Availability and Utilization of Instructional Materials in selected Andragogical Setting in Ogun State, Nigeria

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Abstract

This study examined availability and utilization of instructional materials in selected andragogical settings in Ogun State, Nigeria. This was informed by the doubts and controversies that have attended the supply, improvisation and the uses into which adult learners and instructors have situated instructional materials in the andragogical process. The descriptive survey research method was adopted for the study. From a population of 1,452 adult learners and instructors, samples of 726 participants were selected through the proportionate random sampling technique. The questionnaire titled" Availability and Utilization of Instructional Materials Scale (AUIMS), r = 0.86 was used for data collection. Five research questions were raised and answered with descriptive statistics. Results showed that, instructional materials are very important in the andragogical process (86%), as it increases learners' understanding (72%), reinforces knowledge acquired (76%), increases adult learners' academic achievement (69%) and over all performances in the andragogical setting (66%). Use of instructional materials has significant impact on the level of academic achievement of learners. It was concluded that availability and use of instructional materials are vital of the sustenance of improved participation in the andragogical settings and the design, improvisation, uses and storage of these materials should be consistent with the selective interests and needs of the participants in the andragogical settings.

Key Words: Availability; Utilization; Instructional Materials; Andragogical setting; Improvisation.

Background and the Problem

Learning in all ages is considered fundamental human rights as it represents a basic human need. So, a deliberate attempt has to be made to highlight the significance of promoting the process among adults in all societies. For instance, the year 1990 was declared international literacy year following the Jomtien Conference that held in the reassertion of faith in adult learning and literacy education. It raised concerns for the provision of learning opportunities for all, including those who are excluded and unreached. Attention was also drawn to the need to link literacy to social, cultural and economic development aspirations of people, improve the quality of literacy programmes, teaching and enrich the literacy environment in developing nations.

It was in recognition of this that United Nations Economic Social and Cultural Organization (UNESCO) (2006) described literacy as a dynamic concept, formerly understood as just reading and writing and basic numeracy, the concept has now been enlarged to encompass a whole range of more complex and diverse skills and understanding. Unfortunately, while advanced nations are succeeding in their efforts to eliminate illiteracy, developing countries are not making much meaningful progress and one aspect of such defect is associated with the andragogical process.

The dangers of illiteracy in the 21st century are immense as presently experienced in state. To achieve modernization, accelerated transformation of the economic and democratization of development institutions, meaningful and sustainable literacy activities are the keys. This is because, no democratic government can thrive in the midst of illiteracy, and no economy has space for illiterate in the 21st century due to high technological changes as occasioned by globalization (Ogili and Nzeneri, 2001). The success of any illiteracy programme therefore, depends on the adequacy and how effectively the human and materials resources are deployed.

Gayne, Briggs and Wager (1992) pointed out that for adult learning to be effective, instruction must be properly planned and designed in a systematic way and that, the steps to instructional design models must include; (a) identifying the outcomes of instructions; (b) developing the instruction; and (c) evaluating the effectiveness of instruction. It is however observed that some adult literacy instructors have little or no idea about the established methods of andragogy, because, they are inexperienced (untrained) and as such, find it difficult to adapt perfectly to the settings.

Literature on the correlation between poor academic achievement and high dropout rate among adult learners show poor andragogical context lack or near inadequate instructional materials, and difficulty in getting required instructional materials or resources (Ellinton& Race, 1993; Akinyemi, 1992; Nzeneri, 2005; Mba, 2004).
Adult instructors are seen as planners and organizers of the learning environment who seek to effect change in the learner's behaviour, preserve attitudes and habits which are useful in any society and introduce new ideas and concepts (Zuofa, 2001). The adult educator is then seen as a resourceful manager of scarce educational materials and finances, in order to improve on the teaching-learning process.

Hence, instructional materials and learning resources are associated with objects, persons or other aspects of the environment which can be used to impact, or help in any learning activity. Instructional materials are intermediate or mediating materials used in instruction or teaching learners so as to make the learning objectives clearer and teaching easier. A careful explanation of a subject may not absolutely lead to a better understanding of that particular subject by adults, whereas, the use of teaching aids or instructional materials provides clarity on issues that are of learning interest to the adults (Knowles, 1996; Ezimah, 2004; Angaye 2002).

Presently, government and non-governmental organizations have established many literacy centers such as those managed by the agency for adult and non-formal education, national youth service corps, and mission literacy centres among others. In realization of the functions that learning aids to play in the classroom setting, the Federal Government of Nigeria (2004); in her National Policy on Education (2004) has stated categorically that adult educators will be required to participate more actively in the production and assessment of educational and instructional materials respectively as well as evaluation of technical innovation and new techniques. This position implies that the production of these resources that can be improvised at little or no cost could be undertaken by facilitators in the various andragogical settings. In addition, those instructional materials that are already produced for use at the literacy centres must be evaluated constantly to ensure that they remain useful, suitable and adequate for the purpose of sustaining employment-based skills.

