The Effectiveness of Audio-Visual Aids in Teaching-Learning Process

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Abstract

The real and ultimate aim of education is all round development of the individual and to create the power of justification. It is universal truth that education is the merely key factor in the development of society and a nation. Therefore, the whole process of education should be easy and effective in all the senses. The educationists, sociologists and researchers have invented a number of methods and materials to make the teaching-learning process easy and effective; as traditional verbal instructions can be boring and painful for students. But the most accepted things which make the teaching-learning process easy, effective and interesting and provides intrinsic motivation to students by peaking their curiosity and stimulating their interests in the subjects that is use of audio-visual aids in this process. The present investigation is a sincere attempt to be acquainted with the effectiveness of audio –visual aids in the process of teaching-learning. Twenty teachers and one hundred students of 10th both male and female of private and government senior secondary schools of Gohana City (Haryana) comprised the sample. The teachers and students were categorized as experimental and control groups. The self- made questionnaires were used to collect the pertinent data and it was found that the effectiveness of audio-visual aids were significant in teaching-learning process.

Key words: - effectiveness, audio aid, visual aids, audio-visual aids

Introduction

Teaching is a complex process which aims to bring a positive change in the behavior of the learner; it is possible when the teaching would be result-oriented, easy, effective and interesting. There are so many models; methods and technique existing to make teaching process effective for best learning outcomes. Rao (2006)stated that now-a days, teaching became a complex process due to the age of science and technology which has enter the field of education to make it accessible. The class room is to be just like the laboratory where different hardwares and softwares are used to teach the students; undoubtedly, audio-visual aids are devices/technique which is used in the class room to encourage learning. It is integrated process of teaching. Lestage (2009) integrating technology in to the classroom begins when a teacher prepare lessons that use technology in meaningful and relevant ways. Use of audio-visual aids gives scope for innovative and creative practices in the classroom. Audio-visual aids, teaching aids, instructional or teaching materials are same; these are projected (OHP, transparencies sheets opaque and slide projector, film, film stripes etc.), non-projected (maps, charts, globes, flash cards, posters, graphs, cartoon, news papers, comic strips, dimensional aids, models, display and bulletin boards etc.) and activity aids (field trips, excursion, exhibitions, museums, demonstrations and dramatization) Ode (2014) stated that teaching and learning take place when an individual has direct experience with the subject under study, in order to learn best by doing; it is because attention, motivation, concentration and retention of facts are enhances through the use of audio-visual materials.

systematic use of varies teaching aids can make subject matter clear and appealing to students of diversified backgrounds and varying abilities. Mahajan (2011) that audio-visual aid is the best tool for making teaching effective and the best dissemination of knowledge.

Audio-visual aids arouse the interest of learners and help teachers in explaining the concepts easily and effectively. Lestage (2009) pointed out that technology can never replace the human mind, but it can help expand it. It is duty of the teachers that use audio-visual aids relevant to the lesson and students; wrong use and selection of the teaching aids will be the wastage of time and energy for nothing. Mathew (2013) stated that it is the responsibility of the teacher to use audio-visual aids to make the teaching-learning process effective. Shamsideen (2016) teaching and learning activities are interesting when audio-visual materials are used effectively and efficiently in a classroom-teaching situation. It is universal fact that children learn best by observing and copying the behaviors of adults. Sunder (2010) stated that leaning is more effective when sensory experiences are stimulated. Teaching aids stimulate the behaviors of the students towards learning. The learning experience is made quite relevant, effective and meaningful by these aids as these motivate the child's learning by arousing his interest in a number of ways. Dike (1989) found that audio-visual aids add clarity to the topic taught and make learning more interesting. Pandit (2009) audio-visual aids provide a rich variety of sensory experience to amplify and reinforce the concepts that have been presented in a textbook and develop teaching skills. Sunder (2010) stated that teaching aids strengthen teaching skill, attract and retained learner's interest and attention and make teaching learning process more interactive and knowledge centered. So, keeping in the mind views of different scholars there is keen need and importance of teaching aids to make the teaching —learning process result-oriented, easy, effective and interesting for both teachers and students; the present investigation is an attempt to ascertain the effectiveness of audio-visual aids in teaching-learning process.

