EFFECTIVENESS OF VIDEO CONTENT MANAGEMENT TRAINING PROGRAMME ON TECHNOLOGY

MEDIATED TEACHING AMONG

B.Ed. TEACHER TRAINEES

FINAL REPORT

ON

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INTRODUCTION

The quality of education mainly depends on the efficiency and effectiveness of teachers. Teacher training institutions are faced with the challenge of preparing new generation of teachers who are technically so advanced that they could easily make a mark of their own in the digital era. Teacher education programs have still not succeeded in producing a teacher well equipped for a technologically enriched classroom in spite of the advances in the ICT. Hence digital learning environment should be offered to the teaching community in such a way that they become masters in planning and presenting such technology-mediated teaching and learning. To increase the involvement of teachers, they should bring in their own ideas and imagination into the materials. A teacher should remember that now the classrooms are no more a traditional classroom of desks, chalkboard, and instructor. Instead, it is individual and small group stations containing computer, LCD Projectors, Interactive White boards etc to fill the room. Technology has now blossomed up with such miracles that classrooms are mere concepts that meet over the internet as "Virtual Classrooms". This points out the use of video and other media as educational tools in the classroom.

Brain research has raised awareness that it is important to create associations that "link new learning to something that is personally relevant to the students" (Wolfe, 2001).This is an effective way to make meaning and therefore build synapses in the brain. When children see photos or videos of themselves, the material becomes personally relevant and meaningful, thus contributing to learning by strengthening synaptic connections. This implies the need for use of technology to integrate curriculum with the still and moving videos of and around the child. Since Pre-service training programmes are preparing the teachers of tomorrow, there is a need of in-depth training so as to gain skills in expanding their use of digital cameras and the relevant computer programs for editing and authoring such videos.

"If you are a teacher educator, you cannot afford to leave it (the integration of computers) to the professor who teaches a class on technology" (Leu, 2000).

NEED AND SIGNIFICANCE OF THE STUDY

Technology is reshaping the destiny of education. In 1970s technology was considered only as a subject in which, we studied about machines. Then, we adopted technology as a supplement to teaching and learning. But now the concept has been changed and there is a flawless integration of technology into our educational system. The success of this integration depends upon the extent to which future teachers are being exposed to technology in their classes. Training must be provided to teachers in the use of these technologies and must be coordinated with concepts taught in their classes.

Pre-service teacher education has two aspects - theoretical studies and practical activities. The theoretical components help the teacher trainees to equip themselves with the knowledge of various dimensions of teacher education and the practical components help them to acquire the essential teaching skills. In the new era the teacher should function as presenter of information initiating the learning process. They must be technologically skilled so that they could effectively mine the data required for their theory part and should correlate and reproduce them integrating different aspects in such a way that it either replicate the same situation or provide the necessary experience in a visual way that retains in their memory and make the things more clear. It is not always possible to take the child to the real situation either due to the time and money constraints or due to some other practical difficulties. In that sense it is always preferable to give the exact video replication of the incidence in a required and controlled manner with the addition of other related works. More over this technology helps to trace the path from its past in the history to the recent development of the topic anywhere in the world. It also helps the teacher to prepare and present the event by themselves.

Linda Good (2008) in her book on Teaching and Learning with Digital Photography: Tips and tools for early childhood classrooms cited that a teacher in Hong Kong published a teacher made children's book based on the nursery rhyme "Mary Had a Little Lamb" in which she used photos of children from her class and images of animals downloaded from the Internet paired with simple lines of patterned text resulted in listening to the story read to them multiple times for the children.

The videos are valuable tool for classroom instruction as it is possible for various audio- visual experiences to be produced, stored, and retrieved as needed. Teachers and students may use pre-packaged materials of their own. Teachers need to plan ways to integrate the new video technology into the curriculum and help students interpret "the electronic images smashing around them." Like it or not, students are immersed in television and video viewing; thus, there is a need to "train children to become critical video consumers who are literate in 'reading images" (Adams and Hamm, 1987). Teachers require assistance, in finding new methods to manage video contents and to help students in enhancing their critical viewing, aesthetic, and thinking skills in a TV- and video-dominated culture.

