THE APPLICATION OF THEORY AND PRACTICE OF EDUCATIONAL TECHNOLOGY TO THE TEACHING AND LEARNING OF ISLAMIC STUDIES

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Abstract.
Researches and observations have shown that Islamic Studies Student teachers and Islamic teachers who have been in service a long time rarely use instructional materials while teaching and they rarely apply any knowledge of educational technology to their teaching and assignments. Attempt is made in this paper to examine the concept of educational technology as a broad field of study, Instructional technology as a subset of educational technology and instructional materials as tools and materials of Instructional technology. The relationship between educational technology and Instructional technology is assessed coupled with the importance of educational technological materials to the teaching and learning of Islamic Studies. The paper also delves into the practical evaluation of student teachers' assessments of those who had their Final Teaching Practice Exercise in April 2009 at the Tai Solarin University of Education, Ijebu-ode, Nigeria. A few of the students from other studies conducted were of the opinion that educational technology was not relevant to them. This exposes their ignorance of what educational technology is all about.

Key words: Educational technology, teaching and learning, Islamic Studies.

INTRODUCTION

What is Educational Technology?

Technology is a systematic way of doing things by applying scientific and other organized forms of knowledge in the solution of problems for the improvement of the society. Relating technology to education, two concepts emerged according to Olowu F .A (2005). Technology in Education and Technology of Education. Olowu F A (2005) defines Technology in Education as, "the application of technology to all the processes which support education within institutions". He says, "It involves the use of teaching, machine or audio- visual aids to enrich teaching functions."

According to him, technology of education deals with methodology. This is characterized by the adoption of a systematic or process approach to instruction based on clearly stated learning objectives. To Olowu F.A (2005) "Technology of education is a behavioural science concept." Ogunranti (2005) also described educational technology as a "principle and method which bring together men and resources in a systematic bid to effectively resolve educational problems". He also expressed the view of Ademoyin (2005) who sees "educational technology as a systematic organization of men, machine, ideas and procedures in designing, planning, implementing and evaluating the teaching and learning process in a bid to promote effective learning".

What are Instructional Materials?

Instructional materials are the objects that are use in teaching and learning situations. They are items that the teachers use to pass instructions to the learners to facilitate teaching on the part of the teachers and also to facilitate learning on the part of the learners. Instructional materials are also referred to as teaching aids and they are divided into three categories namely:

(i)Visual Instructional materials: These are materials employed in a teaching and learning situation which can only be seen .They can only be visualized, they appeal to sight alone. These objects do not produce sounds and they cannot be heard. Examples of visual instructional materials include drawings, card boards carrying inscriptions, pictures, flash cards, photographs, calendars, diagrams, stickers, handbills, posters etc.

(ii) Audio instructional materials: These are materials that can produce sound but the speaker cannot be seen. These types of materials are equally used in teaching and learning situations and there are areas where they are of much relevance to specific topics where other materials cannot be employed for usage. For instance while teaching about the unity and omnipresent nature of Allah, some asked, "How can it be possible for one God to be present in all the places at a time? Those who asked this question based their argument on the reasoning ability of man and the logicality of such statement. Modern religious educators like other sound educational methodologists of the contemporary period agree that bringing visual objects to validate or answer the question raised above will not be appropriate. But a better, appropriate and adequate teaching material here can be a radio or telephone or tape-player.

When a radio is put on during a programme session like health talk. A medical doctor who is invited to the studio is giving a talk on Swine flu. Here is a man or woman behind the screen discussing very useful topic and giving beneficial information to the generality of the people. This single person cannot be seen by majority of the people listening to him except those who are in the studio with him. Also, the talk he is giving is getting across to many people in different distant areas at a time within the period when the talk is in progress. The logic is that here, only one person is involved, not seen, but he is heard by many people or that his presence is felt in many areas at a time and no one doubts his singleness and

existence. This logic is used to prove that God could be One only and at the same time, His presence can be felt anywhere in the world.

Another illustration can be drawn from the use of telephone when a person here in Nigeria is receiving call from University Sains Islam Malaysia. This person is only one and his presence is felt in Malaysia, and this same person can even be making call with other people in other areas at the same time. It is with the help of audio visual instruction that we have been able to establish the unity and omnipresent nature of God. Examples of audio instructional materials are radio, telephone, tape player, C D player, Cassette players, audio tapes, audio computers, audio discs etc.

