

Improvisation of Instructional Materials Involving Colours for Effective Teaching in Fine and Applied Arts

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Abstract: - The paper examines the improvisation of instructional materials involving colours for effective teaching in fine and Applied Art. It visualized the concept of improvisation as a supplement to real made materials with the conceptual framework. The paper also talked about why improvisation is used in classroom. E.g. for classroom friendly, engages learners, and increase motivation. Improvised instructional materials are those teaching and learning materials produced using locally available resources with the help of experts. Some proven contributions of instructional materials to learning were listed. The importance of colours in improvised materials in Fine Art and its categories were spelt out, the effect of colour in teaching and learning and how these colours were sourced for were also discussed. Furthermore, the source of this paper was secondary; books, journals, articles and internet browsing were consulted. Training and re-training of Fine and Applied Art teachers should be done in form of workshops, seminar training programme on how to produce and use instructional materials were part of the suggestions given in this paper.

Keywords: Improvisation, Instructional Materials, Colour, Fine and Applied Art.

I. INTRODUCTION

One major reason for poor performance among learners is the abstract manner in which the fine and applied art are taught. Aina (2013) and Adeyemo (2010) are of the view that the absence of instructional materials such as pictures, models or real object makes it difficult for learners to understand communicating information. The learners usually lack the ability to assimilate concepts abstractly making it imperative to adopt the use of interactive instructional materials. Instructional materials can be defined as all the resources a teacher uses to help him/her explain or elucidate the topic/content/subject to the learner so that the learner is able to comprehend the topic fully. (Tukur, 2012).

Nowadays teaching and learning has gone beyond the traditional method where the teacher is the main and only instructor. This means that with the latest instructional materials in teaching, teachers are expected to “talk less” and perform fewer activities during instruction. Teachers are expected to utilize variety of attention getting, interest arresting, stimulating and motivating instructional materials that come in the form of graphic models, pictures or real objects in today’s classroom. In the classroom, there are many

necessary materials the teachers need to make learning interesting, inclusive and effective, these materials though helpful and effective they are most of the time beyond the reach of the teachers because of their sophisticated nature and cost. As teachers, are expected to be resourceful and innovative, they do not have to wait for the authorities to provide the materials. They should look for alternative or substitute from everyday materials around us.

Teachers can produce materials that can operate like the factory manufactured ones or very close to them. There is no limit to materials that can be improvised for effective learning. As factory made materials are of high quality and operate exactly according to design, improvised homemade materials satisfactorily enable the child to explore and extract the basic concept or skills (Dalhatu, 2014). Improvisation is therefore, the making of substitute from local materials found at home or school premises when the real or original material/equipment is not available (Tukur, 2012).

The aims of improvisation are to:

- Serve as an alternative to materials that are out of reach.
- Develop once thinking ability and also enable an individual to think for himself
- Develops learners’ creativity and enable the child to express his/her own ideas.
- Helps learners to be independent and self-reliant

The involvement of colour to instructional materials is to attract the attention of the students. In my opinion, colour is a medium of expression that changes the surface of an object, materials or platform. Colour has a retention power that lingers in the memory of the learners for a long period of time. It helps the instructional materials to achieve its goals in the learning process. In fact, Sir Isaac Newton and Goethe’s research shows that colour can play a major role in the overall state of well-being. The colour we surround ourselves with enhances the environment. In fine art, colour allows the learner to create their own individuality and flare. For years, graphic designers, such as advertisers and artists have been using colours to enhance the environments. Colours also create a message or sharp responses in the learners. Artists

learn how to use the positive or negative attributes of colour in their works to send a message.

Since improvisation tends to remove abstraction(s) in learning theories because the production of improvisation is tangible, handy and concrete, this paper, therefore intends to analyze the integration of colour in instructional materials for an effective teaching in Fine and Applied Arts (FAA).

II. CONCEPTUAL FRAMEWORK

In order that this paper is fully comprehended by reader, some concepts are hereby explained. The understanding of the concept will throw more light.