There are a number of characteristics of video that have the potential to make videos more cognitively salient and presumably more effective as teaching-learning tools than their written counterparts. The video format promotes learning by supporting a viewer's cognitive processing and development of detailed mental representations in several ways: The spatial and dynamic (moving) quality of video makes scenes richer and more realistic, contributing to the authenticity of what is captured (CTGV, 1990). Events and contexts that are seen as authentic are usually encoded easily into memory because they are believable to the viewer and can therefore be readily connected to prior knowledge in existing mental representations (Baddeley, 1990). Video's audio-visual format also allows the viewer to encode the events portrayed in both visual and verbal modes (Paivio 1971, Dual code theory), unlike written cases, in which only verbal encoding is possible. Dual encoding promotes understanding over and above verbal encoding alone (Clark & Paivio, 1991).

STATEMENT OF THE PROBLEM

The investigation is stated as "**EFFECTIVENESS OF VIDEO CONTENT MANAGEMENT TRAINING PROGRAMME ON TECHNOLOGY MEDIATED TEACHING AMONG B. Ed. TEACHER TRAINEES**."

OBJECTIVES OF THE STUDY

The present study is designed with the following objectives

1. To assess the extent of awareness in Video Content Management among teacher trainees at secondary level.

2. To assess the extent of dimension wise awareness in Video Content Management among teacher trainees at secondary level.

3. To compare the mean scores of awareness in Video Content Management among teacher trainees at secondary level with respect to University Syllabus followed, Qualification and Additional Computer Courses attended.

4. To develop Video Content Management Training Programme with a view to enhance the abilities of teacher trainees at secondary level in Technology Mediated Teaching.

5. To test the effectiveness of Video Content Management Training Programme on Technology Mediated Teaching of teacher trainees at secondary level.

HYPOTHESES OF THE STUDY

The hypotheses formulated and tested were the following

1. The extent of awareness in Video Content Management among teacher trainees at secondary level is average.

2. There will be no significant difference in the mean scores of awareness in Video Content Management among teacher trainees at secondary level with respect to University Syllabus followed, Qualification and Additional Computer Courses attended.

3. There is no significant effect of Video Content Management Training Programme on Technology Mediated Teaching of teacher trainees at secondary level.

METHODOLOGY

The study was conducted by employing the Survey cum Experimental design. A survey was conducted to assess the extent of awareness in Video Content Management among teacher trainees at secondary level giving due importance to sub samples.

Forty teacher trainees at secondary level was selected as the experimental group and a pre-test was conducted for them on Technology Mediated Teaching after having training in the existing method of study. The awareness and skill in Video Content Management were pretested using Awareness Test in Video Content Management and Video Content Management Skills Inventory.

Training modules on Video Content Management were developed and then it was implemented for the experimental group after administering the pretest observation using Observation Schedule on Technology Mediated Teaching. After the training programme, post test is conducted to measure the effectiveness of the programme on Technology Mediated Teaching using the same Observation Schedule. Post test was conducted to ensure the awareness and skill in Video Content Management using Awareness Test in Video Content Management and Video Content Management Skills Inventory respectively.

SAMPLE

Sample for survey in the study consists of 190 teacher trainees at secondary level from Mahatma Gandhi University and University of Calicut. The sample was selected by random sampling technique.

Forty teacher trainees were selected as the experimental group.

TOOLS USED

The tool used for the study was

- AWARENESS TEST IN VIDEO CONTENT MANAGEMENT prepared and standardised by the investigator.

- VIDEO CONTENT MANAGEMENT SKILLS INVENTORY prepared and standardised by the investigator.

- OBSERVATION SCHEDULE OF TECHNOLOGY MEDIATED TEACHING prepared by the investigator.

STATISTICAL TECHNIQUES USED

The main statistical techniques employed was

- Percentage Analysis

- Test of significance of difference between mean scores of large independent samples.

- Paired t-test

MAJOR FINDINGS AND CONCLUSIONS OF THE STUDY

The major findings of the study revealed from the statistical analysis are the following.

1. The extent of awareness in Video Content Management of teacher trainees is average and only a small percentage is having high awareness in Video Content Management. This may be due to the avoidance adopted in the curriculum of Teacher Education towards the practices of Video Content Management.

