Instructional Materials as a Tool for Effective Delivery of Educational Objectives in Nigeria

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Abstract

The influence of instructional materials in promoting student's academic performance and realization of teaching and learning objectives of education is indisputable. Instructional materials are crucial to teaching and learning processes, dedicated classroom teacher/facilitator at all levels of education feels satisfied when he realizes the objectives he has set out to achieve for every lesson. However, before a trained teacher could achieve objectives of a lesson, he employs a number of methods, design and actions, one of which includes the use of instructional materials, also the quality and appropriateness of instructional materials will always determine successful lesson delivery from the teacher/ facilitator to the students/learners. The types of instructional materials to be used for successful lesson delivery are syllabi modules and manuals, reference books, charts and maps, newspapers, journals, laboratory apparatus, prototypes, Braille machines, writing board and so on. Teachers, lecturers, facilitators and instructors should always march each step of lesson presentation with the appropriate instructional materials for effective and efficient lesson delivery.

Introduction

The influence of instructional materials in promoting student's academic performance and realization of teaching and learning objectives in educational development is indisputable. The instructional materials used by teachers / lecturers to teach and drive home their course points In their various levels of teaching are incontrovertibly a paramount issue in successful transfer of knowledge from the teacher to the students.

Instructional materials are crucial to teaching and learning processes. A dedicated classroom teacher feels satisfied when he realizes the objectives he has set out to achieve for every lesson. In order, to achieve this, a trained teacher employs a number of methods, design and actions one of which includes the use instructional materials. Instructional materials are referred to as the resources which both the teachers and students use for the purpose of effective teaching and learning at all levels of educational system ranging from primary schools, secondary schools and tertiary institutions in Nigeria. Okebukola (2003) described instructional materials as information multipliers because they are capable of providing learners with opportunities to learn beyond teachers capabilities when utilized for instruction. Utilization of instructional materials is the act of using and applying the available instructional materials in the actual teaching/learning process. There are various concepts of instructional materials over the years, instructional materials have been changing names. It has been referred to as teaching aids, instructional or educational facilities, learning resources, and curriculum materials according to Ogwo and Oranu (2006), can be defined as any devices employ by teachers/lecturers to transmit facts, facilitate skills/knowledge acquisition and improve understanding of learners or students. According to them, instructional materials include entirely of what is known as a models, objects, drawings, graphs and charts, pictures, films and specimens. It is clearly defined by Ogwo and Oranu that instructional materials are been used in both theory and practical aspects of learning process that is, both cognitive and psychomotor objectives of learning in order to achieve the set goals of teaching and learning objectives. However, for effective delivery of educational objectives in Nigeria, Instructional materials are to be fully employed in order to make learning more concrete and examplary at all levels of our educational bys term to bring about functional educational process, the use of instructional materials cannot be over emphasized. They are paramount to teaching and learning more especially in modern times, when there is increase in the numbers of students in classrooms. It is against this back ground that this paper focuses on Instructional materials as tool for effective delivery of educational objectives in Nigeria.

Adequacy of Instructional Materials

The primary purpose of teaching and learning process is to bring a significant change in behaviour through active participation and critical thinking of the learner.

This cannot take place without the availability of instructional materials (Afework and Asfaw, (2014).

Adedeji, Adelua and Oladejo (2011) referred instructional materials as objects or devices, which help the teacher to make a lesson much clearer to the learner. Instructional materials are also described as concrete or physical objects which provides sound, visual or both to the sense organs during teaching. (Wiggins, 1998) cited in (Afework and Asfaw, 2014). Instructional materials are very important in the whole process of teaching and learning to any subject. They make learning more pleasant to the students because they offer a reality of experience, which stimulate self-activity and imagination on the part of the students. They also supply concrete basis for conceptual thinking and hence reduce meaningless word response from the student (Nyamubi, 2003). Likewise Campbell (1999) agreed that, instructional materials enhance the teaching/learning process by exhibiting information necessary to acquire knowledge and skills. One can deduce that instructional materials display the relevant information to bring about acquiring authentic knowledge and skills.

Tanzania Institute of Education (TIE) (2007) outlined that, apart from teachers, instructional materials are the most important resources needed at classroom level. If the curriculum is to succeed or if the teaching and learning is to be successful, the preparation and production of instruction materials must be handled with utmost care. In this study the realization of

teaching and learning objectives or goals at distance learning level, the instructional materials are to play a very vital role for such programme so succeed. It is expected that quality instructional materials shall:

- Correspond to the curriculum and syllable
- Be piloted or tried out in pilot schools
- Promote competence intended for the learners
- Be enough and adequate, interesting and learners with special needs
- Stimulate the learners' cognitive, affective and psychomotor domains during teaching and learning
- Address requirement of learners with special needs including the learning and the visually impaired and physical handicapped.