(iii) Audio Visual Instructional Materials: The third group of instructional materials are audio visual materials. These are materials that combine both sounds and pictures. They are items that learners can see and at the same be heard. The best example here is the teacher who can be seen and be heard by the learners. These objects make learning real to the pupils. Examples of audio visual instructional materials are television, video C D player, video cassettes, computer systems, film projectors, CD Rom, Yahoo Messenger, Skype on the internet etc. Paquette Gilbert (2004) supporting the above classification also groups the instructional materials as reference materials combining information materials that are proposed mainly for the use of learners and instructors. He describes the samples of the three groups as texts, audio segments and images.

Relationship between Instructional Materials and Educational Technology.

Instructional Materials could be taken as materials or objects of instructional technology. These are audio visual aids, graphic or creative arts, photography, cartography, general methods of teaching, curriculum development and teaching aids etc. All these are items and issues related to teaching and learning situations. Instructional technology can be taken as components of educational technology and also a subset of educational technology. On the other hand educational technology is broader in scope than instructional technology. While instructional technology is the technology applied to instruction, educational technology is the technology applied to education. The differences between Instructional technology and educational technology are that while educational technology consists of elements like curriculum and instruction, administration, management supportive and maintenance components etc, Instructional technology consists of components like the teacher, learner, content, media, method and evaluation. Instructional technology helps learners improve reading and other skills. It removes anxiety, fears and boredom because many teaching aids are like games.

Relevance of Instructional Materials and Educational Technology in the Teaching and Learning of Islamic Studies.

Educational Technology was a concept that came into existence around 1950s. According to Berg, Gary A, (2003), research literature was common on the use of film and T. V in educational environments. Educational technology has been described as Systems Technology and this perceives teaching, learning and education as a whole unit. Ford, Nigel, (2008). Educational Technology is an open strategy for solving educational problems. Among the problems range between curriculum, educational materials, teaching aids and the likes. For instance, the study of instructional technology one hand and educational technology on the other has enabled us to identify some of the following problems facing the teaching and learning of Islamic studies in our schools.

(i) Lack of relevant textbooks relevant to the teaching of Islamic studies. Teachers and students face a lot of problems to locate textbooks to update their knowledge or get additional information on some of the topics entrenched in the curriculum they are going to teach for teachers and learn for students. Topics like histories of some personalities like Shitta Bay of Lagos and his contributions to the development of Islam in Nigeria, and a topic like Islamic philosophy have always posed serious problem to teachers and learners who cannot easily get textbooks or reading materials on such topics.

(ii) Overloading of the curriculum is another problem facing the teaching and learning of Islamic studies. A review of the junior secondary school Islamic studies curriculum or syllabus revealed that many topics have been loaded in the syllabus. Investigations revealed that those who prepared the curriculum or syllabus purposely did so because Islamic Studies is reflected as an elective subject at the senior secondary level of education and the university level too. So, according to Bidmos, M. A. (2003), their thought was that they would want to give the Muslim Children all the basic knowledge required in their life for the practice of their religion and for guiding their ways of life within three years of secondary education, so that if they did not offer it thereafter, they would have been well equipped Islamically. This eventually turned out to be a disaster in the sense that, the topics loaded in this three year secondary education syllabus cannot even be judiciously covered in a four year university education programme. Observation also confirmed that what most teachers do as a result of this is to abandon some of the topics not touching them at all. Where some of these topics were taught, they were taught with brevity and learners were not given adequate information. This is more dangerous than total ignorance. For instance, of what use will it be for a stored information on the system but when one opens the system to use the information , he discovers that half of the information is corrupted or deleted and cannot be recovered. Definitely the half information found cannot make tangible meaning and if care is not taken could be misinterpreted to suit a wrong purpose.

(iii) Another problem discovered was that of language of instruction and methods to be employed in teaching and learning situation. One now sees language as a strong tool in a teaching and learning situation. Teaching and learning involves communication, dialogue between the teachers on a topic with the learners. Where language is not in use, teaching and learning cannot take place because language is the weapon through which communication can take place .This language should be the one that is simple, explicit and understandable to the learner. Methods too involve ways or techniques or strategies to make teaching and learning effective. To Hughes- Hassell, Sandra, (2005), this depends on the age of the learner topic, level and background of the learner if the teacher wants to record achievable success. The learner is a strong determinant factor when selecting any method for use. Garcia Penalvo, Fancisco Jose (2008) , also expressed the view that, the use of additional learning style and personality elements of the cognitive profile will allow comparison between the measures and an extension of the individual differences.

