

**METHODS OF
TEACHING PRIMARY SCHOOL
SCIENCE**

DEMONSTRATION

Outline

- What is the Demonstration Method?
- Ways to Present a Demonstration
- Conditions for using Demonstration
- Guidelines for Effective Use
- Advantages
- Disadvantages

What is the Demonstration Method?

- A demonstration is a doing of something in the presence of others in order to show how to do it
- A demonstration is the repetition of a series of planned actions designed to illustrate a certain phenomenon

Ways to Present a Demonstration

1. Teacher Demonstration

- The teacher prepares and gives the demonstration by himself/herself
- This approach has the advantage usually of better organization and more sophisticated presentation

2. Teacher - Student Demonstration

- This is a team approach in which the student assists the teacher
- This gives recognition to the student
- The class may be more attentive because they like to watch one of their peers perform

Ways to Present a Demonstration

3. Individual Student Demonstration

- This can be a very effective demonstration especially if the student giving the demonstration has a high status among his peers
- An effective way to have individual student demonstrations is to have a student from an upper-class demonstrate to students in a lower-class

Ways to Present a Demonstration

4. Student Group Demonstration

- It has the advantage of more actively involving students in the presentation

5. Guest Demonstration

- Guest demonstrations can do much to relieve a boring pattern of routine class activities
- Other science teachers in the school may be called in to present a demonstration or an activity in which they have some special competence

Conditions for using Demonstration

Demonstration method is used when:

- material is scarce
- material/equipment is costly
- material/equipment is delicate or fragile (easily broken or damaged)
- the operation involved is dangerous
- a complex skill is involved

Guidelines for Effective Use

- All students should be placed so as to see and hear the Demonstration
- Articles liable to distract attention should be removed from the Demonstration bench
- All articles essential for the Demonstration should be present before the Demonstration begins and should be arranged in the order in which they will be used
- The teacher should run a commentary on the Demonstration as it takes place and ask questions constantly to make sure that the students are following everything that is being done

Guidelines for Effective Use

- The activity should be rehearsed before the Demonstration
- At the end of the Demonstration conduct a brief review of steps involved or give a short summary of what has happened
- If time permits have one or two students replicate the Demonstration
- Plan a Demonstration with the intention of using it again

Advantages

- It trains students to be good observers
- It stimulates thinking and the formation of concepts and generalizations
- It has high interest value since it often involves the use of gadgets and equipment which might be new to the students
- It is economical since only the demonstrator(s) needs/need the materials
- It is effective as an introduction to skill learning
- It is more appropriate when teaching students how to operate a machine or some other piece of equipment
- Students can see and feel how something looks like or is done
- Students have the opportunity to try something out without risk
- Teacher can emphasize a point during the demonstration

Disadvantages

- Much preparation and planning is required on the part of the demonstrator
- It can be ineffective if the demonstrator just carries on without asking questions
- It is not suitable for large classrooms or with extremely small objects
- It can lead to imitation without understanding
- Unsuccessful demonstrations may frustrate students
- A quick demonstration may not be grasped by students