



DEVELOPMENT AND EVALUATION OF AUDIO LESSONS IN SOCIAL STUDIES

Geeta Rani, Ph. D.

Assistant Professor, M.D. College of Education, Abohar (Punjab).



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

Introduction:

In the past, technological breakthroughs such as simple visual aids and printing press have greatly influenced education. With the further advancement in the field of technology a new discipline named as Instructional Technology was emerged. Instructional Technology is the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning. Educational Instructions can be enriched and made more attractive, effective and satisfying by using a variety of media relevant to the content for learning

The media used for education can be classified into two groups: print media and non-print media. Educational systems cannot do without printed course material. It is the mainstay of the instructional system almost everywhere. It is in the form of reading material or in the form of programmed instructional material. The area of non-print media includes the technologies such as radio and television, audio and video CDs, telephone, videotext, computers, internet, satellites and so on. The overview of the potential of non-print media indicate that these media lend themselves particularly well to certain generalized educational purposes and provide support to print based instruction. Information through audio and video is extensively used in supporting teaching and learning.

Broadcast media-radio and television were the first to be used by educators, linking the print based tradition of education with that of formal and non-formal educational broadcasting. As the technologies became cheaper and more accessible, audio and video cassettes increasingly took over the role of broadcasting, but the cost of producing the visual media (Television, computer based learning) and of using them, are very much higher and access to the technology, particularly in developing countries and especially among the poor and educationally disadvantaged, is still very limited. In contrast, radio programmes and audio CDs are relatively cheap to produce and distribute. Moreover production facilities are widely available. Access to reception, reproduction and playback facilities is widespread.

Even in the poorest rural and urban areas, radio sets are common and CD players are increasingly available. The audio media speak directly to their audience in a personal, powerful and persuasive way. They are also extremely effective in terms of teaching and learning- especially when combined and integrated with print and other learning activities.

Importance of Audio media is that it contribute to specific learning activities, motivates learners psychologically, fulfil individual's needs, help learner to learn according to their convenience, extend the role of a teacher, useful for distance learners and useful for visually impaired and low vision learners.

Audio CDs have most of the capabilities of radio. They are probably not as good as radio for news and information, but they can certainly fulfil the four roles- motivation and support, tutorial support, resource material and direct teaching when audio media radio and particular audio cassettes and CDs are combined with visual material it is called audio-vision.

Audio Compact Disc (CD) is an optical disc used to store digital data, originally development for storing digital audio.

Significance of the study:

Use of audio material in the field of teaching and learning is proving an effective and popular medium. Audio books and other audio learning devices are fast gaining popularity in the educational field. In using audio material for the purpose of education; parents, teachers and educators are relieved because of its numerous benefits.

By adding interest and involvement in audio instruction, the textbook centred subject like social studies becomes lively and interesting. By provision variety of learning experiences, this technique of instruction brings the world into the classroom and thus makes learning permanent. It indicates that the nature of this subject (Social Studies) suits the characteristics of audio instruction. That is why; the present investigation was taken up by the investigator.

Review of Related Literature:

Santha (1976) conducted a study on school broadcast programmes in Bangalore City through questionnaire and interviews with pupils, teachers and heads of 12 schools. The findings revealed that majority of the students; teachers and headmasters were in favour of the school broadcast being held in the afternoon session.

Sharma (1984) used tape recorder for providing education. He found significant and positive relationship between education and gain in knowledge amongst medium category of respondents.

The Utah Study conducted by McCarty in Brigham Young University (2002) tested the effectiveness of audio enhanced classroom instruction with English language learners (ELL) students. The results showed a 16% increased on criterion reference test scores SAT test scores also showed significant gains.

Canas et al. (2004) conducted a longitudinal study on "Concept maps : Theory Methodology, Technology". Development of instructional materials in their longitudinal study was by means of audio tutorial lessons, in which children learned from audio tapes. The results indicated that the students who were helped to form basic science concepts in grade one and two had developed their cognitive structure for energy and molecular kinetics ideas in a way that continued to facilitate their meaningful learning.

Mathew and Alidmat (2013) conducted a study on effectiveness of Audio-Visual aids in EFL Classrooms. The study was conducted with 15 undergraduate students at Aljouf University, Saudi Arabia using self-designed questionnaire. The findings of the study suggested that using audio-visuals as a teaching method stimulates thinking and improves learning environment in a classroom. Effective use of audio-visual aids substitutes monotonous learning environments. Students develop and increase personal understanding of the areas of learning

Idris et al. (2018) examined the use of Audio-Visual Materials in teaching and learning among secondary school students in Sabon Gari Local Government Area of Kaduna State. Its main objective was to examine the impact of the use of Audio-Visual materials on the academic achievement of students. In this study, a quasi-experimental research design was used with a Classification of Living Things Achievement Test (CLTAT) as data collection instrument. 100 students were used from five selected schools in Sabon Gari Local Government Area of Kaduna State for the study. The analytical tool used was t-test using the Statistical Package for Social Sciences version 22 (SPSS, 22). Thus from the results obtained, it showed that with a significant level of 0.001 using T-test, using audiovisual aids in teaching classification of living things plays the role of enhancing students' academic performance.

