

## **TEACHERS' EXPERIENCES IN EDUCATIONAL MULTI-MEDIA CONTENT DEVELOPMENT**

### **The case of Tanzania's Institute of Adult Education**

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#### **ABSTRACT**

This paper is an academic observation of an Educational Multimedia Content development-training programme funded by the Commonwealth of Learning (COL) in Tanzania. This project focused on skills development in script writing and in radio and video programme development, aimed at transforming selected subjects from text to multimedia content. The ultimate objective was to enable better and easy understanding of the lessons, for Open and Distance Learning learners. A group of 25 teachers from the Tanzania's Institute of Adult Education participated in the training and development of the programmes. In this paper the author shares the new and exciting experiences of teachers on adding such skills to their professional career, as the development of these programmes. Author's own participation and interviews with peers in the project were employed as methods of data collection. A total number of 13 videos and 12 radio programmes were developed over the span of six months. Five school subjects were covered, namely: English, Mathematics, Biology, History and Geography. Some of the challenges encountered in developing the programmes included: difficulties in developing a video idea from the textbooks; working as a group online in collaboration with the training consultant in another country especially in script development; memorizing words (as actors playing in the productions) and saying it on camera; and time constraints (working under pressure). The author recommends to African nations and educators in other parts of the world to access these multimedia-learning programmes online since they are OER, and to use them in their context. The video and radio programmes reflect the Tanzanian context to some extent, but most of the lessons are general for use by any country.

The paper concludes that skills development on technological innovations among ODL teachers in both formal and non-formal education system is essential towards attaining EFA goals.

**Keywords:** Multimedia, open and distance learning, education.

## **INTRODUCTION**

Educational multimedia may be referred to as a means to deliver education using a combination of various media. It involves a combination of video, graphics, learning interactive technologies, animations and audio. According to various scholars educational multimedia has been proved a most successful technology in enabling learners to internalize learning. It is from the strength of educational multimedia where the Tanzania Institute of Adult Education came up with an idea to transform its text learning materials to multimedia content.

Tanzania's Institute of Adult Education (IAE) grew out of a section of Extra-Mural Studies of the Makerere University College of East Africa in Uganda, which later became a department of the University College of Dar es Salaam in 1961(IAE, 2011). The title -- Institute of Adult Education was made official in 1965. In 1975 the Institute became an autonomous Institution by the Parliamentary Act No. 12 of 1975, under the then Ministry of National Education (IAE, 2008). As part of its entitled obligation, Institute of Adult Education provides secondary education through Open and Distance Learning in the country. Considering emerging technologies the Institute has been investing in skills development for teachers facilitating Open and Distance Learning programmes to ensure quality. In the academic year 2011/2012, Institute of Adult Education hosted a training programme on Educational Multimedia content development, which was made possible with generous support from the Commonwealth of Learning. . This aimed at equipping teachers with knowledge and skills to produce video and radio programmes for secondary education learners studying through Open and Distance Learning.

## **PURPOSE AND METHOD**

In this paper, I as one of the training beneficiaries want to share my and my colleagues' real experience at the Institute of Adult Education, in learning how to make Educational Multimedia programmes. The experiences are drawn right from theoretical to practical parts of script writing, video and radio programmes development.

Interview method and my evidence as a participatory observer in the workshops were employed to collect data. These workshops involved twenty-five (25) participants who were split into five subject groups, so for this paper,

I interviewed the five representatives (one per group) who had leading roles during the training activities. I was also a representative of a group, but interviewed someone else on my behalf. Since it is important to protect the identities of those who participated in the research (Clark, 2006), the interviewed participants are coded C1 to C5.

## **THE PROCESS**

The training stretched over four weeks of (interrupted) face-to-face training and practical sessions, led by a Commonwealth of Learning consultant from Namibia.

In-between the face-to-face sessions was about six months of practical group work when participants developed radio and video scripts which they would email to the consultant for editing. Participants worked on five modules/subjects namely; Biology, Mathematics, History, Geography and English. Five participants were allocated to work on each module/subject based on their area of specialization. The first week, in mid-October 2011, was a theoretical training session, covering basic knowledge of Educational Multimedia content development. Towards the end of the week, participants started writing scripts for their respective modules/subjects. The following week participants started with practical video and radio programme recording, with each of the five groups, producing 5 programmes – thus 25 lessons in total. Thirteen (13) out of 25 planned video and radio programmes were completed in these first two weeks.

