



Strategies for Selection of Instructional Media in Classroom Instruction

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ABSTRACT

Instructional media are objects or devices that assist the teacher to present a lesson to the learner in a logical manner. They are tools or instruments through which stimuli could be sent or received. Based on this background, the paper examines the concepts of media, instructional media. The paper equally examine strategies for selection of instructional media, furthermore, the paper also review the guidelines for using instructional media as well as why using instructional media in teaching and learning. Finally, the paper also looked at the constraint to effective use of instructional media and the role of instructional media on teaching and learning. The paper recommended that teachers should use instructional media because it will help the learner to grasp complex concepts that they could not have comprehended through explanation alone, teachers should employ the use of instructional media because it will bring the real world into the classroom for students to explore and solve.

Key words: media, instructional media, strategies, selection and instruction.

Introduction

The uses of instructional media started somewhere from the Stone Age period (World Encyclopedia, 2001). The Egyptians for example used hieroglyphics for visual communication of ideas. With such inscriptions, the elders used them as symbols to teach their children how to kill animals accurately during their hunting and farming. Also through initiation rites, storytelling, and festivals the young were given some form of training and instruction. Various studies have examined the relevance of Instructional Media for effective teaching and learning. Fidanboyly (2014) noted that the use of visual aids in teaching can motivate the students and reinforce the subject content. According to Makewa, Role and Ngussa (2012) media resources are important when it comes to instruction. They also argue that instructional resources are vital to the teaching of any subject.

Seth (2009) indicates that lack of wall charts, models and other conventional media to compliment the use of chalkboards and textbooks in the schools increased difficult for teachers to offer quality teaching and learning to promote high academic performance. Instructional media play obvious and increasingly important roles in education in improving instructional programmes or in implementing various innovative projects. Teachers at all levels of education are encouraged to apply instructional media in enriching the teaching learning process. There are, available today, a wide variety of instructional media that are capable of making the teaching – learning activities in the classroom more effective and productive. Instructional media is an objects or device that assists the teacher to present a lesson to the learners in a logical manner (Ikerionwu, 2000). They are tools or instruments through which stimuli can be sent or received. In the instructional setting, they are the carriers of information in the teaching – learning process. They are the electromechanical devices which act as middle conditions between students and what is to be learn. An instructional medium is a means of transmitting instruction. It serves as the channel of instruction. What passes through the channel is the substance of instruction. They can be used to record, store, preserve and transmit or retrieve information. Instructional media are self supporting devices which can be used to present a complete body of information in the teaching learning process. According to the preceding concept, instructional media would make discovered facts glued firmly to the memory of students.

Therefore, the thrust of this paper is based on the subheadings indicated below.

- ❖ Concept of Media
- ❖ Concept of instructional media
- ❖ Strategies for Selection of Instructional Media
- ❖ Guidelines for Using Instructional Media
- ❖ Why Use instructional Media in Teaching and Learning
- ❖ Constraints to the Effective Use of Instructional Media
- ❖ Roles of Instructional Media in Teaching and Learning

- ❖ Conclusion and Recommendation
- ❖ Reference

Concept of Media

Media is a means of communication and a source of information. It refers to anything that carries an information between source and receiver. Ojogan (2019) presents media as any person, material or event that establishes conditions which enables the learner to acquire knowledge, skills and attitudes. Ojogan (2022) described media as a channel of communications that carry messages and the means by which information can be delivered to learners. In essence, media is any medium or outlet that can be used to store spread and retrieve information.

Concept of Instructional Media

Muvango, Indoshi, & Okwara (2019), present instructional media as one of the factors that influence the success of teachers to deliver material and make it easier for students to master the material taught. Agina-Obu (2005) cited in Abdu-Raheem and Bilqees Olayinka (2016) submitted that instructional media of all kinds appeal to the sense organs during teaching and learning. Isola (2010) declared instructional media as objects or devices that assist the teachers to present their lessons logically and sequentially to the learners. Oluwagbohunmi and Abdu-Raheem (2014) acknowledged that instructional media are such used by teachers to aid explanations and make learning of subject matter understandable to students during teaching learning process. According to Opoku-Asare (2004), described Instructional media as a devices and materials employed in teaching and learning. It includes hardware like blackboards, radio, television, tape-recorders, video tapes and projectors, and software like transparencies, films, slides, teacher-made diagrams, real objects, cartoons, models, maps and photographs. Scanlan (2003) states that instructional media includes all the materials and physical means an instructor might use to implement instruction and facilitate students' achievement instructional objectives. This may include traditional materials such as chalkboards, handouts, charts, slides, overheads, real objects, videotapes or films as well as modern materials and methods such as computers, DVD's, CD-ROM's, the internet and interactive video-conferencing. In much the same way, Nyame-Kwarteng (2006) declared instructional media as various materials that appeal to the five senses seeing, hearing, touching, feeling and tasting which enhance teaching and learning. They affect different senses and act as an integral part of the teaching and learning process and also help to bring about meaningful experiences. Igu, Ogba, and Igwe (2014) stated that the use of instructional media make teaching effective as it enables learners to participate actively in classroom. From the above definition, it is concluded that media is both tool used for teaching and avenue for learning.

