

The Nigerian Universal Basic Education Journal

VOLUME ONE NUMBER TWO, 2001

ISSN 1595-3368

IN THIS ISSUE

CRITICAL HISTORICAL ANTECEDENTS OF THE UNIVERSAL BASIC
EDUCATION PROGRAMMES

SPECIAL AND GIFTED EDUCATION IN THE UNIVERSAL BASIC
EDUCATION PROGRAMME

STRATEGIC INFLUENCE OF UBE ON THE EDUCATION OF MIGRANT
FARMERS

STRATEGIES FOR TEACHERS' RETENTION IN THE UBE
PROGRAMME

Other Articles Inside

Faculty of Education, University of Nigeria, Nsukka

The Nigerian Universal Basic Education Journal

VOLUME ONE NUMBER TWO, 2001

ISSN: 1595 - 9368

IN THIS ISSUE:

- CRITICAL HISTORICAL ANTECEDENTS OF THE UNIVERSAL BASIC EDUCATION PROGRAMMES
- SPECIAL AND GIFTED EDUCATION IN THE UNIVERSAL BASIC EDUCATION PROGRAMME
- STRATEGIC INFLUENCE OF UBE ON THE EDUCATION OF MIGRANT FARMERS
- STRATEGIES FOR TEACHERS' RETENTION IN THE UBE PROGRAMME

Other Articles Inside

Faculty of Education, University of Nigeria, Nsukka

REALIA AS STRATEGY IN TEACHING EFFECTIVENESS OF PRE-VOCATIONAL SUBJECTS IN THE UNIVERSAL BASIC EDUCATION SCHEME

By

ALADEMERIN, EDWARDS ADESEYE

Lagos State College of Primary Education, Noforija-Epe

Abstract

This paper takes a look at the conceptual meaning, identification and use of realia as efficient strategy in teaching effectiveness of pre-vocational subjects comprising primary agriculture, home economics, introductory technology, local crafts, cultural and creative arts, etc in the UBE scheme. Recommendations and suggestions on how they could be identified and used or teaching effectiveness under the UBE Scheme are given.

Introduction

Ever since pre-historic times, man has realized that words alone cannot fully describe or express his subject or idea. The ancient man otherwise called the cave man realized that audio-visual communication created a clearer and more meaningful impression in his listeners' mind than the verbal communication alone. Hence the cave drawings and illustrations he produced to supplement his oral narrations to his listeners and peoples.

The narrations to the listeners of the old could now be taken to man the formal school setting of today right from the kindergarten level up to the tertiary level. For proper teaching and understanding of concepts in pre-vocational subjects, the lesson must not be in abstractions. There is the growing need for the use of realia otherwise called instructional materials to conceptualise understanding in learners. Realia are objects or activities used to relate learning experiences to the real world.

Allen (1963) clearly distinguished between 'teaching aid' and "instructional materials" otherwise called "realia". According to him, teaching aids are devices, which assist an instructor in the teaching-learning process by simply presenting, supporting or supplementary materials usually intermittently. It is not self-supporting. On the other hand, Allen explained the instructional materials as devices which present a complete body of information, and largely self-supporting rather than supplementary in the teaching learning process. The stress here is on concrete examples rather than abstractions, and instruction in vocational education areas has had high usage of realia as compared to other areas of instruction in the formal school setting. This is because much attention in this area of study is more on the manipulative skills, such as proficiency in handling or operating tools or machines, in planning or investigating processes, or in designing, shaping, forming, or fabricating various objects, farming, food processing etc.

In the present dispensation of the Universal Basic Education (UBE), adequate care and attention should be given in the identification, strategic use and efficient storage of the realia because of their role in the proper understanding of concepts taught in the classroom and field situation.

For this reason the realia for classroom and field uses must be unambiguous, providing stimulus of a very precise kind, with a code of symbols accepted and well understood by the children or learners who are to practice language by talking about the realia they are in contact with.

The Concept, Meaning and Types of Realia

The term instructional materials or realia are used more commonly in recent times to mean all the materials and equipment which were formerly referred to as 'teaching aids'.

instructional aids' or 'audio-visual aids'.

An instructor who uses realia is a better communicator and, therefore, makes more efficient use of the time of students and of himself/herself. Realia usually appeal to more than one sense. Some realia may actually appeal to all five senses namely: Seeing, hearing, feeling, smelling and tasting.