There are basically two types of teaching/learning materials namely:

Textual and non-textual. Textual materials include printed materials such as textbooks; syllabi modules and manuals, reference books, charts and maps, newspapers, journals and encyclopedias, texts in Braile, posters, fliers, photographs, booklets and brochures.' On the other hand, non-textual materials include laboratory apparatus, prototypes, Braille machines, writing boards, weather station and sample of actual materials, ICT resources such as computers, internet connectivity, photocopying machines, printers and scanners (United Republic of Tanzania, 2013).

The textual materials which are mostly printed materials can be used to bring about learning spellings, fluency reading, describing critical concept, reading maps, finding out meaning of new words and showing the pictures or photographs of our past heroes and heroines and so on. The non-textual materials which are electronic gadgets can enhance teaching and learning when the instructor/teacher uses motion pictures and sound to back his/her explanation and with this, the students/learners will retain such for a long time in their memory and quickly retrieved when necessary. Likewise, Kapoli (2001) noted that

authentic materials enable the students to explore the language used in day-to-day life and which is tailored to their needs and interest.

Muthamia (2009) opined that, teachers can only be effective and productive in their work if they have adequate and relevant instructional materials. Likoko, Bakari and Ndinyo (2013) reiterated that, for effective teaching and learning, textbook and other instructional materials are basic tools, in absence or inadequacy makes teachers handle subjects in an abstract manner, portraying it as dry and non-exciting.

Adeogun (2010) discovered a very strong significant relationship between instructional materials and academic performance. According to Adeogun, schools endowed with more instructional materials performed better than schools that are less endowed. Adeogun (2010) also express that, effective teaching cannot take place within the classroom if basic instructional materials are not present.

Impact of Instructional Materials in Teaching and Learning

An instructional material is an aid to teaching and learning. It helps to raise learning from verbalization to practical aspect of teaching and learning. Instructional materials make teaching and learning interesting, easy and amusing. It makes learning more effective. Instructional materials make students understand concept of subject or course easily when the teacher/lecturer makes use of working model. It makes the teacher task easier and more effective. Olaide, (1990) highlighted the impact of instructional materials that teachers use to improve the student understanding and perception of the subject or course. It brings clarity and creates recognition that allows them to have realistic hand and total knowledge of the student. It enhanced learning, improve that competence of the learners and makes learning more meaningful to the students.

Kay (2008) instructional materials stimulate the students desire to learn, it assist learning process by making assimilation and memorization of materials easy. Also it helps to hold attention of the students. Finally instructional materials makes

learning available to a wider audience, control the pace of learning, promote better understanding of subjects/course concept and helps to overcome difficulties in presenting lesson of all kinds. From the above assertions, in my own opinion, instructional materials serve as a tool that brings about easy lesson delivery from the teachers/lecturers to the students/learners.

For instance, newspaper as a textual material can be used to enhance writing skills that is, on how to make use of punctuation marks for correct spelling of words and also improve on the knowledge of current affairs, equally, manuals can be used to learn on how to operate electronic gadgets, steps on how to use farming implements and usage of chemicals on the farm.

On the other hand, non-textual materials such as computers and internet connectivity can be used to learn operational skills and also search information at global level.

Classification of Instructional Materials

Instructional materials or resources are available from many sources. Modern education faces lots of problems. The attempts at solving these problems which involves the use of organized combination utilization of people, materials facilitate equipment and procedures to achieve the desired instructional materials, instructional media and educational media virtually mean the same thing. They all involve media materials derived from communication revolution, which can be used to promote teaching learning process. According to Agy Okogbuo (2000) instructional materials could be classified into:

- 1. Visual materials- such as picture, diagrams, buildings, projectors, teachers themselves (s) chart, real objects (realia) studies etc. these materials such as books, newspapers, journals, magazines, pamphlets, handout or NTI modules were also involved.
- 2. Audio materials- such as tape recording cassette, cartridge, radio, dice, teleture, teleconferencing, language laboratories teachers' voice. They appeal to the sense of hearing.
- 3. Audio-visual materials which include the television, video

