials (Adeboyeje and Afolabi; 1991:38).

In the teaching-learning process, three basic elements-the teacher, learner and subject matter- must be involved and for the subject matter taught by the teacher to be easily understood by the students, the creative use of instructional materials enhance learning and makes what has been taught easy to assimilate and recall. Instructional material is expected to be able to stimulate students interest, make learning real, help secure easier, faster and better if properly and appropriately used (Akinmoyewa, 1971: 15).

As stated earlier, the current study emphasized the view of professional and non-professional teachers and also students on the use of relevant instructional materials towards effective teaching of Physics to facilitate learning and understanding. Instructional material has been defined as persons, materials or events that establish conditions, which enable the learner to acquire knowledge, skills, and attitude (Gerlach and Ely, 1971:98). It ranges from the teacher also is a loving object to smaller inanimate objects such as chalkboards, wall charts, slip charts, film strips, slides, television, motion picture, models, maps, globes, text books and the lots. Interestingly, instructional materials present the same information at any time and any location, unless it has been distorted. Instructional material is expected to be able to stimulate students' interests, make lessons real, help secure attention of students and make learning easier, faster if properly and appropriately used (Akinmoyewa, J.O. 1997:15).

Instructional materials are of immense educational roles to the teacher in his bid to achieve the desired instructional objectives. Some of the benefits are that instructional materials lead to increase pupils' attention, verbal messages can be reinforced through the use of instructional materials; they promote greater acquisition of longer retention of factual knowledge, etc (Adeboyeje and Afolabi, 1991:40). A broad range of instructional materials have been listed in our previous discussion (Amodu et al, 2014), among animate and inanimate objects. Apparently, therefore all subjects learnt by students in schools including Physics should be taught with

the aid of instructional materials, if students are to gain maximally from such teaching.

II. RESULTS & DISCUSSION

Physics as a subject taught in secondary schools hold a strategic important position in the educational life of secondary school students in Nigeria as a credit minimum pass level is a crucial requisite condition for admission to Science and Technology courses in tertiary institutions in the country. Thus, Physics teaching is backed up with practical in the laboratory so as to enable students acquire knowledge and skills. In fact, Physics is a medium of technical learning. Thus, it would be required and a lot of resources, financially and infrastructurally, would be devoted to the teaching of physics and hence it would be a subject embraced by all students.

Table 1: Comparison of the response of Professional and non-Professional Teachers on the Importance of the use of Instructional Materials

Qualification	Very essential	Frequency	Essential Frequency	%		Total
B.Sc Ed	6	66.7	3	37.3	9	100.0
B.Sc	3	60.0	2		5	10.0
PGDE	2	66.7	1		3	10.0
NCE	-	-	1		1	10.0
Total	11	61.1	7	38.9	18	100

The above Table 1 indicates that 3 out of 11 teachers regard the use of instructional materials as very essential to teaching Physics, six teachers (6) has B.Sc.Ed (66.7%) and two (2) had PGDE (60.0%), and three (3) has B.Sc (66.7%). Of the seven (7) teachers that say it is essential three (33.3%) has B.Sc. However, it is pertinent from the above information to note that professional teachers appreciate more the importance of the use of instructional materials and better informed on their relevance to the effective teaching of Physics.

This implies that some teachers may not be worried; neither would they see it as faux pas, if they are teaching the subject without the use of appropriate instructional materials. The implication and likely hood of this trend for teaching of Physics is that the Physics class taught without the use of instructional materials–thus orally –based will end up boring boredom and the student may end up finding the subject un - comprehensible. Since majority of the teachers consider the use of instructional materials as essential to the teaching of the subject, one would expect that a lot of teachers would use different types of instructional materials to teach so as to enhance effective dissemination of the subjects and to ensure students find these subjects exhilarating. However, the low level of performance of students in Physics widely observed in secondary schools, especially public high schools indicate the dearth and low use of instructional materials. Despite teachers are aware of the essence of various and appropriate instructional materials to the teaching of Physics, they have not sufficiently reflected it in practical terms in the class which would then show in students performance.

Table 2: Students' response on the use of instructional material for better understanding of Physics

Response	Frequency	Percentage (%)
Yes	7	11.3
No	53	88.3
Total	60	100.0

Table 2 revealed that majority of the students regard the use of instructional materials as an aid to better understanding. Fifty three (88.3%) responded that Physics cannot be well understood better without the use of instructional materials. Only seven students (11.7%) responded that physics can be understood better without the use of instructional materials. By implication, it means that students are also aware of the tremendous importance of the use of instructional materials for teaching them Physics more effectively. In fact, they showed their appreciation through their response in class when varied, interesting materials are used when teaching those subjects.

III. CONCLUSION

It is quite evident from the investigation that students are also aware of the benefits of the use of relevant instructional materials for teaching of physics. The response of professional and non-professional teachers on the use of instructional materials is sought here. The investigation indicate 13 teachers had professional qualification comprising holders of B.Sc Ed (5%), three (16.9%) having PGDE and one NCE (5.5%), 5 (27.8%) had non-professional qualifications (B.sc) of the 18 teachers interviewed.

REFERENCES

[1]. Adeboyeje R.A and Afolabi F.O. Classroom Management Ondo: J.A Ife Ohewa Ent. Nig. Ltd, 1991.

[2]. Akinmoyewa J.O. Educational Teaching Onitsha: Lincel Publlishers, 1997.

[3]. Amodu F.R and Adewole O.O. Towards Effective Teaching of Physics through the use of Relevant Instructional Materials. IJMSE, 2014.

[4]. Gelachi V.S, Ely D.P. Teaching and Media: A Systematic Approach. New Jersey: Prentice Hall Inc., 1971.