Criteria for Selecting Instructional Media

Most teachers believe that the mere application of media in the teaching-learning process would enhance media learning. This is not true. The effectiveness of instructional media depends very largely on proper selection and utilization. The following factors, therefore, must be considered and should form the basis for selecting instructional media for classroom use.

- ❖ **Instructional Objectives:** The objectives of the lesson will help the teacher in making appropriate choices with respect to broken down into their constituent levels. They should be classified into cognitive, psychomotor or affective. The type of objectives, what the students are to know, how they are to behave and the level of accomplishment they are to achieve with all influence the type of media that is selected.
- ❖ **Learners' Characteristics:** The characteristics of the learners should be analyzed before choosing the media to use. The learner characteristics to be identified include age, level, socio-economic background, learning styles, interest and familiarity with the media proposed for use. These learner characteristics will help to determine the media that will be most appropriate for achieving the objectives of instruction.
- ❖ **Content:** The content of the media to be selected must be such that is adequate in achieving the set objectives of instruction. The content must also be up to date, relevant to and related to the experiences of the learners. The content should be within their level of understanding.
- ❖ **Nature of Instructional Mode and Duration of the Lesson:** The instructional method, the teacher intends to use, the size of the group and the type of interaction stimuli needed would determine the media the teacher will select. For example, projection media can be profitably used in both large and small group classes, but media like chalkboard, charts and the group, classes, but media like chalkboard, charts and the bulletin board can be used most effectively with small groups. Also the amount of time available will also determine the type of media selected for use by the teacher.
- ❖ **Availability:** Although, all the factors discussed so far are important, it stands to reason that the teacher will only use what is available. The teacher will definitely select from the array of media that are available to him. The question to ask at this point is if the material is not available in your school, can it be borrowed from a nearby source of easily improvised.
- ❖ **Teacher's Capability:** Teachers should select only those material that they know how to operate. Where manuals and guides are available, they could be used. But a teacher should not go to class with a medium that he cannot operate, in order to avoid embarrassment.
- ❖ **Cost:** The financial implications must be considered before any medium is finally chosen. The cost of the different media must be considered. The emphasis should be on the instructional value in relation to the cost of using the material. Media materials should be considered in terms

of their educational returns in relation to their cost. The teacher should consider whether less expensive to less complex materials could possibly produce similar or better learning output.

- ❖ **Technical Physical Qualities:** The technical qualities to be considered by the teacher includes simplicity, work ability, tone, fidelity and durability. The physical qualities include attractiveness, ease of handling, accuracy and authenticity. The teacher must consider these qualities in the process of selecting media material.
- ❖ **Infrastructural Facilities:** The teacher must always consider what facilities are required to use the various media under consideration. He should relate the requirements to the facilities available in his school. Facilities that might be required for media utilization include electricity, projection points, room darkening curtains etc. Where the necessary facilities are not available the teacher should select alternative materials.
- ❖ **Support Staff:** The teacher must consider the availability of support staff like projectionists, maintenance technicians and even secretariat staff, before selecting any medium.
- ❖ **The Socio-Cultural Setting:** The teacher must take the socio-cultural setting of the school and the learners into consideration in selecting instructional media. Socio-cultural factors are powerful indicators as to the suitability and acceptability of any particular medium in any given setting. Even the content of any material should be judged along cultural lines. For instance, if a teacher is not careful, he might select a medium which contains content and messages that might be offensive to the cultural sensibility of his learners (Igwebuikwe and Ojogan, 2015).

Guidelines for Using Instructional Media

The teacher therefore should consider the following fundamental steps in the process of using any instructional media in the class.