2. The dimension wise analysis also shows that the extent of awareness in Video Content Management along various dimensions; Basics of Computer, Internet and Visual Content management is average among the teacher trainees at secondary level. This may be due to the lack of stress given to the theory and practices of educational technology in the curriculum of Teacher Education at Secondary level.

3. There exists no significant difference in the mean scores of awareness in Video Content Management among teacher trainees of secondary level with respect to University Syllabus followed. This points out the need for a common change in the syllabus of different universities as per technological demands of this digital era.

4. There exists significant difference in the mean scores of awareness in Video Content Management among teacher trainees of secondary level with respect to Qualification. The extent of awareness for teacher trainees with post-

graduation is significantly higher than teacher trainees with graduation. This may be due to the computer knowledge provided in the post- graduation courses as part of their curriculum. More over the dissertation work or the project work done as part of the post graduation clearly generates some awareness in the retrieval and management of contents.

5. There exists significant difference in the mean scores of awareness in Video Content Management among teacher trainees of secondary level with respect to Additional computer courses attended. Therefore it can be concluded that the extent of awareness for teacher trainees with Additional computer courses attended is significantly higher than teacher trainees who have not attended Additional computer courses. This may be due to the computer knowledge provided in the Additional computer courses as part of their curriculum.

6. The training package was effective in terms of enhancing the awareness in Video Content Management of B.Ed. teacher trainees. It is recommended to introduce the importance of video and visuals in learning and to generate awareness in the management of video contents including its production and presentation.

7. The training package was effective in terms of enhancing the skills in Video Content Management of B.Ed. teacher trainees. The theoretical knowledge will not be adequate to bring up the skills. Therefore it is recommended to provide sufficient time in the curriculum for practising so as to develop the skill in Video Content Management.

8. The training package was effective in terms of enhancing the Technology Mediated Teaching of B.Ed. teacher trainees.

9. The dimension wise analysis shows that the training package was effective in terms of enhancing the Classroom Teaching of B.Ed. teacher trainees.

10. The dimension wise analysis shows that the training package was effective in terms of enhancing the Technology Integration of B.Ed. teacher trainees.

11. The analysis points out that the classroom teaching became more effective when technology was integrated with the contents and practices of teaching. Technological integration with special emphasis to videos enriches not only the contents but the behaviour and practices of teaching.

SUGGESTIONS FOR FURTHER RESEARCH

- Replication of the study can be on In-service teachers at Secondary and Higher Secondary Level.
- Replication of the study can be on pre service teachers at Elementary Level.
- The study can be extended to other areas of Multimedia.
- A study of the relationship between Video Content Management and Creativity of prospective teachers with special reference to Lesson planning.

CONCLUSION

Video-viewing can have a role in actively engaging thinking among learners, provided there are discussions before, during (while pausing the video), and after the viewing, and provided teachers discuss with learners what to look out for while watching, and perhaps even give students graphic organizers that will scaffold the activity for the learners.

Video-viewing as a learning tool however falls far short of what students can accomplish when they are empowered with video recording equipment in their hands. The NCF 2005 states that students should be given access to multimedia production equipment to "mix and make their own productions" to present their experiences and "explore their own creative imagination."In problem-based learning, students can record happenings in the world around them which can serve as artefacts for problem and finally presentation of the solution. Digital cameras and computers and software can be harnessed for this. Quality of education is linked with how well the teachers are prepared for teaching. A carefully chosen text book may provide the framework for teaching and learning situations in any grade level. But these need supplementing with illustrations as well as content from the internet and other reference sources. The teacher must be able to incorporate the relevant illustrations in a relevant manner considering level and need of the learner and time management.

The Video Content Management Training Programme developed in this present study was found effective in terms of enhancing awareness and skill in Video Content Management of B.Ed. teacher trainees. The training package was also found

effective in terms of enhancing the Technology Mediated Teaching of B.Ed. teacher trainees. This study points out the need of such training programmes by which the teacher trainees should be able of integrating learning process which engage, motivate and challenge learners and develop their problem solving skills and thus modernize and bring quality to our education.