# EFFECTS OF AUDIO -VISUAL AIDS IN ACHIEVEMENT OF STUDENTS OF HOME -SCIENCE AT SENIOR SECONDARY SCHOOL LEVEL

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**Abstract:** Teaching - aids which affect our organs of audibility and sight are called Audio- visual (A-v Aids). Lessons can be made more interesting with the help of these aids; Subjects with more practical aspects have more need of Audio Visual Aids. So many demonstrations can be given with the help of A-V aids. A-V aids make teaching more effect. A practical subject like Home -Science can be made more interesting and effective with the help of these aids. Embroidery, knitting, painting, cooking, stitching etc. and more information can be shown and given to the students through A-V aids. And results are found much better. But sometimes inspite of availability of these aids, teachers are not interested in using them. Reasons are so many. Lack of awareness among parents, teachers and students is one of the main reason. Infrastructure problems are also there. But if overall efforts, are used properly than the results are fruitful.

**Keywords:** Teaching, Audio- Visual Aids, Home -Science, Students Schools Demonstrations.

Today is the age of Science and technology. The class room is to be just like a laboratory where in projector, record player, overhead projector, computer etc. are lying. The materials like charts, maps models, concrete objects, film-strips, radio, television and projector etc. help a teacher in good communication, healthy classroom interaction and effective realisation of the teaching objectives may be called aids in the field of teaching- learning. Instructional- aids are the devices which are used in the class-room to encourage learning and thereby make it easier and interesting. Suitable types of software's are prepared by the teachers as per their needs and requirements. And these aids will work wonders in the class-rooms. Teaching aids which affect our organs of audibility and sight are called "Audio-Visual Aids (A-V Aids)".

We sense the world around us by our sense organs such as by touching, seeing, smelling, hearing and tasting. The devices that are used for observations only are called visual aids and those for listing purposes are audio- aids. But the devices that can be used for seeing and listening simultaneously are known are audio-visual aids.

Audio-visual aids and materials are not a substitute for good teaching. They are complementary materials which assist the teacher in the communication process. There is no specific time in the teaching learning situation when the instructional materials should be used. Good teaching is an art but with all great artists, skills must be developed through practice, drill and hard-work. Albert Duret rightly said, "It is easier to believe what you see than what you hear; but if you both see and hear, then you can understand more readily and retain more lastingly."

Learning was earlier a difficult business. Effective learning depends to a great extent upon the child's having a strong motive for learning as well as upon his experiences being made meaningful and purposeful for him. One of the most important changes that have occurred in this century is the increasing importance given to the study of a child in place of the knowledge he should be acquiring. Direct experience is the basis of all effective learning, the world of learning is such that it cannot be lived on direct sensory level. Learning through a model, a film or a film trip is much easier than learning through direct experience. The use of A-V aids is very useful. They make the process lively and interesting and hence make it effective and better. Just lectures or verbalism of the teacher makes the class-room dull and mechanical. Learning through sense is better and more permanent than just mechanical learning. In this context, Rousseau says, "Give your scholar no verbal lessons, he should be taught by experience only." It is not always possible to experience directly things which are far away or not easily accessible. As it is not easy for many to travel to kashmir and see how apples are grown there and how tourists live in boats on the Jhelum, but all can take a film-trip to the place without any difficulty. Audio-Visual aids help us not only to see things that are removed by space but also those that are removed by time.

Characteristics of Good A-V aids:

Enlisted below are characteristics of good A-V aids:-

- 1. They are large enough be seen by the students.
- 2. They are useful and meaningful.
- 3. They are upto the mark and upto date in every respect.
- 4. They are simple, cheap and may be improvised.
- 5. They are handy and easily portable.
- 6. They are according to the mental level of the learners.
- 7. They motivate the learners, capture the attention of pupils and help in the realization of stipulated learning objectives.

8. They are useful for supplementing the teaching process but they cannot replace the teacher.

Home-science is a well developed multidisciplinary field of study. The multiple fields of Home science include Resource Management. It includes Family Resource Management, Food Science and Nutrition, Human Development, Textile, Fabric and Garment Designing and Extension Education. The science is aimed achieving and maintaining the welfare and well being of home and family life in an ever changing society. It includes not only nutritional needs of the family members but also planning expenditure and budgeting resources available to the family as well. Home science aims at developing an individual, its knowledge attitudes values and skills, which guide one to meet personal needs and aspirations of an individual to become a well adjusted member of the family. In schools, home-science is an interesting subject. But is properly taught can be the most interesting subject. Not only should the pupils get the satisfaction of achievement and success. They should also enjoy doing the work. A-V aids can prove very effective in this direction.

The research work is empirical in nature. A great variety of methods and procedures have been developed and a number of tools and instruments have been designed to collect data. The major tools of research in education n can be classified broadly in two categories:-

1. Standardized tools. 2. Non standardized tools.

The main purpose of the study is the investigation of the use of Audio-visual aids in schools. Evidence or fact which describes a group or situation and from which inferences or conclusion are drawn are known as data. Analysis of data means studying the tabulated material in order to determine inherent factors or meanings. Bare facts, objectives, data never determine anything. The analysis and interpretation of the data collected through questionnaire, checklist and interview was made. The questionnaire related to the availability and use of audio-visual aids there were sorted out separately. The questionnaire concerning the availability of audio-visual aids were taken up first for every question. The total number of 'yes' responses were counted for 10 schools. There were then converted into percentages. Similarly in questionnaire concerning the use of audio-visual aids, the 'yes' responses for every question were counted and converted into percentage. In order to know the number of aids available in the schools, the check-list was consulted. From this checklist, the number of audio, visual and audio-visual aids available in these schools were counted. The informal interview regarding the problem faced by teachers in using a-v aids were sorted out. The interview was taken up and every question was asked. The total number of 'yes' responses were counted for the ten school. These were then converted into percentages.