- ❖ **Prepare Yourself:** The teacher should select the material with emphasis on the relevance of the content to meet the set objectives. He should familiarize himself with the material. He should decide when and how the materials should be presented in class. With the result of the preview of the materials, the teacher can plan the questions and activities likely to grow out of a class application.
- ❖ **Prepare the Materials:** All the materials to be used should be brought out and arranged in their proper position in the class. The materials should be tested to make sure they are in working condition. These steps would reduce any delay that would have occurred, if the teacher has to use the class period to load projectors or to arrange sequence of pictures. Such delays could lead to impatience in the students as well as affecting their level of concentration.
- ❖ **Prepare the Environment:** The teacher should darken the room if projected materials are to be used. If audio materials are to be used, the room should be free of distraction as much as possible. He should make sure that the plugs, sockets, hangers and other accessories required to use the materials are in place.
- ❖ **Prepare the Class:** Instructional media contribute little to students learning, when they are used without giving the students background information and highlighting the vital issues that they will come across in the presentation. The teacher should discuss what is already known about the subject matter and lead into what might be expected from its showing. He should develop a list of questions which may be answered at least partially by the media being used. The students should be informed of the objectives of using the particular instructional media and what they are expected to learn from it. They should also be told what they are expected to do while using the material.
- ❖ **Using the Material:** All materials should be presented in a sequential order, from the ones that are familiar to none familiar ones. The materials can come at the beginning or middle of the lesson, depending on the objectives for using them. The presentation of materials should be followed by explanation comments or demonstrations. Students must actively participate by asking questions through involvement in discussions and taking notes. For non projected materials like pictures, they should be displayed in such a way that all the students can see the details of the pictures. They should not be left for too long on display especially when they focus of discussion has changed.
- ❖ **Activities after Using the Materials:** Review the content with the students after presentation through discussion and/or evaluation. The discussion should centre on the original questions or main points set up before the materials were introduced. As students rethink and talk over the content of the material, the teacher is able to detect any misunderstanding. Other follow-up activities may include the following:
 - i. **Make** students practice the skill taught. The class may be divided into smaller practice groups. The teacher can move from group to group to assist with any special problems which may arise.
 - ii. **Assign** additional reading text to the students to study in order to acquire more information about content of the materials use.
 - iii. **Ask** the students either as individuals or groups to write term papers or projects on a topic arising from the content presented in the material (Igwebuikwe and Ojogan, 2015).

Why Use instructional media in teaching and learning

According to Ojogan (2019), when I hear, I forget, when I see, I remember, when I do, I understand. The above Chinese proverb shows the influence of the senses in the learning process. The five senses of hearing, Sight, touch, taste and smell are human's gateway to the world. They are the means that

humans use to obtain information, gain new understanding and interact with the objects and people around them. Unfortunately, most of our teaching is only targeted at the auditory sense, even though hearing is the only one of the five senses of learning. This is where instructional media comes in. Agina-Obu (2005), Submitted that instructional media of all kind appeal to the sense organs during teaching and learning situation. Learning takes place when the mind is able to put together information from all the senses and make a connection with the past learning. Using sense organ to gain information helps learning to be meaningful and understandable. Instructional media can display information through sound, image, movement and colours either naturally or manipulated thus helping teachers to create a learning atmosphere that is real, lively and not tedious. Learners interact directly with the object of learning.

Instructional media can be used in almost any discipline to enhance learning. People learn abstract, new and novel concepts more easily when they are presented using instructional media as a vehicle. Instructional media increases understanding of learning content and enhances the comprehension of the learners. The common objective of instructional median is grasping attention, creating interest and supporting learning. It also helps to turn learning into an enjoyable experience.

Specifically, instructional media plays the following roles in enhancing learning.

- ❖ It contributes to learning and learners participation as it exposes them to the real world of learning as well as building understanding and retention, because when things are seen or felt, they are ore remembered than when they are simply heard (Wambusi, 2013).
- ❖ According to Ojogan (2006a), instructional media makes learned facts glue firmly in the memory of learners and also motivate them to enjoy participating in lessons and motivate them to repeat the activity during their free time.
- ❖ It helps learners to grasp complex concepts that they could not have comprehended through explanation alone.
- ❖ It helps to bring the real world into the classroom for students to explore and solve. In other words, it provides authentic learning experiences.
- ❖ It fosters positive attitude in students towards learning. The learning process becomes more attractive and encourages self-learning (Ojogan, 2006b).
- ❖ Instructional media provides the experiences that leads to deep learning. It does this by allowing the students to learn collaboratively and to articulate their knowledge both visually and verbally.
- ❖ It enables teachers to create dynamic, digital and hands-on learning experience that is tailored, flexible and relevant for our school graduates to power the economy (Frezzo, 2017).
- They provide opportunity for easy recall of what is learned.
- They help to reduce abstract information into concrete evidence.
- They make learning more permanent by ensuring better retention.
- They help to cater for individual differences in learners thereby creating equal opportunities for all.
- They motivate the learner to want to learn more.
- They help to save time as too much verbalism is reduce (Amadi, 2006).
- They are the tools or instruments through which stimuli can be sent or retrieved.
- The classroom teacher used educational media to concretize a concept during his teaching.
- They mediate between a message and the receiver of the message.
- They are materials that can be used to recall, store, preserve and transmit or retrieve information (Imonivwerha, Ezemeyor and Igwebuik, 2015).
- They are carriers of information in the teaching – learning process.
- ❖ They are the electromechanical devices which act as middle conditions between students and what is to be learnt (Igwebuik and Ojogan, 2015).

