

## Development of Instructional Materials from Local Resources for Art-Based Courses

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**Abstract:** This study examined the use of instructional materials from local resources for art-based courses. The study examined the concept of instructional materials and their production for instructional purposes for art-based courses. Effort was made to review literature on the categorization of instructional materials from local materials and how they can be developed and produced for use to enhance effective learning. The study is also based on the need to drift away from the use of imported/factory produced instructional materials, which are usually very expensive to purchase and scarce to come by. The effectiveness of the instructional materials is also measured by the proximity of the end users to the source and the relevance to their immediate environment, these enhance retentiveness in learning. Some instructional materials are highlighted in the study and how they can be made from local resources are also discussed.

**Key words:** Development, instructional materials, local, resources, arts-based courses, Nigeria

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### INTRODUCTION

The use of locally produced instructional materials in the teaching learning situation has many advantages. Some of them according to Abolade (2009) and Abolade and Olumorin (2004) include the fact that:

- They are cheaper to produce or buy because the raw materials are locally sourced
- They can present objects and model in either 2 or 3-dimensional views through painting and crafts among others
- They can be used to teach large classes
- They encourage class participation since majority of the raw materials can be sourced by the students themselves
- They motivate learners through the participatory activities during production
- They also arouse the interests of the learners because they are made from raw materials they see daily in their immediate environment

The production of Instructional materials had undergone several reviews and processes by experts from various fields. These experts have developed and produced in line with the needs of their area of specialization and the resources available to them in their locality. In the area of Arts and Humanities for instance, much problems encountered from the use of appropriate Instructional materials for teaching and learning had being

usually as a result of high cost of factory produced/imported materials, scarcity of such products in the country and above all irrelevancy of some of the materials to the social/cultural settings, which had always left the students wandering in abstract.

Abolade (2009) emphasized that it is when original materials are not available for use in teaching and learning that other types and forms of instructional can be applied. Also, Abolade and Olumorin (2004) reported that most of the factory produced instructional materials for teaching art based courses are usually very scarce to come by and where they are within reach, they are usually very expensive to buy.

Some of the factory produced/imported instructional materials have also been discovered to be concept-based on foreign ideas and culture. For instance, in learning alphabets at nursery/primary class, an imported chart will have: A for Apple, B for Ball, C for Cat and so on but a locally produced chart will reflect objects that can easily be seen in the child's environment for instance, A for Ant, B for Basket, C for Cutlass. It is against this background that the need to fashion out ways by which local resources can be used for developing instructional materials should be underscored.

In this research, three major categories of mode of local production of instructional materials for art based courses were outlined based on the presentation of Ogunmilade (1984). The presentation was however improved upon to meet up with current use of material resources and methods as shown in Fig. 1.

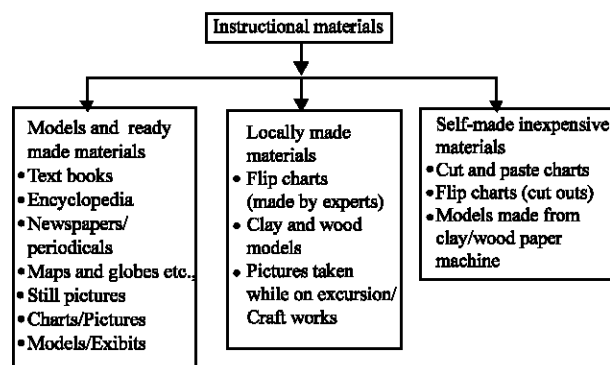


Fig. 1: Categorization of instructional materials based on mode of priduction

## MATERIALS AND METHODS

**Locally sourced instructional materials:** Locally sourced I.M. can be categorized based on their mode of production. These divisions as adopted from Ogunmilade (1984) are:

- Models and ready-made materials (packages)
- Local material made by experts in visual resources
- Self made (inexpensive) materials

**What are instructional materials?:** Instructional materials in its simplest term are those materials that help the teachers to teach with ease and the learners to learn without stress. Instructional materials appeal to the senses of seeing, touching, smelling, feeling and hearing. They include projected, non-projected, printed and others such as objects/relia, 3-dimentional objects that are produced through locally sourced materials, program instruction, instruction package among others.

For the purpose of this study, the areas of focus are the Instructional Materials (I.M.) that can be produced by the teachers and the students using the objects and local products/materials around them in the immediate community. These materials can be classified under those that are readily available naturally (real object) and those that are man-made i.e., made by the teachers and their students.