Concept of Improvisation

Improvisation is a process of using a substitute for a material that is not available at the moment. This is usually done where there is no proper material or where they are not affordable. Improvisation will help to clear the unavailability of the materials in the school system thereby helping the teacher to use the local available materials to assist the existing one. Abdu-Raheem and Oluwagbohunmi, (2015) corroborated the idea that resourceful and skillful teachers should improvise necessary instructional materials to promote academic standard in Nigerian schools. Oso, (2011) in Abdu-Raheem, (2016) agreed that the best way for teachers to make use of their manipulative skills is to improvise so as to achieve their lessons objectives at least to a reasonable extent. The researcher attested that improvisation allows teachers and learners to display their skills in teaching and learning activities for better understanding of concept being taught. It is an alternative of a material that is not available at the moment. It is all about serious thinking, creativity, communication and coming together of different opinions. According to Tukur, (2012) Improvisation is therefore, the making of substitutes from local materials found at home or school premises when the real or original materials/equipment is not available. The improvised materials should be able to convey special instructional messages just as the original materials. Improvisation of instructional materials cannot be overemphasizing as far as teaching and learning is concern. For teaching and learning to have meaning there must be adequate materials for the process. According to Hornby (2010), improvisation means to make or do something by using whatever is available, usually because you do not have what you really need. It is the provision of alternatives to all things. It can be define as an alternative of creative Arts materials to be used for different function for the purpose of instruction to be achieved. Any material improvised along with the learners gives more understanding during learning process. It can be seen as the act of providing teaching materials from our locality when there is shortage or lack of the standard ones (Mboti, 2011).

In FAA, materials to be improvised are many, example charcoal can be used in place of pencil and will give exact understanding that the original (pencil) intends to give.

Teachers scout the immediate environment for suitable materials to be used when the real materials are not available. Tukur (2012), also defined Improvisation in teaching and learning refers to the teacher and pupils' effort in creating any instructional material(s) that will like or a replicate of material that is not available or affordable.

Concept of Colour

An improvised instructional material in FAA goes along way when colours are applied on the materials for Identification, Arousal, Attention, Retention, Interest, Concentration and better Understanding of what is been taught. Instructional materials involving colours tends to help in further attract the attention of the students because of the nature of colour in teaching and learning process. Colour is the application of pigment to shapes and forms or the nature of any surface as may be reflected by daylight (Ogomor, 2007). However, colour is a medium of expression that changes the surface of an object or material. When colour is applied on a particular surface it tends to change it thereby making it looks attractive to the purpose to which it was intended. When colour is applied on a material, it helps to bring out the beauty and arouse the attention of learners as well as making improvised instructional materials to look real and finish in FAA. Colour and FAA goes hand in hand and cannot be separate but are inculcated to each other. The colours are gotten from the basic blocks of the primary, secondary, and tertiary colours.

According to Wright, (2008) define colour as "colour is light, which travel to us in waves from the sun, on the same electro-magnetic spectrum as radio and television waves, micro waves, x-rays etc." The human eye is capable of seeing over 7 million colours. The colours are gotten from the basic blocks of the primary, secondary, and tertiary colours. Colour on instructional materials will help to beautify and call the attention of the learners on the materials thereby helping the students to achieve the purpose of learning.

The Primary Colours

The primary colours are the three basic hues **Red**, **Blue**, and **Yellow**. These colours cannot be created by mixing others, and they are the basis of all the other shades of colours which they generated. If the primary colours are mixed in equal amounts, the resulting colour is always black.

The Secondary Colours

These are the colours that are achieved by mixing equal amounts of two primaries. There are three secondary colours: **Green** (a mixture of red and yellow), **Orange** (a mixture of blue and yellow), and **Violet** (a mixture of red and blue).

The Tertiary Colours

Tertiary colours are achieved by mixing equal amount of primary and secondary hues. There are six tertiary colours which are **Lime** as a mixture of green with yellow,

Purple as a mixture of violet with red, **Saffron** as a mixture of orange and red, **Lavender** as a mixture of violet with blue, **Amber** as a mixture of yellow with orange, and **Turquoise** as a mixture of green with blue. (Wright, 2008, p. 23)

Concept of Instructional Materials

Instructional Materials are collections of materials; equipment that can be used to facilitates the process of communication otherwise called instruction in the process of teaching and learning. Such materials are organized and used to affect a control of message, to motivate, catch and hold attention, stimulate the function of the human sense, this aiding understanding and interpretation and or re-creation of meaning (Salami, Lagbe and Usman, 2008). Instructional materials are the gatherings of equipment, materials depending on your topic or subject to aid or facilitate the learning process for easier understanding. It goes a long way to helping the teacher reach his goal in teaching. According to Tukur, (2012) Instructional materials can be define as all the resources a teacher uses to help him/her explain or elucidate the topic/content/subject to the learner so that the learner is able to comprehend the topic fully. Also, Instructional materials as object or devices that assists the teacher to present their lessons logically and sequentially to the learners (Isola, 2010).