Constraints to the Effective Use of Instructional Media

The following are the factors affecting effective usage of instructional materials.

- ❖ **Availability and Adequacy factor:** Governments and private school owners do not consider it necessary to allocate funds for procurement of instructional media. In Nigeria, all it takes to start a school is to the provision of classroom and recruitment of teachers. For most people, teaching and learning will take place, once the classrooms and teachers are in place. This attitude is largely responsible for the dearth of instructional media in Nigerian Schools.

- ❖ **Cost:** In a country, where the annual national budget for education has continually hovered around eight percent instead of the twenty five percent recommended by UNESCO, there is always never enough funds to cover the needs in education. This is perhaps the major cause for the almost complete absence of instructional media in Nigerian schools. An average overhead projector cost about N180.00.00, an interactive board cost about N260.000.00 while a smart board is an average of N550.000.00. As a result of the high prices, schools at all levels experience shortages of equipment such as projectors, television sets, videos, computers and teaching materials such as study guides, textbooks, transparencies, slides and films.
- ❖ **Education Policies:** There has being very little alignment of government and school administration policies in instructional media development and use with actual practices in schools. For instance, in section Eight of the National policy on Education (2014, revised), the following goals related to instructional media were encapsulated:
 - Make learning experiences more meaningful and realistic for children;
 - Develop and promote effective use of innovative materials in schools.

To help achieve the aforementioned goals, the policy legislated that the following services and facilities be provide;

- Each state and Local Government Authority should establish Teachers' Resource Centres. These centres shall also be used for the development and testing of teaching materials.
- Federal and State Governments are to establish Education Resource Centers.

Nigeria are good in policy formulation and articulation of ideas on paper. This is the story of Nigeria in all spheres of national life. The servant in the Bible buried only one talent. I wonder how many Nigeria has been buried.

So, poor policy implementation has greatly hampered the development and use of instructional media in Nigeria education.

If school managements support and encourage teachers to use instructional media in the classroom, then the development and use of instructional media will flourish. Ojogan (2019) separately noted that most educational policies associated with school funding, resource allocations and tracking usually leave schools in rural areas and low social economic areas and low social economic areas of cities with fewer facilities, equipment and materials.

- ❖ **Types of School:** It has been confirmed that the type of school, private or public, rural or urban and affluent or poor influence the availability and use of instructional media (Ojogan, 2019). Schools located in rural areas and the low income parts of urban areas often operate without the basic facilities, equipment and materials required for teaching and learning. They usually do not have the basic infrastructure required to use instructional media. Most schools, especially those that service low – income neighbourhood have no access to electricity and so cannot use media like television or projectors, assuming they are available. Even when schools are connected to electricity, amenities like sockets, stands, cooling systems may sabotage the use of instructional media.

Roles of Instructional Media in Teaching and Learning

The principal role of instructional media is to help improve the overall efficiency of the teaching/learning process. Ojogan (2019) are of the opinion that in education and training, improved efficiency can manifest itself in the following ways:

- ❖ increasing the quality of learning or the degree of mastery;
- ❖ decreasing the time taken for learners to attain desired goals;
- ❖ increasing the efficiency of teachers in terms of numbers of learners taught without reducing the quality of learning;
- ❖ reducing costs, without affecting quality;
- ❖ increasing the independence of learners and the flexibility of education and training provision.

Conclusion and Recommendations

This paper has stressed on the importance instructional media in teaching and learning process. It attempts the definition of media in which there was a general consensus that media is both tools used in teaching and avenue for learning. The paper equally examined the concept of instructional media as well as guidelines for the use of instructional media. It also look at why we use instructional media in teaching and learning and the constraints to the effective use of instructional media.

Finally, it is obvious to state that teachers should employ the counsel of Ojogan (2019) why using instructional media in teaching and learning.

- ❖ Teachers should use instructional media because it will help learners to grasp complex concepts that they could not have comprehended through explanation alone.

- ❖ Teachers should employ the use of instructional media in teaching because it will bring the real world into the classroom for students to explore and solve. In other words, it provides authentic learning experiences.

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