(iv) The study of educational technology has confirmed the need for teachers to have at least little knowledge of their learners, if they would gain their concentration. This knowledge requires having the sociological and psychological information of their learner. This goes beyond academic information. It goes deep as probing into their parental care, developmental stages, health record, and diet habit. Hughes- Hassell (2005) is of the opinion that learners' characteristics should be considered when preparing for teaching. This is because educational technology addresses education through holistic approach. A physically unfit child cannot acquire any learning. So it is, a child that is hungry will not be able to assimilate because it will be difficult to gain his attention and concentration.

Educational technology makes learning to be real, concrete and immediate. Learners will acquire knowledge in real life situations rather than imagining and troubling their brain. According to Seidel Robert J, (2005), learning will be from simple to complex, concrete to abstract. It makes learning to be effective, easy to grasp, store in the memory and easy to recall what is learnt. This is possible because learners will see for themselves, hear and manipulate the items of instruction.

Educational technology helps to support and authenticate what the teacher says in the class. The educational materials employed in teaching help to validate the teachers' assertions and bring the learning to a real life situation. For instance, when teaching about the obligatory duties of hajj, the teacher brought into the class a Video – C D player showing all the important areas and activities performed in these areas. The students will be exposed to seeing the actual places and the pilgrims in action. Even though the students have not been to Makkah and Madinah before, they will be able to see real actions of hajj in progress.

The use of relevant educational materials to introduce, develop or conclude a lesson helps to arouse the interest of the learners , focus their attention on the lesson and motivate them into wanting to learn more. These materials provide experiences which may not be otherwise available to the learners. The hajj Video- C D which was shown the students for example will make learners have first hand information and experience of hajj areas without leaving their immediate environment. One other advantage of the educational technology is that it can be cost effective, help manage time and reduce risks and dangers. Some topics require that students should be made to visit particular places and areas to enhance their knowledge and understanding of such areas. For instance, during Ramadan, while teaching Tafsir, students may be required to attend lectures of notable Islamic scholars who reside in distant areas from where their institution is based. Instead of making about forty students undertake such journey because the scholar cannot be relocated to their institution, the teacher can otherwise produce a Video tape of the scholar, bring it to the class and play it for the students. This will have saved a lot of money, time, energy and risks which the students and the teacher would have been exposed to and at the same time, they will have a correct glimpse of the scholar and real taste of his lecture.

Educational technology can be used to simplify complex situations and topics. There are some tiny objects which may not be easily seen by the naked eyes. With the help of technology, it is easy to visualise these tiny objects. Through the use of educational technological materials, more people can be educated in less time from distant areas at the same time. In addition, learners are actively involved in the learning because they are the focus of the lesson. It equally increases their acquisition skills and competencies because they participate actively in the manipulation of instructional items.

OBJECTIVES OF THE STUDY

The basic objective of this study is to examine the benefits of applying the knowledge and use of educational technology to the teaching and learning of Islamic Studies. It is also to point out the need to include the teaching of educational technology in the curriculum content of Islamic Studies teaching. A look at the undergraduate studies programmes of most Nigerian universities reveal that they do not have provision for the teaching of educational technology in their curriculum. This study will point out the need to review this situation so as to include the teaching of educational technology curriculum in their syllabus in order to enhance the teaching and learning of the subject.

RESEARCH QUESTIONS

Questions which the researcher will find answers to in this study will include:

1. What is educational technology?
2. What are instructional materials?
3. What is the relationship between educational technology and instructional materials?
4. What is the relevance of educational technology to the teaching and learning of Islamic Studies?

METHODOLOGY AND SAMPLING

Evaluation of Islamic Studies Students Teachers on Teaching Practice Exercise.

The following research was conducted among the final year degree students of Islamic Studies who had their Teaching Practice Exercise in April 2009 at the Tai Solarin University of Education, Ijebu-ode, Nigeria. The exercise lasted for five months. Areas of focus were teaching methods, use of Instructional materials, lesson plan, objectives, teacher's personality, and class control and pupils involvement in the lesson and mastery of the subject matter.