Schramm (1977) asserted that they are simply information carrying technologies that can be used for instruction. According to him, they have always held out in their different ways the bright hope of delivering educational information and experiences widely, quickly, vividly with a realism and immediacy that print could hardly match. For instance, one can describe a bucket, but it is very difficult to tell anyone exactly what a bucket looks like without a picture.

Realia are available in different forms and format. According to Ike (1997) quoting the works of Sleeman, Cun and Rockwell (1979), there are basically four print media, graphic, photographic and electronic media:

- i. Printed media include; Books, magazines, tabloid (Newspapers, Cartoons; programmed texts, journals, periodicals.
- ii. Graphic media include; charts, maps, diagrams, cartoons, comics, mounted displays, any kind of three dimensional display, overhead transparencies, chalkboard displays etc.
- iii. Photographic media include; still and opaque pictures, slides, film strips, motion pictures and any other object that can be photographed.
- iv. Electronic media include; audio recordings and video recordings accompanied by audio content; television, projectors and computers. It should be noted that the electronic media also have the qualities and advantages of the photographic media.

This categorization of instructional materials is necessary so that the present teachers for the UBE scheme can understand from the onset the categories of realia to use in a classroom situation. Basically, their relevance as a strategy is to enable the teachers know the suitability of instructional aids for a particular class lesson or topic.

Generally, there are two main types of instructional materials. They are human resources and non-human resources. Human resources are people who can be invited to talk or demonstrate to the audience on topics, related to their areas of specialization. Non-human resources include physical or material resources, representations or substitutes of real objects or life situations. Physical or material resources are the real objects or life situations, which the learner can see, touch, listen to, feel, taste and manipulate. Representations or substitutes of real objects or life situations include graphic materials, models, mock-ups, diagrams, among others.

Strengthening Teaching Effectiveness Under the UBE Scheme

The Universal search for a precise definition of the concept of basic education led to the Jomtien world conference on Education for All (EFA) in 1990, and Nigeria was a signatory to the Jomtien Declaration and Framework for Action which was due for appraisal by the year 2000. According to the blueprint on UBE (Universal Basic Education) (1999), it is designed to enable all have a functional literacy as from September/October 2000. It will provide free compulsory basic education for every Nigerian child at least in the first 9 years at school. By this definition, the Universal Basic Education (UBE) will span up to the Junior Secondary 3.

In the teaching of pre-vocational subjects in our primary school system, experiences, which are concrete, provide significantly greater depth and breadth of understanding and significantly larger retention periods among the pupils. Under the present dispensation of Universal Basic Education (UBE) and Education for All, teaching effectiveness is necessary to aid learning of concepts and make the scheme worthwhile. Under formal and informal settings verbal discussions are strengthened through gestures. For example, when one speaks gestures are commonly made; we may ask if there are necessary or needed at all? They consist of drawings (illustrations) or diagrammatic representations of concepts drawn in the a

(space) in the absence of a paper or other surface. They serve as information supports (visuals) used to enhance transmission of messages to the listeners. They are intended to make meanings clearer and, also, to aid perception.

For teaching to be effective and meaningful under the present Universal Basic Education (UBE) Scheme, we must take note of the following:

- i. That a child recognizes the power and effectiveness of visuals as a medium of communication.
- ii. That the child's "mind-eye" sees (perceives) everything in terms of visual images. It always transforms the verbal messages first into mental images before it gets the proper concept and meaning of the subject. (Kaggwa, 1989).

Therefore, from the foregoing, it would be right and proper to indicate that effective imagination and creativity are the capabilities for man to formulate clear mental visual images of any given subject.

For any communication/teaching to be meaningful, the obvious and the less obvious aspects must be recognized. The text (words), figures (objects), and stories from the obvious messages and meanings and intention are the less obvious. To reconcile effective teaching and good imagination/creativity in the pupils, the use of realia must be strengthened to improve understanding and learning of concepts as children learn faster with concrete materials. Even a child, before he/she learns speak, learns to express self visually. For example, when he/she cries, he/she spreads out the arms, sometimes, he/she does so to seek mother's help; but very often, he/she makes illustrations (gestures) to express feelings, which he/she cannot express verbally or otherwise. When the child becomes big enough to hold a writing implement, the first thing he/she produces is a visual (doodles, scribbles and figures) on any available place or flat surface.