Statement of the problem

Audio-visual aids are the tools of teaching which make the teaching learning process easier and interesting. But the effectiveness of these aids depends on the availability, use and efficiency of applying. The uses of these aids enhance the teaching and learning outcomes. So, this study "The Effectiveness of Audio-Visual Aids in Teaching Learning Process" was taken to investigate the use, availability and effectiveness of audio-visual aids in this process so that in future all the hindrances in this way may be removed and develop these aids as powerful toll of teaching learning process.

Definition of operational/key terms

Effectiveness: - Yadav (2014) effectiveness is an elusive concept when we consider the complex task of teaching. Leigh (2007) effectiveness is measured in terms of performance of the students on literacy and numeracy tests.

Audio aid: - is an instructional device that can be heard only, but not seen.

Visual aid: - is an instructional device that can be seen only, but not heard.

Audio-visual aid: - is an instructional device that can be heard as well as seen.

Teaching-Learning Process: - is an organized attempt of skills and knowledge to disseminate and receiving the knowledge, skills and training (cognitive, affective and psychomotor) by the experienced person to the non/less- experienced person through some medium; it is interaction and exchange of knowledge and skills to each other/one another.

Experimental group: - a group which was given teaching experience through the audio-visual materials during teaching.

Control group: - a group which was given teaching experience through traditional method.

Objectives of the study

- 1. To know the views of teachers on effectiveness of audio-visual aids in teaching learning process.
- 2. To ascertain the effects of audio-visual aids on experimental group of students.
- 3. To find the effects of audio-visual aids on control group of students.
- 4. To study the present status of audio-visual aids in the schools.

Hypotheses of the study

- 1. There is no effect of audio-visual aids in teaching learning process.
- 2. There is no effect of audio-visual aids on experimental group of students.
- 3. There is no effect of audio-visual aids on control group of students.
- 4. There is no availability of audio-visual aids in the schools.

Limitations of the study

- 1. The study limited to the Gohana city of Haryana.
- 2. The study confined to the senior secondary schools (one private and one govt.) only.
- 3. The study restricted to the students of 10th class only.
- 4. The study restrained only to the teachers teaching to 10th class only.

Methodology

Sample

In the present study two schools one govt. and one private were selected through purposive sampling method of non probability sampling method. 100 students of 10th class comprised the sampling of govt. and private senior secondary schools. Total students were 100 (50 from private school and 50 from govt. school). Twenty teachers (10 from govt. school and 10 from private school) were taken from both the schools to comprise the sample as a whole who taught the students with the help of audio-visual aids.

Tool, statistical technique used and collection of data

A self made closed form questionnaire was used separately for teachers and students to collect relevant and reliable data. Questionnaire of the students had questions related to their curriculum of 10th class and questionnaire for teachers had questions related to use and availability of teaching aids and its effects on their teaching and learning of the students. Mean, standard deviation and t value were used as statistical technique.

The questionnaire had been distributed the students and teachers with some instructions; and a formal talk had done with the teachers on this topic.

Findings, discussion and conclusion

T- Value for Experimental and Controlled Group on Achievement Test

Group	Number	Mean	S.D	t-value	Significance
Experimental	50	23.92	3.93	3.73	0.00
Controlled	50	19.69	4.72		

The above table shows that the calculated value was 3.73 which were significant at 0.01 levels, so null hypotheses that there is no effect of audio-visual aids in teaching- learning process; there is no effect of audio-visual aids on experimental group of students and there is no effect of audio-visual aids on control group of students were rejected which supports the findings of difference in the achievement of students who are taught with the use of audio –visual aids which supports the findings of Ode (2014) that there is a significant difference between students who are taught with or without the use of audio-visual aids. It also supports the findings of Parul (2012) that audio-visual materials have significant effect on the achievement of the students. Billaiya (2017) also found the learning through audio-visual aids was higher. Aggarwal (2012) also found that students of study group with audio-visual aids out performed those of control group with no availability of these aids.