- recording, motion pictures with sound tracks, slide and films trips projection with sound tapes, films and multimedia. They appeal to both sense of hearing and sight.
- 4. Materials/software includes graphic materials, printed materials, slide, filmstrips, overhead transparency, tapes cassettes, and motion picture.
- 5. Equipment/hardware: examples include: black boards, tape recorders, projectors and video recorders, they are used in presenting materials statics or display such as chalk board, flannel graph, flip chart, magnetic board are also used in presenting materials or lectures.
- 6. Electronics: this comprises of radio, computer, e-mail, and multimedia. This teaching material makes teaching and learning process more easy and concrete.
- 7. Non-projected media include books and other printed materials, objects, specimens. Models mock-up graphical materials bulletin boards that exhibits black boards, buildings, field trips simulation and games.
- 8. Two-dimensional instruction materials include flat pictures graphs, charts, diagrams posters, conics, cartoons, slides, films, trips and films. They are also non-projected materials with characteristics of being flat and light and may be either in opaque or transparent form. They have length but no height, hence they are 2 dimensional aids.
- 9. Three dimensional institutional materials include: model, mock-up objects, specimens, laboratories, simulation and games. They are non-projected materials. Characteristically, they have length, breath, height, hence they are called 3 dimensional.

Making Wise Use of Instructional Materials

When selecting instruction materials for your own particular class, consideration be given to the following factors:

1. Accomplishment objectives: when selecting instructional materials for your particular class, the objective of the lesson should be considered. Different objective will require different instructional materials for instance Benjamin

Bloom Taxonomy consider three main categories of objective namely:

- i. Cognitive objective can be realized by all instructional materials.
- ii. Affective objective are best realized by Audio aids, pictures. Television simulators and language laboratories.
- iii. Psychomotor objective are best realized by Audio aids, models, simulators and field trips.
- The nature of the topic: It is always the case that case that certain subject matter or topics calls for a specific kind of instructional materials. Such factors like familiarity of the topic and scope will guide the teacher in selection of instructional materials.
- 3. The nature of the learner: The teacher selecting appropriate instructional materials for his own particular class must consider the group characteristics of learners some instructional materials are made suit for large group or individual learning as such, teachers should conceder the visibility, clarity and the accompanied sound for effective teaching and learning.
- 4. Technical component: instructional materials vary from place to place and how well they can fit into a lesson. Here a teacher will select the best quality durable and ease of use. It is necessary for the teacher to bear in mind that only comfortable and flexible materials can be applied to teaching and learning process.
- 5 Economic condition of a country or school could be a hindrance to purchase the most needed instructional materials. Where a school finds it difficult to buy readymade instructional media, they can resort to improvisation using the local available resources within their surroundings. It is very necessary that teachers consider their financial position before taking any decision to acquire instructional materials.
- 6 Availability of teaching resources: Resources are many and are very essential for the development of any lesson. The scope of resources depends on the nature of the subject or

topic being planned. It is the duty of the teacher to use his wealth of experience to select the readily available instructional materials. Where ready-made materials are not available may resort to improvisation of local teachings aids.

Goals and Objectives of Instructional Materials in Teaching Instructional materials in teaching, regardless of the type of teaching serve multi-purposes:

- 1. Long-lasting Resource: provide a long-lasting reference that students can take away from the training session and refer back to on an –needed basis.
- 2. Provide Lesson Context: help provide users to context around the lesson steps and help pull the content all together.
- 3. Offers Alternative Instruction: it offers an alternative to the classroom or even online instruction that is they can walk away with a physical resource.

Conclusion

Instructional materials cannot be used anyhow. A wise teacher/lecturer applies them when appropriate to achieve his lesson objectives. He should know when, how and where to use teaching materials. Wrong timing of teaching aid make a good lesson useless and right timing promote understanding of the lesson in little time.

In other words, preparation and readiness and visualizing the relevant of instructional materials before the lesson proper will help the teacher to have easier and smooth delivery of his lesson, it will also arouse the mind and attention of the students/ pupils towards the expectation of the learning and the teacher. Above all, quality and appropriate instructional materials will always make the teacher, facilitator and instructor at all level of learning to be above board during presentation of his lessons.

Recommendations

- 1. A teacher/lecturer should always march each step of lesson presentation with the appropriate instructional materials.
- 2. Teachers at all levels of education should prepare and

- assemble all the needed instructional material before commencement of lesson.
- 3. Teacher should always organize the classroom to suit the usage of instructional materials.
- 4. Teachers should present the materials in the best form to achieve lesson objectives.
- 5. Government at all levels should assist schools in making provision for instructional materials that will help in implementation of educational objectives in Nigeria.

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