**Why instructional materials for the art-based courses?:** Instructional materials are very essential for teaching the art based courses because a high percentage of what we learn in the arts are abstract contents and are better explained through the use of instructional materials. It also helps to introduce to the class, objects that cannot be physically brought to the class e.g., airplane as an example in Means of Transportation as a topic in social studies and objects that are too tiny to see or observe their function with the naked eyes to mention a few. Others are those that are very expensive to afford in terms

of money. There is no option than to improvise such materials for utilization in the class room for teaching and learning.

## RESULTS AND DISCUSSION

**Production from locally sourced materials:** In order to effectively produce instructional materials from locally sourced materials, the teacher must have adequate skills which are basic. This acquisition of skill can be made possible through constant practice and observation of the experts. They also must include the knowledge of the basic principles and elements of design. Some of the skills needed in production of visual materials are:

- Pen lettering skill
- Calligraphy writing skill
- Free-hand writing
- Use of color in graphics
- Modelling technique
- Painting
- Weaving and other crafts etc.

**Lettering:** Traditionally, lettering can be done manually by using felt pens and marker pens, spirit based ink and brush, calligraphy pen among others. In resent time, all of these have been jettisoned for computer letterings. It is now much easier to generate letters for illustrations, labels, titles and topics from the computer. These come in various fonts and points (Types and sizes) and can be printed out in any colour (Using colour printer) on either cardboard or paper as the need may be. These may then be cut out and pasted on the charts, boards, flannels, illustrations on cards etc. as required using the rules guiding the steps in producing IM earlier stated. Illustration letters can also be cut out from newspapers, magazines and old textbooks. The teacher will only need to select those that are appropriate and mount them on cardboards.

**Free-hand drawing (quick sketches):** As teachers in the process of explaining certain points to the learners in the class, there may arise situations that warrants the need to quickly illustrate on the chalkboard, the teacher needs to acquire skills in quick sketches at least using the stick man method, which is the simplest form of sketching (Fig. 2).

To achieve these sketches, avoid details, just be concerned about the character you intend to portray or object you wish to represent use very few lines and remember not to back the class for too long, while illustrating because learners might lose interest. Above all practice several times before going to class.

**Use of colour:** Colour is a very important aspect in visual materials production this is because colour itself speaks. Mis-application of colour on visuals can mar or improve the needed out-put of the material. The therapy of colour brings life and originality to IM when properly used based on its classification and the appropriate application of the principles and elements. Colour is divided into four parts. Primary, Secondary, Tertiary and Neutral.

**Primary (Red, Yellow and Blue):** These colours cannot be formed by the combination of any colour hence, they form the foundation on which other colours are derived. They are sometimes referred to as raw colours.

**Secondary (Orange, Green and Purple):** These colours are formed from the combination of two primary colours. They can be obtained as follows:

Red + Yellow = Orange, Yellow + Blue = Green and Blue + Red = Purple. These occur only if they are mixed in equal proportion.

**Tertiary (Red-Orange, Yellow-Green, Red-Purple):** They come from the combination of three or more colours e.g., one primary plus one secondary which often gives the hue compound names like red-orange, red-purple etc. The use of tertiary colours depends principally on expertise. One needs to understand the principles and elements of

design such as Harmony, contrast, rhythm, balance, among others to be able to appropriately use tertiary colours along with primary and secondary colours. Harmony of colour for instance implies the practical working together of two or more colours to bring out the beauty of a work.

The use of yellow alongside Green and ochre might be visualized as harmonious whereas the combination of green and red is the opposite. Contrasting colours are good in graphics sometimes especially when it has to do with lettering. Using black to write on yellow or white background is contrasting but it is good because such lettering will stand out and can be easily read from afar. This cannot be said of using yellow to write on white background (Fig. 3).

**Neutral (Black and White):** These two colours are neither here nor there, no combination of colours can form them. They can only be used as they are or used to either tint (lighten) or shade (darken) other colours (Fig. 4).