Instructional materials are meant to serve adult educators who are constantly engaged in the andragogical process (Knowles 1996). This engagement is effective only to the extent that they apply the instructional materials. Thus, the national policy statement implies that facilitators should not only produce, but utilize instructional materials in the andragogical settings.

Instructional materials result in more effective learning of actual information in less time than verbalization. Mba (2004) agrees that picture as instructional materials can stimulate and help further study; help learners to take active interest in the topic presented development of emotional impact of the learners and affect their attitude towards what is portrayed. The usefulness of these materials depends on what the facilitators make out of them. Unless the facilitators use these materials and direct learners attention to what they should look for, the adult learners will not as much as intended from such materials.

The success of any literacy programme therefore depends on a resourceful facilitator who plans the instructional materials to be used for adults learning, and also, having experience in the fields of teaching or educating adults. Sadly to observe however that instructional materials are not readily available in most centres and so, no effective usage and the resultant effect is likely that the andragogical process is grossly compromised. Given the fact that the National Policy on Education, (FGN, 2004) provides that facilitators are to improvise and utilize instructional materials in the process of instructional delivery, it is very doubtful if instructional materials are adequately and effectively put into use at the various literacy centres for the benefit for adult learners. Consequently, since no empirical study seems to have established this fact, this study fills a gap in knowledge as it seeks to find out the extent of availability and utilization of instructional materials in selected andragogical settings in Ogun State, Nigeria.

Objectives of the Study

Arising from the above, it was envisaged that the following specific objectives must be achieved in the study among which are to:

i.   Find out the different types of instructional materials in use at the various andragogical settings;
ii. Establish the extent of regular applicability of such instructional materials by the instructors or facilitators;
iii. Determine the impact of the application of instructional materials on the andragogical settings;
iv. Find out the difference in the learning experience gained by adult learners who are exposed to such materials; and
v.   Determine the process of storage and maintenance of instructional materials at the various literacy centres.

Research Questions

Based on the above specific objectives, it was then questioned that;

1. What are the different types of instructional materials in use at the various literacy cent in the andragogical settings;
2. Do instructors demonstrate regular use of instructional materials in the adult learning process?
3. What are the impacts of the use of instructional materials on the andragogical setting?
4. Do adult learners who are exposed to instructional materials achiever more learning experience than those that are not exposed to instructional materials?
5. How are instructional materials stored and maintained for effective utilization?

Methodology

The research design adopted for the study was the descriptive survey research design. The design assisted the researcher to identify, observe, describe and analyse existing phenomenon on the basis of prevailing circumstances. It then enabled the researcher to draw inferences from the existing phenomenon and trends.

Population of the Study

The population of the study comprised all the adult learners and instructors in the 100 adult learning centres located at various andragogical settings in local government areas out of existing local government areas of the state. The estimated population for the learners was 1, 452 and 48 instructors respectively.

Sample and Sampling Techniques

The cluster and proportionate random sampling technique were used to select the sample for the study. Out of the 1,452 adult learners and 48 instructors from the 100 literacy centres, an equal proportion of 50% from each duster (centre) was selected for the study. In all, a total of 726 learners and 24 instructors were selected as participants for the study.

Instrumentation

The instruments for data collection were a self structured questionnaire and interview schedule. The questionnaire was to elicit data from adult learners while the structured interview was conducted among instructors. The questionnaire titled. "Availability and Utilization of Instructional Materials Scale" (AUIMS), comprised of two sections (A & B). While section A contained the demographic data of respondents, section 'B' on the other hand focused on question items for the treatment of the research questions raised for the study.

Validity and Reliability of Instrument

The test item in the instrument was validated through a cross-examination by peer review in relation to the research questions raised for the study. This was to ensure that the instrument was able to measure the variables expected in the study in terms of face, content, predictive, construct, and concurrent validities as expected. Thereafter, the reliability of the instrument was done in order to establish its consistency and adaptable to any given similar situation when applied. This was done through test re-test approach. After two tests, the items were then correlated to find the co-efficient value through the Pearson Product Moment Co-efficient alpha. A reliability value of 0.86 was established. Data analysis was carried out using descriptive statistics.

Results and Discussion

The results of the investigation showed that 522 (73%) male and 194 (23%) female adult learners participated in the study. The mean age of the participants was 48 years (male) and 52 years (female). The mean entry qualification for adult learning programme was primary school leaving certificate. The occupational affiliations of respondent were artisans (46%), farming (24%), petty traders (14%) and others (13%). The study thus shows that most of the adult learners were mostly engaged in the non-formal sector of the economy.