It is evident from the above stated researches that the number of studies conducted on use of audio in teaching – learning process is not sufficient. There is dearth of such studies in Indian situations. Keeping this in mind, the present study was taken up by the researcher.

Objective:

To develop and evaluate audio lessons on five topics of Social Studies.

Delimitation:

The study was delimited to development and evaluation of audio lessons in Social Studies for VII grade students only.

Development of Audio Lessons:

Phase I : Planning the audio lessons

Planning for audio programmes can be done at three levels:

(i) Institutional Planning:

It involves the allocation of resources for audio to particular areas of an institution's activities usually expressed in terms of policy, staffing and budgets.

(ii) Programme Planning:

It covers the detailed planning and design of individual radio programme or audio CD sequences and is usually put on paper in the form of a detailed programme or audio recording outline.

(iii) Series Planning:

It involves the planning and designing of a series of radio programmes or audio CD material linked to a particular course or programme of study.

In the present study, series planning was followed for developing audio material. While using series planning, the investigator took care of following criteria: -

(a) Selection of Topic:

The selection of topic is very important. Such topics should be selected which can be effectively taught through audio media.

The investigator has selected five topics from the text book of Social Studies for evolving lessons for VII grade students. Those are given below:

- National Symbols and their Identification
- Shahjahan
- Citizenship and life of citizens

- Water Surrounding the continents
- Our Constitution and its creation

(b) Topic wise formulation of Objectives:

Formulation of objectives is very important task for development of audio material. Following specific objectives have been taken into consideration while developing audio lessons on the stipulated topics. The objectives are given topic wise:

Topic-1: National Symbols and their Identification

Objectives: After listening the audio lessons the learners will be able to enlist all national symbols, explain the importance of colours of our national flag, tell the name of writers of National anthem and National song.

Topic (2):Shahjahan

Objectives: After listening the audio lessons the learners will be able to name some emperors of Mughal dynasty, explain the administrative policy of Shahjahan's, explain Shahjahan's policy of war and tell some important incidents of Shahjahan's life.

Topic (3): Citizenship and Life of Citizens

Objectives: After listening the audio lessons the learners will be able to differentiate between a citizen and non-citizen, enlist the types of citizenship, understand the rights and duties of a good citizen and to give examples of behaviour of a good citizen.

Topic (4): Water Surrounding the Continents

Objectives: After listening the audio lesson, the learners will be able to write process of water cycle and understand the importance of water resources.

Topic (5): Our constitution and its Creation

Objectives: After listening the audio lessons the learners will be able to define constitution, enlist the members of constitution committee, explain the nature of our Nation given in the constitution and name the objectives of Indian Nation given in constitution.

(c) Analysis of the Target Audience:

The characteristics of the learners for whom the material is developed are stated as follows:

- (i) Subject - Social Studies
- (ii) Class - VII
- (iii) Age - 11+

- (iv) Achievement level – Average and above average
- (v) Intelligence level - Average and above average
- (vi) Socio- Economic status – all strata
- (vii) Residential status – Rural Urban both

Such informations were gathered by the researcher with the help of school records.

(d) Development of Criterion Referenced Test:

According to W. James Pophan "A criterion referenced test is used to ascertain an individual's status with respect to a well-defined behaviour domain."

The researcher selected completion, matching and short answer type items for criterion test. The items thus prepared, were carefully reviewed and edited for content relevance and learning outcomes as well as for technical accuracy and language.

(e) Content Analysis:

The content analysis in the curriculum phase is done by examining the syllabus as course outline. After collecting relevant material on the topic from various sources, the important task for the investigator is to arrange the subject matter on the basis of teaching points in a definite and most effective order.

In the present study course content was decided by the investigator by keeping in view the basic assumptions about the learners as well as the courses of study prescribed for students of 7th class. A thorough study of the topics was made from the text books of Social Studies. The topics were analysed into sub-topics and elements. Then she arranged the subject-matter using both logical order and developmental order as required according to the nature of content.

Phase II: Preparing the Audio Scripts

The writing of lively and suitable scripts entails adoption of the following steps:

- (1) Selection of the form
- (2) Stages of script writing and
- (3) Editing of the script

(1) Selection of the Format:

In writing scripts for this study, discussion and question answer format was followed.

(2) Stages of Scripts Writing:

(a) The Draft Script:

While writing the script the following cautions were kept in view:

The first caution was concerned with the person who was to present the material, i.e. the presenter of the script. It was expected that the presenter should have the gift of a clear and audible voice.

The second caution was related to the students for whom the script had to be prepared. In order to reinforce the students for quick learning, the writer tried to repeat and expand the material in simple and colloquial language.

The third caution was concerned with the language. The script was written in the form of simple words according to the age level and background of the students.