#### **Questionnaire**

**Instructions:-** Please put a tick mark ( $\sqrt{\ }$ ) against 'yes' and ( $\times$ ) against 'No'. This questionnaire deals with availability of audio-visual aids and use of audio-visual aids.

Name of the School:

Name of the Teacher:

## **Availability of Audio-Visual Aids:**

- 1. Do you have audio-aids in your school? Yes/No.
- 2. Do you have visual aids in your school?
- 3. Do you have audio-visual aids in your school?
- 4. Do you have sufficient aids related to your subject?
- 5. Are the aids readily available?
- 6. Are the aids of good quality?
- 7. Are the aids available in good condition?
- 8. Do the aids make students understand the lesson easily?
- 9. Are the aids available related to the topic?
- 10. Are the aids A-V aids necessary for teaching science?

#### **Use of A-V Aids:**

- 1. Do you use A-V aids while teaching (practical)
- 2. Do you encourage students to participate in using the aids?
- 3. Do students enjoy the lessons with A-V aids.
- 4. Are the aids used by you are appropriate to the mental level of the students.
- 5. Do you plan the lesson before using the relevant aid.
- 6. Do a-v aids motivate students to learn?
- 7. Do you have any room for preserving the aids?
- 8. Do you take care in handling the aids?
- 9. Do you use improved aids?
- 10. Do students learn better with the help of a-v aids?

Table No. 1

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Q. No.	Availability of the aids (No. of schools in which available)	Percentage of responses				
	winch available)					
1	7	70%				
2	10	100%				
3	8	80%				
4	5	50%				
5	4	40%				
6	8	80%				
7	4	40%				
8	6	60%				
9	8	80%				
10	8	80%				

Table No. 2

Q. No.	Use of the aids (no. of schools using the aids)	Percentage
1	6	60%
2	10	100%
3	8	80%
4	8	80%
5	5	50%
6	10	100%
7	2	20%
8	5	50%
9	3	30%
10	2	20%

On the basis of the questionnaire, it was seen that the schools are either sufficiently or moderately quipped with audio-visual aids. But they are not being used to large extent. The aids are of good quality of also in fairly good condition inspite of all this the teachers are not in a position to use these aids. Following are the reasons:-

- 1) Lack of teacher's training
- 2) Lack of principal's cooperation
- 3) Problems of technical handling
- 4) Problems of mechanical defects.
- 5) Problem of timing.

Table No. 3

Q.	Name of the School	Audio Aids	Visual	A – V
No.			Aids	Aids
1	Sarvodaya Kanya Vidhalya (SKV) Nangloi	2	50	1
2	SKV, Mundka	3	40	3
3	SKV, Sultan Puri	1	10	2
4	SKV, Kanta Colony	0	60	2
5	SKV, Tikri Kalan	0	50	4
6	SKV, Palam Village	2	40	5
7	SKV, Ranlaula	3	30	3
8	SKV, Pera Garhi	1	10	2
9	SKV, Nihal Vihar	4	20	4
10	SKV, Jawalapuri	5	20	1

On the basis of the checklist, it was revealed that the schools are well equipped with A-V aids in the following order:

- 1. Sufficiently equipped with visual aids.
- 2. Moderately equipped with audio aids.
- 3. Insufficiently equipped with a-v aids.

### Checklist used was

## **CHECKLIST**

Name of the School:

Name of the Teacher:

Name of the Aid:

Chalk Board

Flannel Board

• Bulletin Board

Pictures

Posters Charts

Diagrams

Maps and Globes

Model

Projector

Tape Recorder

• Overhead Projector

Films

Pen drives

Computers

• T.V.

Smart Board

### **Reasons being:**

- 1. Visual aids are cheap and can be purchased without much of a problem.
- 2. Visual aids are easily available.
- 3. Visual aids can be easily prepared and preserved.
- 4. Visual aids are easily to handle.
- 5. A-V aids and audio aids are available in lesser quantity in the schools.
- 6. A-V aids are less because of:- (a) Problem of finance (b) problem of technical handling. (c) Lack of teacher's training.

Interview was also taken of the teachers. Interview was:

#### Interview:

Name of The school:

Type of the school:

Name of the Teacher:

- 1. Do you have an Audio-visual laboratory in your school?
- 2. Does the use of A-V aids affect student learning?
- 3. Do you use any types of aids?
- 4. Do the students participate while using the aids?
- 5. Does your school run an audio-visual club?
- 6. Do you have any problem regarding the availability and use of audio-visual aids in your school?
- 7. Do staff and parents cooperate you?
- 8. Do you arrange exhibitions and trips for the students?
- 9. Do you mentally prepare the students before using any aids?
- 10. Would you like to give any suggestions for the solution for these problems?

On the basis of the interview, it was revealed that although audio-visual aids are available in schools but teachers are not much interested in using then. Even though they agree that these aids make teaching effective reasons are:-

- 1. Lack of separate A-V libraries in schools.
- 2. Parents and staff do not cooperate.
- 3. Lack of awareness among teachers and students.
- 4. Lack of proper facilities of building and electricity specially in government schools.

On the basis of the analysis and interpretation of the data, following suggestions are here to solve the problems faced by the science teachers.

- 1) Classroom teaching should be aided by films, slides, coloured charts, diagrams and demonstrations (especially for cooking, embroidery and painting).
- 2. Each school must maintain a a-v club.
- 3. The general public may be encouraged to start the a-v aids and parents must be invited to the meetings and may be acquainted with different types of aids.
- 4. Government should provide the supply of good and new a-v aids.
- 5. Teachers may be imparted the training from time to time.

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