The teachers told that the use of audio-visual aid makes the subject matter easy to understand and explain and students learn quickly which supports the findings of Gopal (2010) that use of audio-visual aids methods do seem to facilitate the acquisition, retention and recall of lessons learned. Teachers also stated that students took interest in lesson which supports the claim of Hills (1994) audio-visual materials contribute in stimulating interest. They also stated that audio-visual aids help the teachers to control the class room and overcome the physical difficulties which support the results of Dahiya (2005) that teaching aids help the teacher in maintaining discipline in the class room; Gopal (2010) also supported that audio-visual aids help the teacher to overcome physical difficulties. Teachers also explained that use of audio-visual aids save energy and time which supports the findings of Aina (2006) that use of teaching aids in teaching learning process also save time and helps teachers in completing their syllabus timely; it also supports by Yunus (2015) these aids in teaching literature is less time consuming and as a result teachers have ample time to create enjoyable classroom activities and conduct an effective teaching and learning process. Respondents also stated that use of audiovisual aids helpful for students in high academic achievement which supports the findings of Dahiya (2005) that audio-visual aids enhance the academic achievement of students. They also recommended that teaching aids make teaching learning process effective and result-oriented that supports Rasul (2011) A.V aids make teaching learning process effective and motivates to teachers and students.

It has also found that mostly teachers were not trained/well versed in using these aids. There is lack of audiovisual aids and funds in the school; they also told that some parents are not in favor of this method those were same as the findings of Awasthi (2014). Sufficient audio –visual aids were not available in the both type of schools but the condition of private school was better so the hypothesis that there is no availability of audio-visual aids in the school retained. It was also found that maximum numbers of aids available in the schools were the visual aids which support the findings of Bhusan (2013). Schools had not well furnished separate room for teaching aids. Lack of maintenance of these aids was also seen .Audio-visual aids in the school were not being used to a great extent which is same of the findings of Dahiya (2005). It was also revealed in this research that teachers did not plan the lesson to be taught beforehand. Teachers (98 %) in govt. schools were not using latest technology of teaching in the class room.

Thus, it is proved/concluded that audio-visual aid is the best tool for teachers and students to make teaching learning process effective and easy; it promotes the cognitive, effective and psycho-motor aspects of the teachers and students. Koc (2005) stated that the integration of technology into curriculum means using it as a tool to teach academic subject and to promote higher order of thinking skill of the students. Audio-visual aids are important tools for easy and effective teaching learning process which retain the concepts better and for longer duration. It develops the reflective and analytical thinking of students and teachers and improves the whole teaching learning environment. Use of teaching aids instigate the interest of the students and motivates them for practical learning. Students found teaching through audio-visual aids more useful, relevant and effective and easy to understand.

Implications of the study

The findings of the present study revealed that audio-visual aids are the most effective and easy way to make the teaching learning process result-oriented. Students found these resources useful in understanding the subject matter in the easiest way which supports the findings of Mcnaught (2007) observed that audio-visual aids are very useful teaching and instructional as well as promotional aids. The study is very useful for the schools administrators to know/overview the status of these aids in schools and will help them in planning to use and availability of teaching aids in the schools. It will serve a lot of teachers to make the lesson easy and effective by using aids in the class room. The probable use of this study can be useful to understand the importance of teaching aids and will give insight and idea to the students for research regarding the selection of area, topic and data gathering techniques and for the comparative analysis and interpretation of the data.

Recommendations

Teacher should be provided training in- service or pre-service to make them acquaint and train in use of relevant audio-visual aids.

Authorities of education make it mandatory for teachers to teach with the help of teaching aids which should be pre-planned and under the keen supervision of the head of the institution. Teachers should be instructed and motivated to use maximum teaching aids during teaching.

It should also mandatory for the institutions to have a special lab and club of audio-visual aids.

Govt. /management should provide adequate fund to the institutions for purchasing these aids; it would be better if separate fund must be provided in the annual budget of the institutions; they should also arrange for the supply of good and new audio-visual aids.

Parents must be guided regarding the use of audio-visual aids to clarify their doubts and they should also be invited to the meetings where they can acquaint with different types of aids.

Teachers and students must be trained, encouraged and supported to prepare relevant and useful teaching aids with their hands.

Curriculum planners should encourage the use of audio-visual materials by inculcating them in the educational syllabus of all levels of education Ashaver (2013).

References

Aggarwal, Puneet. (2012). A Comparative Study for Effectiveness of Use of Audio-Visual Aids in Amphibian Laboratory. International Journal of Scientific & Engineering Research, Vol.3, No. 12.

Aina, M.E. (2006). General Teaching Methods: School of Education National Open University, Nigeria.

Ashaver, Doosuur. (2013). the Use of Audio-Visual Materials in the Teaching and Learning Processes in Colleges of Education in Benue State-Nigeria. Journal Of Research & Method In Education, Vol.1, No.6.