Oluwagbohunmi and Abdu-Raheem, (2014) acknowledged that instructional materials are such used by teachers to aid explanations and make learning of subject matter understanding to students during teaching learning process. However, Akinleye, (2010) attested that effective teaching and learning requires a teacher to teach the students with instructional materials and use practical activities to make learning more vivid, logical, realistic and pragmatic. Owing to the above assertion that FAA is 80% practical subject that cannot be taught outside the use of instructional materials for effective teaching and learning. It is a subject that requires total attention, concentration and manipulation of the instructional materials to be able to fully participate and arrive at the stated objective. Despite the fact that instructional materials are essential tools that can make learning practical and knowledge acquisition easier, they are not readily available in Nigerian secondary schools leading to low level of performance of learners in government examinations (Abdu-Raheem 2014). An improvised instructional material is a method or way of minimizing loss of equipment and materials and an inexpensive method of widening scope of inquiry.

III. WHY WE USE IMPROVISATION IN CLASSROOM

Improvisation is basically and mostly around the idea of effective teaching and learning it finds its uses. Before you understand the uses of improvisation, it will require the imagination of the type of teaching and learning that is probably to take place, classroom materials for teaching FAA should not be absent because it is a practical subject and cannot be taught without materials. The uses include;

(i) Increase motivation (ii) Engages learners (iii) Classroom friendly

Increase Motivation: Improvisation helps learners to express their feeling; meet new people; and experience different culture; they are open to diversity, differences, and sharing personal information with other learners in class. (Junco & Mastrodicasa, 2007; Lenhart, Rainie, & Lewis, 2001; Oblinger and Oblinger, 2006b)

Engages Learners: Improvisation engages learners of diverse population. Regardless of gender, ethnic, racial, culture background or educational needs. As learners built upon offers drawn from their interest, experience or curricular exposure, a sense of validation, trust and respect towards themselves and other develop. They are what Jenkins (2006) calls a participatory culture; they are not spectators.

Classroom Friendly: The entire class is involved because improvisations increase engagement and sense of community. They gravitate towards activities that promote and reinforce conversation, collaboration, and teamwork (Howe and Strauss, 2000; Junco & Mastrodicasa, 2007; Manuel, 2002; Ramaley & Zia, 2006);

Examples of materials that can be improvised in FAA such as paper on which to draw, pencils of B Grades, pens, gum and glue, ink, colour, brushes for painting etc.

- Charcoal can be used in the place of a pencil for drawing
- Pens for drawing can be made from bamboo and pieces of sticks
- Writing brush can be got from chewing stick.
- Colour can be improvised by mixing two primary colours e.g. Blue + Yellow= Green. Yellow can be obtained from boiled ginger roots etc.

The above are some of the materials in FAA that can be used to replace the unaffordable/unavailable materials for continuous effective teaching.

IV. IMPORTANCE OF COLOURS IN FINE ARTS

Colour plays an important role in our daily lives that most of the decision we take are influenced by the colour around us. It has a retention power that lingers on in the memory of a learner for a long period of time. We often remember the colour of an object more than we remember its shape or form. We can easily forget word but not colour, reason been that, when we look at an object, our attention is drawn to its shape and colour. But we remember the colour much longer because it has more retention power which lingers on in the memory of a learner.

Instructional materials involving colour tends to help in further attract the attention of the students because of the nature of colours in teaching and learning. In improvisation, there is place to adapt, imitate or invent your own technique (Dalhatu, 2014). It can also be done in colour when thinking of instructional materials to use depending on your topic,

mostly in FAA that is naturally embedded in colour. The use of colour on instructional material to teach FAA is uniquely related. FAA and Colour cannot be separated, they are two halves of one complete whole, nothing is been design or beautify outside colour in FAA.