The consultant then left and participants had to work on their own for the remaining programmes, although with scheduled online support of the training consultant in Namibia. After three months of online support, the trainer returned for another two weeks of face-to-face practical training from late January of 2012. During this time, the participants had an opportunity to evaluate the 13 completed programmes and could finalise the 12 remaining ones. Following this second round of training sessions, the participants again worked on their own for about two months from February to March 2012, again with online support from the consultant to complete the programmes.

Finally, the target was achieved - the 25 programmes (13 video and 12 radio programmes) were completed. As said, the whole process took roughly six months.

## **TEACHERS' EXPERIENCES**

Teachers experienced new knowledge and skills in script writing, video and radio programme recording, and radio programme editing. Teamwork and online interaction were also an exciting experience to most of the participants. Below are highlights of some of the experiences and lessons learnt.

### **Script Writing Experiences**

For many, script writing was the most difficult task in the training process. Transforming the text modules into a video or radio script needed extra skills. It was difficult for participants to figure out for example how the video should eventually look like, to conceptualize and visualize it in script development. Das (n.d) argues that a good writer should be able to read the script she/he has written and "see" it audio visually in his or her mind, the way that the audience will see or experience it when viewing or listening to it. With regard to their experience in script writing interviewed participants had this to say:

*"...I am happy with our video but I wish I could have known how it would look like on the screen, because I could have done better in our script...anyway, my point is, after I have watched our video I am now confident that I can write a better script because I can imagine the video right from the writing ...". C4*

***"...there was too much argument in our group on what and what not to write on the scripts...we had to think and rethink and constantly challenge what we had in mind...and sometimes we failed to even come up with an idea to write down...transforming text into video needs creativity...you need to insert things that are not visible or tangible but just coming from your mind, this is difficult. And remember the video needs to be interactive and speaking directly to viewers...". C5***  
***"Scriptwriting gave me hard times...it was actually very difficult to transform the text materials to a video or radio programme". C2***

Experience indicates that script writing for video needs different skills from that of radio programme. Video script for educational multimedia programme has to show what to be heard and what to be seen on screen while radio script shows only what to be heard.

Radio script therefore, appeared to be complex among workshop participants because it deals with listeners and has no visuals to activate learners.

### **Video Recording Experiences**

Those who had to act as actors and actresses found that doing things in front of a camera is not easy. Some actors were very nervous when thinking of the video recording. Sometimes group members had to encourage each other to avoid poor performance on camera. One of the actors (C4) said;

***"I was always in tension because it was my very first time to act on camera...I actually spent the whole night memorising the words from my script so that I can say it well on camera, yet I was making a lot of mistakes during recording - something which made me embarrassed sometimes... the camera person will always say, "take two" and then "take three"...up to "take six" which implies that I had to repeat the actions for the second time, third and up to six times to get a better shot..."***

***"Nafasi nyingine ni ngumu sana kuigiza. Mfano mimi nilipewa kuigiza sehemu ambayo nilitakiwa kukasirika lakini sikuweza kufanya vizuri na kulazimika kurudia rudia sana kwa vile kuvuta taswira ya uhalisia ilivyotakiwa ilikuwa ngumu kutokana na ukweli kwamba mimi nilivyo tu huwa ninatabasamu wakati wote!..." C1***

[Literal translation: Other positions are very difficult to act. For instance I was assigned a role to act. I was supposed to act "annoyed" but failed to play it well; and I had to repeat the act several times because it was difficult for me to imitate the real situation stated on the script, because naturally I am always smiling! ]From the video shooting exercise we learnt that one must plan and anticipate everything beforehand. Things like props, actors, the cameraperson and other things needed for filming a scene must be prepared well in time.

*"...I came to learn that video recording is an integration of various skills, knowledge, a team of experts, surroundings, climate, legal issues, financial aspects, administration, directorship and many other things all together...it's just a huge thing that needs proper preparation and coordination - otherwise it will take too long time to make one video". C4  
"Nilichojifunza ni kwamba video ya kuelimisha inatakiwa iwe interactive na yenye kuonyesha uhalisia". C1*

[Literal translation: What I have learnt is that, educational video programme needs to be interactive and reflecting reality.]