Instruments used.

Assessment sheets of ten lecturers / supervisors who assessed ten (10) Islamic Studies students were used for the study. The assessment format prepared by the Tai Solarin University of Education, Ijebu-ode, Nigeria was adopted for use. This covered the specific areas which the university wanted the students to be rated.

Tai Solarin University of Education Practical Teaching Assessment Form.

Items of scoring	Marks Obtainable	1st Stud	2nd Stud	3rd Stud	4th Stud	5th Stud	6th Stud	7th Stud	8th Stud	9th Stud	10th Stud	Total mks	%
1. Lesson Notes: Statement of objectives. How related to instructional materials.	10	4	3	4	6	3	5	5	6	4	5	45/100	45
2. Presentation / motivation of learners. Relationship between the instructional materials and Pupils' activities.	10	4	4	4	4	4	4	5	4	5	6	44/100	44
3. Subject Mastery and use of Instructional materials.	20	8	6	8	7	7	8	7	8	7	8	74/200	37
4. Teaching Technique / Teaching Methodology and judicious use of instructional items.	15	8	7	7	7	7	8	7	8	8	8	75/150	50
5. Questioning Technique and students' interaction with instructional items.	10	4	4	4	4	4	4	4	4	4	4	40/100	40
6. Communication and effective use of educational materials.	10	5	5	5	5	6	5	6	5	5	6	53/100	53
7. Class Management and pupils' response to instructional items.	10	3	5	4	4	3	5	3	4	4	3	38/100	38
8. Teacher's Personality.	5	3	3	2	3	3	2	3	2	3	2	26/50	52

9. Evaluation and suitability of instructional items to lesson objectives.	10	3	5	3	5	4	6	5	3	4	3	41/100	41
Total	100	53	46	49	49	49	50	48	51	48	52	1000	49

DISCUSSION OF FINDINGS

1. **Lesson Note**: Lesson note is an important document for teachers in the Primary and Secondary levels of education. Under the lesson note, features scored were statement of objectives, relationship between objectives and instructional materials, and how measurable were the objectives. This group attracts 10 marks. On the average, scores of the each of the candidates were between 3 and 6 over 10. The aggregate score was 45 over 100 (45%) reflecting a fair performance on the part of the students. If ten supervisors could come out with this range of scores which was done at different places and different times without the supervisors comparing notes, it showed that a fair performance was reflected. The supplementary comments given by the supervisors was that the students scored such marks because of the inadequate objectives stated. Objectives set by some of the students did not take care of the Bloom's taxonomy behaviours which ideal objectives were to cater for. More so, instructional materials to use would reflect on the stated objectives. This as well was not catered for.

2. **Presentation / Motivation of Learners**: Under this group, scoring focussed on Introduction of the lesson, recall of previous knowledge, how the instructional materials matched pupils' activities. The total mark obtainable in this group was 10. The average score recorded by the student teachers was 4 over 10. (44%). The supervisors commented that this performance was so because pupils were not involved in the lesson at all simply because the teachers assessed monopolised the lesson by doing much talking all through. It was also observed that their lesson could be said to be teacher centred rather than being child centred. In essence, teachers supervised did not use instructional materials at all.

3. **Subject- Mastery**: Under this heading, scoring was concentrated on mastery of subject matter, content, demonstration of mastery and use of instructional materials. The highest score under this group was 8 over 20 which was a very low mark in relation to 20 marks obtainable for the subject mastery. All the ten supervisors whose scores were used in this study commented that the student teachers did not use instructional materials at all. This was responsible for their low score because nothing could be scored for instructional materials. Altogether, 74 marks, (37%), were scored by the ten candidates over 200 marks obtainable in the group.

4. **Teaching Technique / Teaching Method**: Students scores focussed on relating content to learners' experience, judicious use of instructional items in relation to students' experiences and background. The highest score obtainable here were 15 marks and each of the candidates' scores ranged between 7 and 8. Altogether, the ten candidates scored (50%), 75 over 150. One would not expect the performance in this situation to be marginal to the previous one on subject mastery. This is because while considering the method for use and how to relate learning to learners' experience and background, one would have equally considered the teaching aids that would be appropriate. But where it is recorded that teachers under study did not use instructional materials, one would not expect a better performance on the part of such teachers and a better way of relating content to learner's experience.