There is importance attached to colours when mixed together, it does not have exactly the same effect as when used alone. These make important for us to know how a colour will look like in a work of arts as well as on an instructional material.

- a. It helps to attract attention
- b. It helps to suggest mood
- c. It helps to define and interpret forms
- d. It helps to arouse feeling of viewer about work
- e. It serves as a means of identification

V. EFFECTS OF COLOUR IN TEACHING & LEARNING

Colour is an inseparable part of our everyday lives. It's inherent in everything we see and do and studies indicate that it plays a role in emotion, productivity, communication, creativity and learning. The colour you choose to use in your classroom can have a huge impact on learners' mood and how learners learn and absorb the information you are teaching them. Here are a few colours and how they can influence learners.

Red – Encourages creativity, increases appetite, increases alertness and excitement.

Blue – Encourages creativity, lowers temperature, inhibits appetite, and creates a sense of comfort.

Green – Encourages calmness.

Purple – Encourages calmness.

Orange – Increases alertness.

Yellow – Creates positive feeling, improve attention, encourages creativity.

Brown – Reduces fatigue creates a sense of security (Smithsystem, 2019)

The following are some practical guidelines for incorporating colour into three different spaces in a school's interior with a specific focus on furniture.

1 The Classroom: The key to creating an environment conducive to learning in a classroom is to have a calming and neutral colour on the walls; furniture can add a splash of colour to an otherwise dull classroom.

2 Libraries: They are similar to classroom in many ways. Libraries are multi-purpose, are an extended learning environment and require careful attention to colour selection. A section of the library is reading section; they are intended to be calm and relaxing allowing learners to reflect. Green and blue can be applied.

3 Common Areas: Common areas such as entry ways and lunch rooms are more informal and welcome conversation, excitement and play. The colour choices are limitless, but still should reflect the purpose of the areas. Choice of colours can be bright to welcome and energize the learners such as yellow and orange. (Smithsystem, 2019)

Sourcing for Colours

The colours known as poster colour, water colour, powdered colour, of different makes are available in the market. But where these colour media are not available, some of them can be obtained from natural substances. Certain plants when boiled or crushed can give colours, for example:

Orange: It can be obtained from the root of carrots. Wash and crush the roots and later boil them with water, mix lime juice to preserve it from fading.

Yellow: it can be obtained from the roots of a certain plants e.g. the liquid from boiled ginger roots.

Green: squeezing cocoa yam leaves will produce a good colour. Wash several leaves lightly in cold water and remove the chaff with a sieve. The green colour forms sediment when liquid settles. Heat this to get rid of the slime; it will also help to thicken it. It is then ready to work with.

Black: These fire place materials like soot from chimneys, ashes and charcoal can be used as black colouring medium e.g. charcoal can be ground and mixed with water and gum for use as black colour (Dalhatu, 2014).

Safety Precaution

It is advisable that whenever teachers plan to improvise instructional materials, he/she should engage the students in the acquisition of materials and also the production. This is therefore the need to observe safety attitude throughout the process.

VI. CHALLENGES FACING IMPROVISED INSTRUCTIONAL MATERIALS AND COLOUR

The challenges confronting actualization of aforementioned goals are as follows:

1. Accessibility to the materials for the improvisation of colours
2. Inadequate support from principals, stakeholders and parents
3. Poor attitude of student towards Fine Arts as a subject
4. Lack of knowledge on colours by teachers
5. Non-recognition of instructional materials in teaching by teachers (Fine Arts)
6. Non acceptability of the subject in the Nigerian situation by the public.

VII. CONCLUSION

This paper discusses the improvisation of instructional materials involving colours for effective teaching

in Fine and Applied Art. These are materials employed by the teachers to enhance the effectiveness of teaching. However, this paper looked at improvised instructional materials in colour as a substitute to material that is out of reach which can be sourced locally to enhance teaching and learning.

VIII. SUGGESTIONS

The following suggestions are made for this work:

- a. Fine and Applied art teachers should be encouraged to improvised instructional materials to facilitate effective teaching.
- b. Training and retraining of fine and applied art teachers should be done inform of workshops, seminar training programme on how to produce and use instructional materials.
- c. To reduce the work load on the teachers and learners. Government should provide instructional materials both hardware and software required for effective teaching.
- d. Lesson should not be taught without instructional materials in fine and applied art.

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