The research questions raised to guide this study were analyzed under the main themes of each variable, these are presented below:

Different Types of Instructional Materials in Use

A synthesis of the survey showed that the variable instructional materials included improvised drawings on cardboards, flip-charts, pictorial posters, and photographs from newspaper, realia, maps, black or chalk-board, flannel graph/charts. These are non-electric powered aids that are usually simplest and perhaps, the least prone to breakdown. However, the analysis showed that the quantum of these instructional materials was inadequate (86%), participants (62%) agreed that realia and improvised cardboards for the drawing of objects, images and cuttings were the most commonly used instructional materials.

Most of the instructors (78%) interviewed noted that since the centres were not regularly supplied with teaching aids and textbooks, it was inevitable for them to encourage the learners by designing instructional materials that are locally fabricated or improvised to ensure that their interest in learning is motivated and sustained. It was also found that, not much emphasis was laid on the use of instructional materials since; such centres could not be provided with requisite quantum of materials that could enhance the teaching-learning process.

Demonstration of Regular Use of Instructional Materials in Adult Learning Process or Setting

Evidence from the survey showed that most instructors depended on the chalkboard (66%) for writing, and charts (58%) for follow-up demonstration or pictorial display. Besides, the participants noted that, their instructors usually come along with drawings or chalkboards to show key objects that were associated with their occupationally-base subject matters. In specific, the participants were of the submission that their instructors had an excellent (53%), well (21%); fair (1 their instructors usually come along with drawings or chalkboards to show key objects that were associated with their occupationally-base subject matters. In specific, the participants were of the submission that their instructors had an excellent (53%), good (21%), fair (14) and poor (12%) demonstration of the use of instructional materials in the teaching-learning process. Consequently, it could be inferred that most of the instructors (82%) used available instructional materials effectively in their various centres to reinforce their instructional delivery process.

Important of the Use of Instructional Materials

The survey revealed that the composite (general) impact of the use of instructional materials among the adult learners was evident in their collective attachment to and dependency on the real experience gained when such materials were deployed into the andragogical setting. Specially, the respondents noted that it increased their understanding of the subject taught (72%), made them to easily remember the content of lesson taught (76%), and increased their pace of learning achievement (69%). The use of instructional materials also facilitated their retention rate (66%) as against those participants (34%) whose centres lacked the use of such materials in the andragogical setting.

Comparative Efficiency of Instructional Materials on Learners with Exposure Relative to those without Exposure

There are three variants that showed the comparative advantage of the use instructional materials. Participants in this study concluded that on account of their exposure, 64% participated "actively" when familiar objects (realia) were used. Many of the participants (52%) also recalled that they easily forgot subjects taught whenever the instructors did not use instructional materials. The survey also revealed that most learners (66%) had sustained interest in learning when instructional materials are used in literacy classes.

Storage and Maintenance of Instructional Materials for Effective Utilization

Storage of instructional materials is critical to the durability and replicability of such items in enhancing sustained use of available instructional materials.

In most of the centres visited during this investigation, it was discovered that the modes of storage were very primitive as most of the drawing were hung on the walls, covered with dust while some were not protected from harsh weather conditions. Infact, the instructors noted that poor maintenance of the available materials led to the accelerate decline in the amount of stock at the various centres. Investigation showed that (63%) of the respondents suggested that cardboard papers showing drawings should be kept in dry cupboard with nylon rapping. Also, the real objects should be regularly painted and stored in dry places where no insects could cause damage.

In general, instructional material in adults learning setting implies the production, use, storage and maintenance as much as appropriate to achieve effective result in the learning achievement of the adult participants. The resourcefulness of the instructors comes to bear when instructional aids become inevitably linked with effective learning achievements. This is premised on the submission of Mba (2004) that as complex as instructional materials may be, it revolves around people; ideas, procedures, devices, and institutions for analyzing the issues in discourse. Given the full senses of sight, smell, taste, touch and hearing, Kosemani (2002) observed that, teaching and learning processes in the andragogical that setting are more effective when the presentation of instructional or learning materials appeals to two or more of these senses.

It is against this background that, Akude (2004) submitted that, it is a strategy developed to solve problem of learning. It seeks to teach how to plan, develop, evaluate and manage the instructional delivery process effectively, and to also ensure optimal result of instruction for adult learners.

Conclusion and Recommendations

The study has shown that when instructional materials are effectively utilized, can help make learners understand abstract ideas and complex topics. The comparative efficiency of instructional materials in teaching learning is evident in its potentials of bridging the gap in communication between the instructors and learners. Thus, the learning ability of the adults is better reinforced with the use of instructional materials.

Recommendations

Among other things, it is advanced that:

  (i)   Planning the instructional materials on the part of the facilitators is very important in attempt to get good results as the outcome of the learners;
  (ii) Adult learners must be involved in the selection of materials that bear meaning and relevance to their learning interest;
  (iii) Facilitators must be knowledgeable enough in the demonstration or use of instructional materials;
  (iv) Instructional materials should be used in such a way that meaningful information are conveyed to the learners; and
  (v)   Agency for adult and non-formal education must update instructional materials in all the learning centres in the state.

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