

**METHODS OF  
TEACHING PRIMARY SCHOOL  
SCIENCE**

**SIMULATION**

# Outline

- What is the Simulation Method?
- Rationale
- Purpose
- Roles of the Teacher
- Roles of the Learner
- Advantages of Games and Simulations
- Limitations of Games and Simulations

# What is the Simulation Method?

- Simulation is a method of teaching in which the teacher creates a 'mock' situation and puts a learner there so that from his mock situation the learner may learn about the real situation.
- The most common forms of simulations include simulation games, role playing and dramatization.
- Deliberate making of certain conditions that could exist in reality in order to study them or learn from them.
- The simulation and games method of teaching entails the combination of the characteristic of both games and simulation. It entails some aspect of reality and this it is enjoyable and educational, with emphasis on learning.

# Rationale

- If what is simulated in the classroom is what exists in real life, it therefore follows that what a student learns in a simulated situation is most likely to transferred to real life situation.

# Purpose

- It promotes an active form of students participation
- It provides an opportunity for development of communication or verbal skills.
- It promote creative student behavior
- It gives the students different kinds of opportunities for success and recognition among peers.
- It gives the teacher an opportunity to observe students in more life-like participation where various forms of talent and behavior may be identified.
- It provides fun and enjoyment as well as rich and relevant content as part of the programme.

# Roles of the Teacher

- Prepares the materials/equipments and properties that will be needed
- Explain what the purpose of the simulation is
- Give reasons for using the materials
- Assign roles
- Brief the pupils on their roles and make sure they understand them
- Conduct the simulation following strictly the scenario (outline description of scenes and characters of what is to be done)
- Follow up by asking pupils some questions and also answering their questions; by giving pupils a chance to discuss and summarise what they have learnt.

# Roles of the Learner

- Select from a given list of topics to be simulated such as stories events, etc.
- Specify purposes to be achieved and outline steps to follow
- Prepare/ collect materials (models, equipments, pictures etc.) to be used
- Set the stage
- Perform the simulation using your scenario as a guide
- Other pupils watch and ask questions or answers same from simulators
- Learners discuss what they have learned from the simulation.

# Advantages of Games and Simulations

- It encourages abstract thinking of children and keeps them busy
- Children readily want to participate in games and simulation exercises and so require no urging, prompting or outside stimulation from the teacher.
- Facts which are memorized and usually forgotten when not applied, become meaningful and remembered when used in enjoyable realistic situations.
- Greater learner interest is generated than would ordinarily or normally occur in other learning modes

# Advantages of Games and Simulations

- It promotes self-learning as it enriches learners' imagination and expand their experiences.
- Students are more likely to experiment with ideas that they do undertake in
- Immediacy of feedback and valuable reinforcement the participants in game and simulation sessions.
- Games and simulation enhance interaction and poor learning
- Self-motivation is encouraged on the part of the learners as they can reap the benefits of their self-interaction

# Advantages of Games and Simulations

- Games and simulations which contain high interest values and low vocabulary content will be effective for slow learners
- Games and simulations may increase the confidence of young people to deal with real world problems that seem impossibly remote from their lives
- Games and simulations are desirable supplements to my educational programs. They make abstract materials in a textbook look vivid
- In games and simulations, gentleness and friendliness will enhance learning settings in schools and homes.

# Limitations of Games and Simulations

- Games and simulations are time consuming and painstaking in design and evaluation
- Games and simulations are no solutions to educational problems. They may only be able to achieve some educational objectives which the textbooks and teachers might not easily achieve.
- There is the temptation of stealing and pilfering where real objects(money/materials) are used
- At times there is the possibility of teaching the wrong values to pupils

# Limitations of Games and Simulations

- In business simulations, the cost, number and quantities of articles and materials must be within controllable limits to avoid possible losses or damages where real objects are used.
- In games and simulations certain norms and conventions are contravened. Disrespect, shouts, insults and behaviours not ordinarily condoned may invariably be introduced by the participants.
- It may promote child truancy if not properly controlled where children's interest could make them stay out from other duties.