The fourth caution was connected with unnatural constructions; the script was recorded into a CD through computer.

(b) The Revised Script: The term revised script means a new version of the draft script, reflecting external comments. The most important step for preparing revised script was to present the draft script to the experts of NCERT and to experts of radio station, Kurukshetra. Their suggestions were sought and incorporated in the draft script.

(c) The Final Script: The final script was that revised script which was used by the speaker for recording. It also had added hints about technical instructions as well as minor details of production for a natural presentation of the programme.

(3) Editing of the Script: The lessons were edited for any grammatical error or any other inadequacies in the material such as lack of proper communication and gap in sequential order prior to their final validation. The first draft of the audio script was edited by three specialists, namely (a) subject matter expert (b) language expert (c) audio expert.

Phase III: Production of Audio Lessons

(1) Preparation of the Studio and the Equipments: The recording studio of Kurukshetra Radio Station was used for recording. For this study a computer was used for recording. Speakers, who were professional presenters of radio programmes, were selected for putting life into the script.

(2) Rehearsal: The participants were briefed about the purpose of the recording and necessary instructions were given to all.

They were allowed to do rehearsals for presenting the script in a natural and conversational manner without straining the voice or shouting.

(3) Recording: All undesirable background noises such as whispers, chair, squeaking, paper rattling, (especially rattling of the script near the mike), feet shuffling around and other similar noises were eliminated during recording. After completing the recording, editing of the CD was done. The CD was replayed by the experts for listening purpose.

Evaluation of Audio Lessons:

The investigator evaluated the audio material in two ways: -

(1)Evaluation Based on Students Reactions:

After preparing the audio CD, it was tested on 30 students of class VII. The reactions of the students were received in the form of verbal face to face interaction through discussions. According to the reactions of the students, changes were made in the recorded material with the help of experts. :

(2)Evaluation based on Gain Ratio dependent upon the Mean Scores of the Criterion Referenced Test:

First of all the investigator made it clear to the students and their subject teacher that this tryout is for the evaluation of audio lessons. Then the investigator gave a criterion referenced test as pre-test to students to know their previous knowledge of the respective topic. After the administration of pre-test, the lesson on CD was played. The students were requested to listen it carefully. The post test was given to students after the completion of the lesson.

This process was repeated for 5 days for all the 5 lessons. The Gain Ratio was found out for each unit dividing the mean gain between the pre test and the post test scores by the mean possible gain score, which is defined as the difference between the mean pre-test scores and the full scores on the post test.

$$\text{Mean of (post test scores – pre test scores)}$$

i.e. Gain Ratio = -----

$$\text{Mean of (Full scores – pre test scores)}$$

Gain Ratio of all the five units / lessons is given in the table:

Table 1

Sr. No.	Unit	Mean of Pre-test scores	Mean of Post Test- Scores	Total Scores	Gain Ratio
1.	Our National Symbols and their identification	2.08	12.08	14	.83
2.	Shahjahan	1.32	11.88	15	.77
3.	Citizenship And Life of Citizens	2.12	12.4	14	.86
4.	Creation of our Constitution	2	13.88	16	.85
5.	Water surrounding the continent	.6	9.4	13	.71

The above result revealed that the Gain Ratio ranged from .71 to .86 which is quite satisfactory. After completing above given steps the audio lessons were considered ready for teaching – learning process.

References:

Dhamija, N. & Panda, S.K. (2006). Development of Audio Material in Social Studies for Elementary School Students, Minor Research Project, D.R.S. (SAP).

Glaser, R. (1967). Instructional Technology and the Measurement of Learning Outcomes : Some Questions, American Psychologist, Vol. 18, 519-521.

Idris,A.T., Shamsuddin,I.M., Arome,A.T., & Aminu,I. (2018). Use of Audio-Visual Materials in Teaching and Learning of Classification of Living Things among Secondary School Students in Sabon Gari LGA of Kaduna State. Plant, Vol. 6 (2), 33-37.

Mathew,N.G.& Alidmat, A.H. (2013). A Study on the Usefulness of Audio-Visual Aids in EFL Classroom: Implications for Effective Instruction, International Journal of Higher Education, Vol. 2(2), 86-92.

Pandey, V.C. (2005). Technology and Development of Distance Education, ISHA Books, New Delhi.

Popham, W.J. & Husek, T.R. (1969). Implications of Criterion Referenced Measurement. Educational Technology Publications, Englewood, Cliffs, New Jersey.

Santha, I (1976). School Broadcast Programmes in Bangalore City. Journal of Indian Education, New Delhi.

Sharma, J.P. (1984). To evaluate the impact of different formats of CSCS in terms of gain in knowledge in C.B. Block, Rudrapur Distt. Nainital, Unpublished thesis, Department

of Agricultural communication and Extension, G.B. Pant University of Agriculture and Technology, Pantnagar.

Sharma, R.A. (2007). Technological foundations of Education (Theory, Practice and Research) R. Lall Book Depot, Meerut.