For the teaching effectiveness to be strengthened under the Universal Basic Education (UBE) scheme and to bring about a meaningful learning and understanding of concepts, there must be;

- a. Approach i.e a clear aim for the teaching, calling up fully the learners experience by resourceful questioning, and necessarily providing relevant experience-realial.
- b. Presentation of the new material (realia), especially by problem solving, so that it is possible for the learner to associate it with personal experience. The presentation should be so arranged, step by step, that one thing leads to another in a way that makes it possible for the learner to associate one thing with another.
- c. Generalization and summary, which bring all that, has been learned together in an associated way until there appears a proper summary of what has been learnt.

All the above could easily be adapted for strengthening teaching effectiveness of pre-vocational subject in the primary and the Junior Secondary levels. Pre-vocational subjects include Business studies, primary agriculture, local crafts, Home Economics, creative and cultural arts. For example, in the teaching of classification of Agricultural crops in the primary school, the topics comprising legumes, cereals, etc. could be further broken down into sub-topics, which now be cover at every lesson. Using the steps indicated above will enable the learner to reconcile previous and past experiences with the present and then prepare for the future. The topics are concepts to be presented and should dovetail into one another so as to have meaningful understanding, and association, and appeal to the pupils' reasoning.

Uses of Realia for Strategic Teaching of Pre-Vocational Subjects

Since realia are the sum total of all resource materials including real situations, direct experiences and activities used by teachers to relate instruction to real life, they are inseparable in facilitating effective communication between people. In the teaching of the pre-vocational subjects at the primary and junior secondary levels, insight into learning that is essentially verbal or symbolic is strengthened by creating a 'model' of the structure. For example, many of the concepts in the classification of crops in practical agriculture at the junior secondary are better grasped when they are physically presented, in model or diagram. Models are desirable in the absence of real objects.

In practical teaching, pupils find the flow of connected events or concepts easier to understand when presented in the form of a chart or diagram which bears a pattern illustrating the sequence of events or otherwise and highlights their connections. This brings about the right kind and quantity of perception from which learning can take place example;

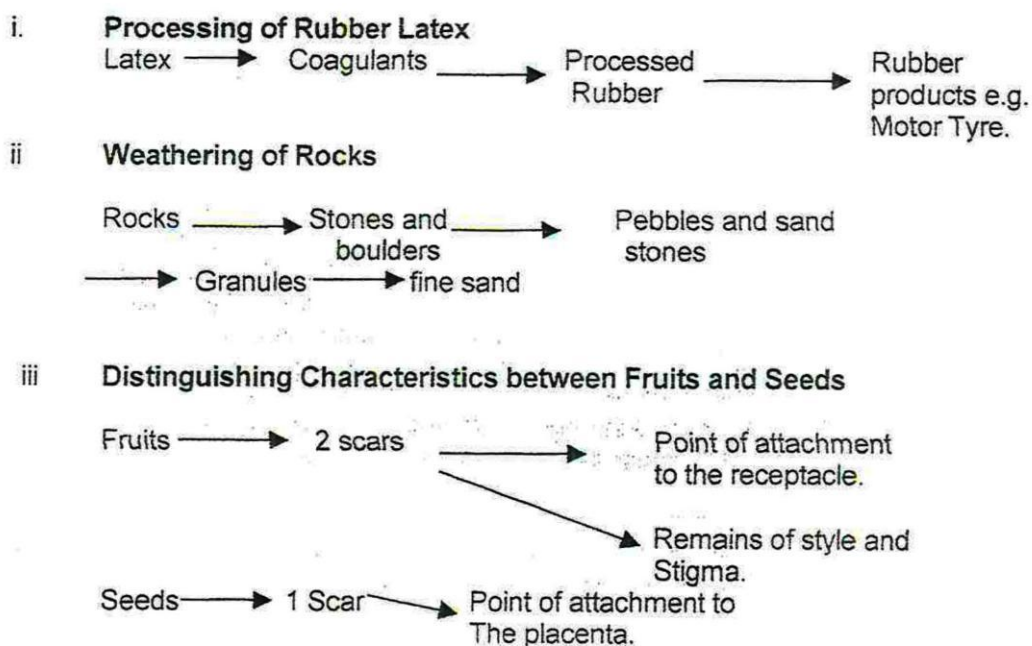


Fig 1 – Concepts Flow Chart

The flow chart must be accompanied with the real objects/instructional materials to make learning much easier for the students.