### **Radio Programme Recording Experiences**

Radio recording was done at EKV studio of Institute of Adult Education. The recording of narrations was far easier than the video, because much less is involved, and the narrators and actors are not visible to the audience. However, recording was not so easy in the case of dialogues, where narrators had to discuss or argue issues. It was challenging to have the voices to reflect the real situation. In most cases, narrators had to say sentences again and again to get it right. Although this task was tedious also because it was the first time for teachers to do a radio programme, participants were relieved because they could do it with their scripts right on their tables. One of the participants (C5) had this to say,

*"I liked the idea of recording in our studio pretending that we were at a certain location! We didn't have to bother moving around streets and homesteads for recording. Instead ambient sounds were to be collected later and mixed with our voice..."*

### **Audio Editing Experiences**

Workshop participants managed to download a free sound-editing programme from the Internet for sound editing. With instructions from the training facilitator, each had a chance to practice editing their radio-recorded clips.

However, time was so limited that not all participants were able to fully practice the editing. With this sound-editing programme, participants came to learn that in the recording process one should not worry too much about the errors made, because the unwanted sounds will later be removed when editing.

### **Teamwork and Online Interactions**

Working as a team and especially in groups was a successful approach. Teachers with similar professional background and experiences were grouped together to allow effective sharing and contribution especially on script writing. Each group member was assigned a part to play in the programmes. All members as a team became actors and actresses and this made everyone feel responsible and owning the programme. Working as a team however, was a challenge especially on getting everyone in time for a group work. All workshop participants work in the same 3-storey building of Institute of Adult Education but it was difficult to meet all at one point in time.

This was because the Institute's tertiary conventional classrooms were going on-and all workshop participants were lecturers in these classes. Participants were only exempted from work during the face-to-face training when the consultant was there-but during the in-between periods they had to resume their normal duties. With this situation, teamwork was largely affected. The following quotation reflects how the situation affected the teamwork.

*"I remember writing one of the scripts alone because other group members were always busy on their desks accomplishing their other official duties..." C1*

Workshop participants experienced video conferencing with Skype when communicating with the consultant in Namibia and Commonwealth of Learning in Canada. To most of them Skype was a new thing and they had to learn how to use this communication technology. Due to too few computers among participants and Internet connectivity problems, group members had to gather themselves in one member's office to Skype with the consultant.

In most cases the consultant had difficult times to have Skype sessions with the groups though she had a prior planned schedule known to all group members. Regardless of challenges involved in accessing Internet, using Skype nearly every week, unknowingly added important e-skills to participants as it is well known that Skype is a good tool for teacher – learner interaction in Open and Distance Learning.

## **LESSONS LEARNED**

Making an Educational Multimedia programme is costly. It involves costs for a quality studio, scriptwriters, editor, cameraperson, good actors, props and many other related costs. Proper planning may address the financial aspects in a broader sense. It is important to use teachers (lecturers) when developing Educational Multimedia programmes. One participant said,

*"I think the idea of having teachers writing scripts and making videos for their learners is a good thing and should be spread to other academic institutions. This is because teachers have excellent writing and pedagogical skills that they can easily employ when making the programmes...they are also the ones who know their learners' learning needs". C4*

During evaluation and after watching some of the produced programmes, it was very clear that learners could learn better from video than from radio or text materials. Yes – radio is easier to produce, but video holds learner attention much better, so the investment is validated. This is because learners can see the real situation on screen. With video, a combination of graphics, sounds, voices, pictures, animations and text makes it the best learning tool to use in Open and Distance Learning.

## CONCLUSION AND RECOMMENDATIONS

Skills development on technological innovations among teachers in both formal and non-formal education system is essential towards attaining Education For All goals. Teachers must be part and parcel of technological advancement to ensure holistic development approach. Now it is evident that teachers facilitating Open and Distance Learning programmes at the Institute of Adult Education can now design and develop Educational Multimedia programmes on their own. This implies that Commonwealth of Learning's investment on the programme has made a sustainable impact to the Institute and the country as a whole.

I recommend to African Nations and other parts of the world to access these multimedia contents online since they are Open Educational Resources - and to use them to supplement classroom teaching. I believe countries may use these programmes as they are for their schools, but where curricula differ, others may like to use them as reference material when developing their own programmes fit to their context.

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