Awasthi, Deepa. (2014). Utilizing Audio Visual Aids to Make Learning Easy and Effective in Primary Education. International Journal of Scientific Research, Vol.3, No.8.

Bhusan, Ravi. (2013). A Study of the Impact of Teaching Aids on Learning. A Dissertation Submitted To IASE, Sardarshar, Rajasthan.

Billaiya, Roshni.(2017). Impact of Visual Teaching on School Students. International Journal of Advances in Scientific Research and Engineering, Vol.3, No.5.

Dahiya, S. K. (2005) An Experimental Study of the Effects of Audio-Visual Aids in Achievement of Students of Science at Higher School Level. A Dissertation Submitted to M.D. University, Rohtak.

Dike, V.W. (1989). Library Resources in Education, Enugu: ABIC Publisher.

Gopal, V.P. (2010). Importance of Audio-Visual in Teaching Methodology, Maharastra, India.

Hills, T. (1994). Teaching with Multimedia: Do Bells and Whistles Help Students Learn. Journal of Technology and Human Services, Vol. 24, No. 2.

Jain, Paras. (2017). Impact of Visual Teaching on School Students. International Journal of Advances in Scientific Research and Engineering, Vol.3, No.5.

Koc, M.(2005). Implications of Learning Theories for Effective Technology Integration and Pre-Service Teacher Training: A Critical Literature Review. Journal of Science Education, Vol.2, No.1.

Mahajan, Triparna. (2011) Assess the Role of Audio Visual Aids in Education. A Blog.

Mathew, NG. (2013). A Study of the Usefulness of Audio-Visual Aids in EFL Classroom: Implications for Effective Instruction. International Journal of Higher Education, Vol.2.

Mcnaught, A. (2007). Moving Images and Sound: Inclusive and Accessible. Moving Images Knowledge and Access: The BUFVC Handbook. British Universities Film And Video Council, London.

Muchhal, Mahesh. (2014) To Study the Impact of Visual Aids on Academic Achievement of 7th Grade Learners. Barut, Baghpat (U.P).

Ode, Elijah. (2014). Impact of Audio-Visual Resources on Teaching and Learning in Some Selected Private Secondary Schools in Makurdi. International Journal of Research in Humanities, Arts and Literature, Vol.2, No.5.

Oketunji, I. (2000). Application for Information Technologies in Nigerian Libraries: Problems and Prospects in I.K: Nwalo (Ed); Information Technology in Library and Information Technology Education in Nigeria. National Association of Library and Information Science Education.

Parul, Tandel. (2012). Effectiveness of Teaching Learning Materials in Mathematics. Gujarat Manovigyan Darshan, Vol. 8, No. 12.

Rao, Ajay. (2006). Effect of Audio-Visual Aids on Teaching Learning. A Dissertation Submitted to V.M. University, T.M. India.

Rasual, Saima. (2011). A Study to Analyze the Effectiveness of Audio-Visual Aids in Teaching Learning Process at University Level. Procedia-Social and Behavioral Sciences, Vol.28. The Islamia University of Bahawalpur.

Shamsideen, S.A. (2016). Impact of Audio-Visual Materials in the Dissemination of Knowledge for Facilitators in Some Selected Literacy Centers in Oshodi/Isolo Local Government Area. African Educational Research Journal, Vol.4 (1).

Sunder, P. (2010). Bhartiya Siksha Ka Gyankosh, K.S.K. Publishers, New Delhi.

Yadav, Rekha. (2014). A Study of Teacher Effectiveness in Relation to Role Commitment of Primary School Teachers. Researcher's Tandem, Vol.05, No.17.

Yunus, M. (2015). Using Visual Aids as a Motivational Tool in Enhancing Students' Interest in Reading Literary Texts. Recent Advances in Educational Technologies. University of Kebangsaan, Malaysia.

Pandit, Hemant. (2009). A Study of the Effects of Stimulation Teaching. A Dissertation Submitted to Global University, Sikkim.

Lestage, A. (2009). The Use of Audio-Visual Aids in Education; Extracted from UNESCO Chronicles, Regional Seminar from 28 September to 17 October 1959.

Leigh, A. (2007). Estimating Teacher Effectiveness from Two Year Changes in Student Test and Core. Research School of Social Science, ANU. Available at http://www.igi-global.com.