**Models:** Models are 2 or 3-Dimensional representation of objects or figures, which portrays absolute resemblance

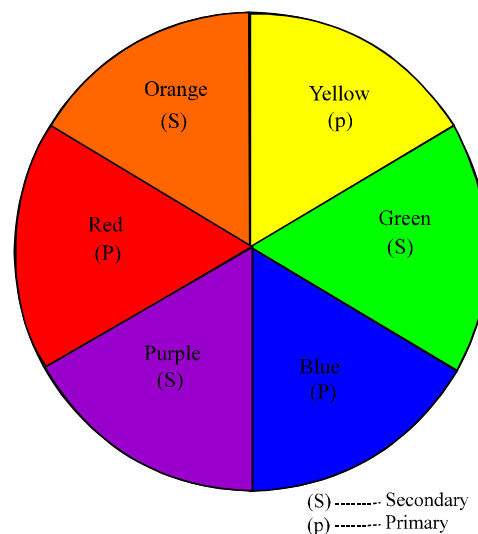


Fig. 3: The colour wheel

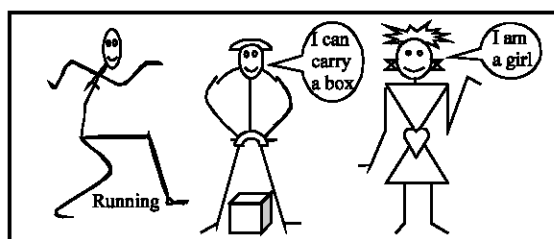


Fig. 2: Some free-hand sketches

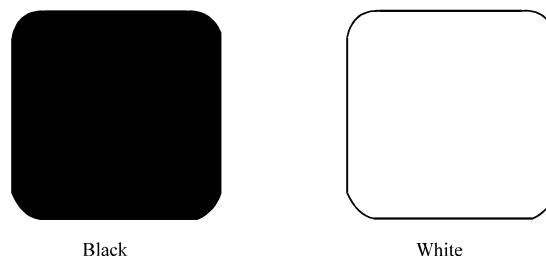


Fig. 4: Neutral colours

of the intended real object or figure (Adeyanju, 2000). These models can be produced from several materials such as clay, plastic, polyester, Plaster of Paris, cement, wood and iron among other. These materials are manipulated by using different kinds of tools, techniques and methods like moulding, casting, welding, fixing, engraving, etc. Like any other production of LIMs, it is important to follow the basic principles and elements of design i.e., size, shape, balance, colour, proportion and so on. These help to enhance exactness and accurate resemblance of the object being replicated.

**Paintings:** Painting in Creative Arts is the one referred to by implication in this situation. It is that which has to do with the use of brush to apply paints of different hues to create meaningful impression on surfaces to represent objects/figures. The mastery of the therapy of colour helps the instructional materials producer to manipulate brush and paint in a way that gives accurate resemblance of the intended object/figure. Painting could be produced on cardboards, plywood, canvas, strawboard and other 2-dimensional surfaces. Other materials are brush, palette, medium (water, linseed oil, kerosene, turpentine/thinner, spirit, retarder etc). The impression usually attained after a successful painting appears in a 3-dimensional optical illusion, which makes the learner/viewer see it as a real still camera picture in its true colour.

**Crafts:** Crafts are the use certain materials that are usually locally sourced and sometimes factory produced to build objects that can be used for domestic and educational purposes. It requires the use of the producer's intuitive (initiative/innovative) ideas based on particular set objectives (as it relates to any specified school subject). The process for the production may be manual or mechanical depending on the raw materials, tools and the production technique. The nature and scope of crafts entails Creativity in designing art works for the pupils' class activities, Cognitive knowledge is also needed to be acquired by the pupils. It is also targeted to the acquisition of psychomotor skills for pupils through manipulation of different types of tools.

**Steps in producing/selecting visual material:**

- Select specific instructional objective. This must be based on the content of the syllabus and scheme of work
- Identify the character of the learner. This character will comprise the need, interest, cultural/religious background and the weaknesses of the learners in the area of their psychological state of mind

- The message to be carried by the visual. This should conform with above results in terms of content and context
- The medium to be used by the producer e.g., clay, paper, board, print, cut-outs, among others, which are presumed to be available and accessible from the immediate environment
- The cost of production, which must ordinarily be cheaper than the factory-produced items
- The golden rules of production which are clarity, legibility, simplicity, accuracy, durability, portability and manageability must be strictly adhered to, while producing

## CONCLUSION

Attempt was made in this study to discuss the importance of instructional materials in the teaching learning situations. The study also stressed the fact that due to the high cost of ready made instructional materials, teachers should endeavour to produce improvised materials for their teaching from local resources. The paper highlighted some instructional materials that could be produced for the teaching of Art-based courses and the local resources that could be used for their production. Steps in the production of instructional materials were also suggested by the study.

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