

Teaching Aids in Physical Sciences

Audio-Visual Aids in Science

In order to make the lesson interesting and understandable it is necessary that the education should have a relationship with maximum organs of perception. Keeping in mind this objective, these days the use of audio-visual aids is being made in abundance. The use of audio-visual aids in teaching of science is compulsory. The theoretical, oral and uninteresting topics can be made more natural, entertaining and useful with the use of teaching aids. It is a factual truth that audio-visual aids, sharpen the senses of sight and hearing and open up the avenues of learning.

Although the teacher is himself an audio-visual aid because he makes the lesson easy and tries to explain it properly, still he is not complete in himself. The use of audio-visual aids is not only desirable but necessary.

Audio-visual aids can be defined as "Audio-Visual Aids are those tools and devices by the use of which communication of ideas between persons and groups in various teaching-training situations is helped."

Objectives of Audio-Visual Aids :

1. To develop the lesson and create interest of the students towards the lesson.
2. To impart factual knowledge to the students in an interesting manner.
3. Improving the power of retention.
4. To make the students more active.
5. To develop the interest towards learning.
6. To have desired effect on the earnest desires/interests.
7. To impart education to the dull and intelligent students according to their capabilities.
8. To make the teaching material clear, easy and understandable.
9. To keep the attention of the child-centred towards the lesson.
10. To develop the power of observation of the students.
11. To make inanimate objects animate.

Characteristics of Audio-Visual Aids :

The audio-visual aids are useful in teaching due to the following characteristics –

1. The audio-visual aids help in learning and understanding permanently.
2. It reduces verbalism.
3. It imparts knowledge through experience.
4. It gives knowledge through narration.
5. It saves time and increases interest.
6. It gives a flow to the thoughts.
7. Helps the teacher in useful and proper teaching.
8. Eliminates language related problems.
9. Makes use of variety of media.
10. The students remain more active and learn the lesson easily.
11. Develops scientific attitude.
12. The students start considering themselves as efficient, resourceful, self-dependent as they start working themselves.
13. They develop curiosity towards exploration of various subjects.
14. They get a chance to see the things apparently.
15. They get a chance of comparative study of natural and artificial things.
16. The students learn the methods of use of apparatus.
17. The audio-visual aids explain the intricate matters easily, precisely and develop the imaginative and thinking power of the students.
18. The sense of perception is inspired and the students obtain precise knowledge.
19. The lesson becomes interesting.

Classification of Audio-Visual Aids :

The audio-visual aids can be classified in various manners. But the following classification is very popular and commonly used—

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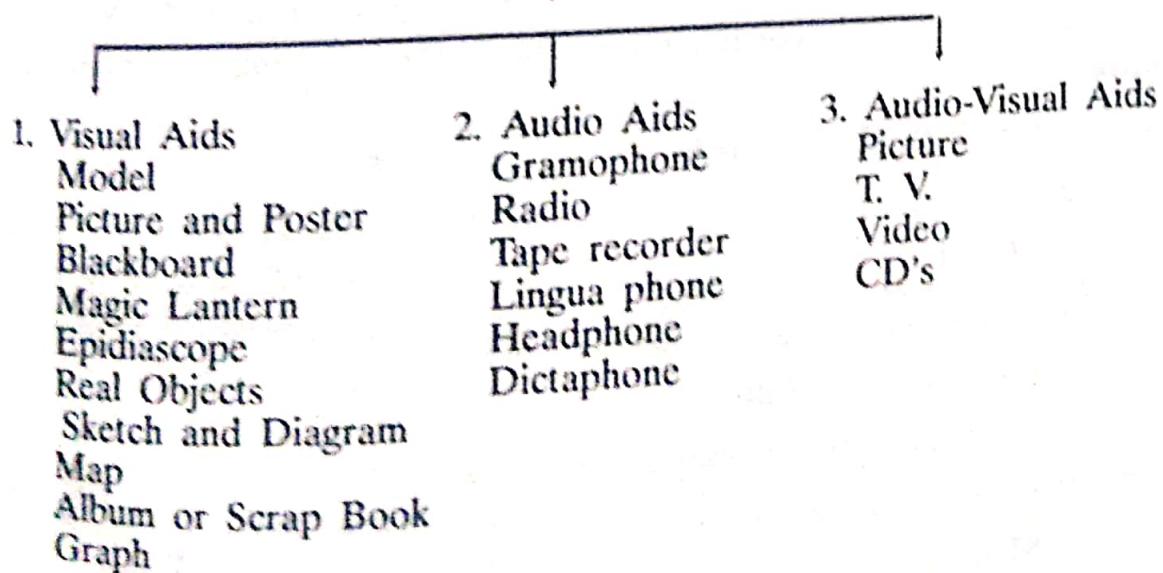


Chart
Film strip
Text-Books
Bulletin Board
Tours and Excursions
Museum
Computer/Internet

1. **Visual Aids** : The knowledge is perceived by the use of audio-visual aids. If a student is being told about the various parts of a machine then he should actually be shown that machine. The students take more interest in what they see and show more curiosity.

2. **Audio Aids** : By the use of this type of aids the student gains knowledge through the sense of hearing. The chief examples are radio and tape recorder. By the use of these apparatus the students listen to the new discoveries and scientific inventions and life histories of Scientists and gain knowledge.

3. **Audio-Visual Aids** : In the use of these aids the eyes and ears work together. The child sees with his eyes and listens with his ears and tries to memorize the teaching points. The knowledge bestowed by these aids should have the quality of being precise, real, thematic and have comprehensibility. In the absence of these the audio-visual aids lose their usefulness.

In science the Audio-Visual Aids can also be classified in the following manner :

1. **Projected Aids** : In this type of aids all those aids are included which are projected e. g. film strips, films etc.

2. **Non-projected Aids** : In this type of the aids like charts, pictures, models, are included.

Useful Audio-Visual Aids in Physical Sciences

In Teaching of Physical Sciences mainly the following types of audio-visual aids are used.

1. Chalk or Black-Board.
2. Objects.
3. Models.
4. Science exhibitions & Science fairs.
5. Film strips and Films.
6. Charts, graphs and maps.
7. Pictures and Diagrams.
8. Magazines.