Realia for classroom situation under the UBE scheme must be selected and arranged for learning in such a way that children will both see what is to be seen, and be able to understand the significance of their observations. Such could be in the identification and distinguishing characteristics between cereals and legumes, fruits and seeds etc.

Realia help the teachers to apply among other things, the six basic principles of learning, minimize the degree of abstractness of educational experiences and promote the retention of information. In addition, they also help in:

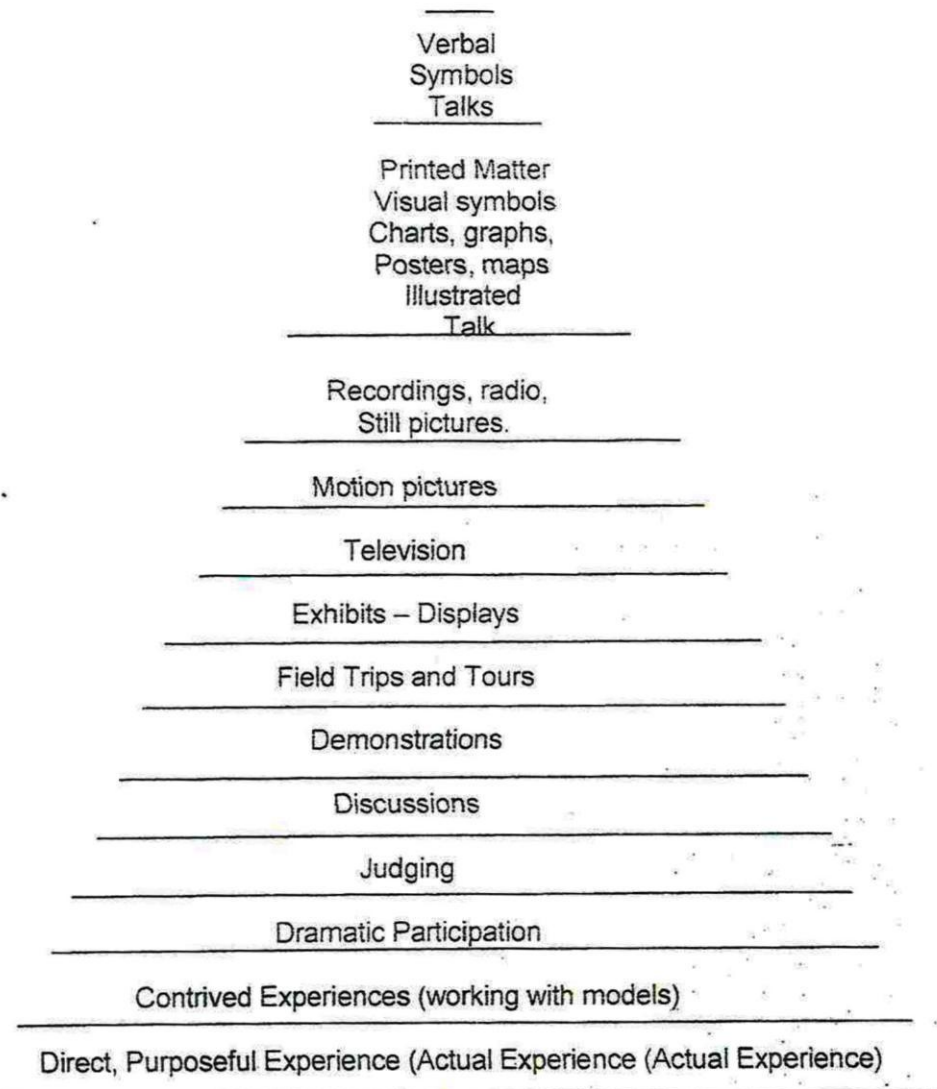


Fig 2: The Cone of Educational Experiences

1. Providing a variety of learning experiences for students, thereby adding interest to the instructional programmes and thus increases effectiveness.
2. Speeding up the learning process and making it more pleasant for the students.
3. Preventing the "pooling of ignorance".
4. Helping to involve students in participating in their own learning (McCormick and Cox, 1980).