5. **Questioning Technique**: Questioning has been referred to as a strong tool to sustain and retain the attention of learners in the process of teaching and learning situation. 10 marks were earmarked for this alone because of its importance. From the assessments of the lecturers involved in this study, all the student teachers examined scored 4 marks each all through amounting to 40 over 100 marks being (40%) of the total mark obtainable for Questioning technique. The comments written by the supervisors indicated that the use of instructional materials would have assisted a great deal and would have facilitated the questioning technique had it been that they were duely provided and effectively used.
6. **Communication**: Communication refers to dialogue or transfer of message from one end called the teacher to the receivers who are the learners in this context. Where there is communication breakdown, teaching cannot take place. Hence, communication plays a vital role in the teaching and learning situation. However, for the communication to be effective within the classroom environment, this cannot be done without judicious use of educational technological materials. The responses recorded by the students teachers supervised indicated that their performance was just a little above average. Their scores ranged between 5 and 6 marks over 10 (53%). A further confirmation that no matter how skilful one may be in communicative ability, entirely making it verbal or oral without the use of instructional materials cannot serve the required purposes in the teaching and learning situation.
7. **Class Management**: Students' scores under class management centred on class control, pupils response to instructional materials. Like the initial scores, the range of scores for class management was between 3 and 5 marks over 10. 38marks (38%) was recorded altogether over 100 marks obtainable in the group. This is a performance below average. The supervisors commented that lack of non-use of educational instructional materials affected the performance of the students negatively. According to them, it was observed that apart for a few questions asked verbally by the teachers, the pupils had nothing to respond to and their comment was that the class could not be said to have been well managed judging from the silence observed from the pupils.
8. **Teacher's Personality**: This includes the teacher's appearance, how neat and smart the teacher is, his comportment, how he behaves and relates with the learners. The teacher is a model for the learners, the way he dresses, speaks, walks, behaves, teaches and relates with the pupils will all have influence on the students. Pupils will imitate and emulate him in nearly everything he does. This is why teachers particularly the teachers of Islamic Studies should be disciplined and more careful in the way they behave and react to issues and events. An Islamic Studies teacher in particular holds a delicate position because of the subject he teaches. He projects the religion of Islam and what he does will be ascribed to the religion. He should be careful not to dent the image of the religion he professes and not to dent his image too. The mark obtainable under teacher's personality was 5 totalling 50 for all the 10 candidates. Students recorded fair performance (52%) indicating that they were all conscious of their dressing and behaviour in their school of practice.
9. **Evaluation**: Areas of focus under evaluation was suitability of instructional materials to the attainment of stated objectives. Obtainable score was 10 marks giving cumulative total of 100 marks for the group. Students scored between 3 and 6 marks and the total score for the group was 41 over 100 (41%). This was a poor performance and a confirmation that no instructional item was considered while preparing the lesson objectives.

Recommendations:

Generally, the overall performance of all the ten candidates involved in this study indicates that when this performance is viewed vertically and horizontally, it resulted in 49% a low performance not good enough. It was also observed that, the low performance recorded was

due to lack of non-use of educational technological materials in their teaching. This again points out the need and inevitable application of educational and instructional knowledge in the teaching and learning of Islamic Studies.

Following the performance of students' teachers and subsequent responses recorded, it has been established that what was generally responsible for their low performance could be attributed to lack of use of instructional materials. It is therefore of paramount importance that students of Islamic Studies should be exposed to the knowledge of educational technology. Certain terminologies which are inherent in educational technology such as instructional technology, instructional materials should be given adequate attention. Also terms like teaching aids, audio instructional materials, visual instructional materials and audio-visual instructional materials should be well treated and their relevance in Islamic Studies drawn.

Conclusion: It is observed that presently, students are exposed to a little knowledge of general educational technology but the discovery made was that the ones they were exposed to was not enough to adequately groom them for what they would require in the teaching and learning situation where the application would be needed. From the study conducted, students were of the opinion that educational technology was not of much relevance to them. This exposes their ignorance of what educational technology is all about. However, with the establishment of this study, educational technology has become imperative to the training, teaching and learning of Islamic Studies.

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