Identification of Relevant Realia for Teaching Effectiveness Under the UBE Scheme

The ultimate of teaching effectiveness is proper delivery of information by the teacher and functional learning by the students involved. Since learning is an active process, the action relating to proper identification of realia must focus primarily upon the students, and not the teacher. For a student now to be able to comprehend or organise a visual experience, this depends on;

1. The design of the material, which provides the experience.
2. The experience and maturity of the observer i.e. the pupils.
3. The verbal accompaniment by means of which the learner acquires the ability to formulate the concept in such a way that he can communicate it.

Since the emphasis in pre-vocational subjects is centred on skills acquisition in specific areas, attention should be paid to the type of the design of the material that provides the experience for the pupils in the classroom. They should be such that could link past experiences with the present and the future – e.g. topics in textiles and designs, food processing, farm preparation prior to planting of crops, processing of farm products etc. The age during which this exposure is given is also important so as to avoid interpolation of concepts learnt by the pupils. The more the materials given or presented, the better at various ages and levels to facilitate understanding of concepts.

The following are the strategies for identifying relevant materials for school instruction;

1. Should be the type to arouse the interest of the students. Should be attractive and conducive for learning. e.g flowers, fruits, seeds, colours, fabrics, condiments etc.
2. Should be the familiar type that students are used to or have known in the neighbourhood or the locality. e.g common crops and livestock, food types local fabrics and textiles, paints and colours etc.
3. Must pose no threat or security problem to life of users. E.g. dangerous animals and pests e.g snakes, scorpion, etc.
4. Must be moderate and non-bogus (should be moderate).
5. Must bring satisfaction at the end of lesson
6. Must stimulate thinking and ideas in such way that all can participate. e.g class practical session in the pre-vocational lessons.
7. Must serve as a link between previous experiences and the present. The linkage must be very ideal and real.
8. Must be community based so that learning can still continue after wards outside classroom situation.
9. Must agree with the objectives of the unit being studied (no deviation at all).
10. Must meet the need of the students in practical terms.

Conclusion

Realia are used in instruction to give meaning to written and oral descriptions. They give credence to verbal medium when used and this is a sharp distinction from lessons taught in abstractions to students. Under the present dispensation of Universal Basic Education, which is education for all, proper attention should be given to the efficient use of realia to aid teaching effectiveness of pre-vocational subjects. Students learn more and better when;

- There is interest
- Needs are being satisfied
- Thinking is stimulated
- There is active participation
- Two or more senses are used
- A favourable climate of success is maintained.

For any communication to be meaningful the obvious and the less obvious aspects must be recognized, the approach to be used, the presentation and finally the summary, which brings all that has been learnt together. Strategies for identifying relevant instructional materials are such that will further aid the proper understanding of the concepts to be taught in the classroom the strategies must be identified and suited to local conditions in the neighbourhood.

Suggestions

The following are hereby suggested:

1. The training curriculum of competent teachers for the UBE should include detailed contents on all aspects of instructional materials viz; identification, use, storage, production etc.
2. There should be a re-training workshop for teachers on the identification, uses and storage of realia to improve their professional efficiency periodically.
3. The re-training workshop must concentrate on the community-based realia so that learning can still continue after classroom situation.
4. Since the use of these instructional materials aid retention of concepts, government should fund the availability of these realia for different uses in schools.
5. Students/pupils should be encouraged to develop realia related to topic for study. With this, all are brought into the learning environment.
6. Realia that are foreign or not available in the community should be made into models or diagrams. This should be funded by the government at a curriculum instructional materials centre of the Ministry of Education.
7. The presentation of realia during lesson must be mandatory as the presentation of lesson notes by teachers. This is to instill a professional responsibility on them.

References

- Allen, W.H. (1963). Appendix terminology Classified by areas. Audio-visual Communication Review. 2(1) 841.
- Dood, W.A (1970) *The teacher at work*. London. Oxford University Press.
- Ike, G.A. (1997). Graphic skills perceived as needed and possessed by Educational technology teachers in colleges of Education. Ph.D. Thesis Vocational Teacher Education University of Nigeria, Nsukka.
- Kaggwa, Norbert (1989) Communication for Adult Education; The artist's role in Communication and Visual Material Production. A paper presented at AALAE Conference in Njoro, Kenya. 9-10 August.
- McCormick, F.G. and Cox, D.E. (1980) Why Use Realia in Instruction? The Agricultural Education Magazine August.
- Schram, W.(1977).Big media, little Media, tools and Technologies for instruction, London: Sage Publication.
- Universal Basic Education (1998) Proposed Implementation Blueprint. Abuja. Federal Government Press