

Demonstration Skill

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Teaching

- The teaching skills are defined as a group of **teaching acts or behaviors** intended to facilitate students learning directly or indirectly

Teaching

- It is a set of interrelated activities which are performed by a teacher in the classroom....
- Activities- various skills & abilities

Microteaching

- It is used purely for helping the teacher to improve his/her teaching skills and not as a tool for making a value judgment of his/her teaching capacity by his/ her superiors ...

Microteaching-features

- Re-teach session
- Time - 5 to 10 min.
- Group- peer group (10 to 12)
- One skill at a time (Teach-Re teach)
- Content free
- Observation by peer & Expert
- Feedback by peer & Expert

MICRO TEACHING

MICRO TEACHING

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graph TD; A[MICRO TEACHING] --- B[TEACHING SKILLS]; A --- C[INTEGRATION]; A --- D[SIMMULATION]
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TEACHING SKILLS

INTEGRATION

SIMMULATION

SKILLS

- Set induction
- Explanation
- Narration
- Demonstration
- Questioning
- Black-board writing
- Stimulus variation

Demonstration Skill

- A demonstration is a showing.
- Showing of a skill or procedure is demonstration.

Verbal Explanation + Live display/ Use of apparatus

= DEMONSTRATION

Demonstration is an act of showing something by giving proof or evidence.

Demonstration Skill

- An instance of some body showing and explaining how something works or is done

Oxford Advanced Learner's Dictionary

- The demonstrations may be set up on a demonstration table which is usually kept in an elevated place so that all can closely watch the demonstration.

Demonstration Skill

- It is an activity or process of **teaching involving the showing of specimens or experiments** to explain and describe the concerned concept, idea, teaching point etc., in the teaching learning process.
- This process makes the subject matter concrete with the real life situations.
- The demonstration in teaching makes learning simpler and meaningful to the learning.

Why Demonstration?

- To stimulate interest in a particular topic
- To illustrate points efficiently
- To provide change of pace
- To provide model for teaching specific skill
- To overcome resource constraints

Aims of Demonstration

- To teach a skill, concept or principle
- To demonstrate delicate work involving careful manipulations
- To achieve psychomotor and cognitive objectives

Principles in Demonstration

- Learning by Observation
- Learning by by imitation
- The perception helps in imitation

Role of Teacher

- The role of teacher is the demonstrator
- He is concerned that the learner understands the logical step-by-step procedures in doing the job, the principles that apply, and the related information
- The presenter shows how a process is done while the students become observers - the best way to teach "how" is to "show how"

Process of Demonstration

- Orient the learners to the demonstration.
- Show the learners, if possible, what the demonstration is to produce or achieve.
- Show and describe the equipment and materials to be used.
- Emphasize safety.
- Give the demonstration.
- Summarize as needed.

Demonstration Skill...

- Learning is of two types

1. Self learning

2. Learning through teaching

- Teaching of content knowledge, development of skills among the students.
- Concrete and abstract concept in content.
- Demonstration Skill is useful for effective teaching.

Demonstration Skill...

- Demonstration is mainly useful in teaching Science subjects
- Forms, Characteristics, Rules, Principles, Laws, structure, System, Process, Phenomenon etc.
- Without **demonstration** such concept categories are difficult to understand.

Demonstration Skill...

- Other than Science Subject we can use demonstration-
- Mathematics, Geography,
- Languages- Writing, Reading, Communication, Pronunciation
- Physical Education,
- Drawing, Singing, Dancing etc.

Advantages of Demonstration

1. Increase understanding of students.
2. Provide direction to the observation of the students.
3. Students imitate the act of teacher and learn.
4. Saves time and money.
5. Create interest in teaching.
6. Students take the experience.
7. It increase the reliability of the content.
8. More convenient and practical than the experiment method.
9. It develops curiosity and scientific attitude among the students.

Advantages of Demonstration...

10. It increases the experience of the students.
11. Research attitude of students increases.
12. It develops Observation skills and Experimentation skills within the students.
13. Involves various senses that make learning permanent
14. Teacher invites cooperation of pupils
15. Develop interest and motivation for active participation
16. Helps achieve psychomotor objectives

Limitations of Demonstration

- Demonstration can only be used in skills subject
- Only the attention of the learners is invited towards the activity demonstrated.
- Due to poor economic condition of the government schools, there is scarcity of equipment therefore demonstration can not be used.
- Can not used for all subjects and all content of the subject.

Tips for effective Demonstration

An effective demonstration should be given in a minimum of time--no longer than about 15 minutes.

The presenter should be aware of the activities of each member of the class.

If a number of learners are having difficulty in learning a skill, the demonstration should be repeated.

The learners who have mastered the skill may assist the presenter with those who have not

Components of Demonstration skill

1. Appropriate Topic, Concepts, Ideas and Teaching Points
2. Sequence, Order of Presentation
3. Adequacy of Manipulative Skill
4. Creation of Appropriate Situation
5. Generalization

Components of Demonstration skill

1. **Appropriate Topic**

(Concepts, Ideas and Teaching Points)

It should be Appropriate to the Topic, Concepts, Ideas and Teaching Points.

2. **Sequence, Order of Presentation**

The sequential procedure in presentation of materials, Apparatus, Chemicals, Specimens should arrange sequentially which leads in better presentation and learning.

3. **Adequacy of Manipulative Skill**

In the demonstration handling the apparatus, Chemicals, Specimens requires skills

Components of Demonstration skill

4. Creation of Appropriate Situation

In the demonstration process appropriate physical situation with proper aids, instruments, diagrams, gestures etc., should convey the idea appropriately.

5. Generalization

Whenever the demonstration comes to an end, the teacher should conclude the theory and frame a rule or a principle.

Sub skills of Demonstration

1. **Planning:** Lesson Note,
Place, Time, Apparatus, Chemicals,
Specimens, Diagrams, (Subject-wise)
2. **Selection and organization apparatus/material**
Organization diagram, Skillful handling of
apparatus
3. **Neat and appropriate Demonstration**
4. **Explanation / and use of Questions**
5. **Students Participation**
Verbal and Physical participation

Observation Schedule: Demonstration Skill

Sub - Skills	1	2	3	4	5
• Aim of the experiment					
• Selection of apparatus/material					
• Use of organization diagram					
• Skillful handling of apparatus					
• Students participation					
• Opportunity for observation					
• Conclusion of experiment					
• Creation of situation					
• Time Management					
• Overall impact					

Selection of Unit

- Possibility for experiment
- Experiment should not be time consuming.
- Possibility for asking questions/ Explanation
- Opportunity for students participation.
- Apparatus/ Specimens should be easily available.
- Opportunity of showing organizational diagram of the experiment.

Demonstration at Higher level

- Physics
- Chemistry
- Biology,
- Mathematics
- Engineering,
- Geography,
- Languages,
- Social Sciences
- Physical Education and Yoga

- Lesson note format
- Demonstration
- Preparation of Lesson note

Lesson note format

Content	Method	Sub Skill
Introduction Statement of Aim: Presentation: Aim of the Experiment: Apparatus: Activity/ Experiment Observation Inference Conclusion	(Teachers' Activity) Questions (Teachers' Activity)	Aim of the experiment Selection of apparatus/material Use of organization diagram Skillful handling of apparatus Students participation Opportunity for observation Conclusion of experiment Creation of situation

Demonstration

- Aim of the Experiment:

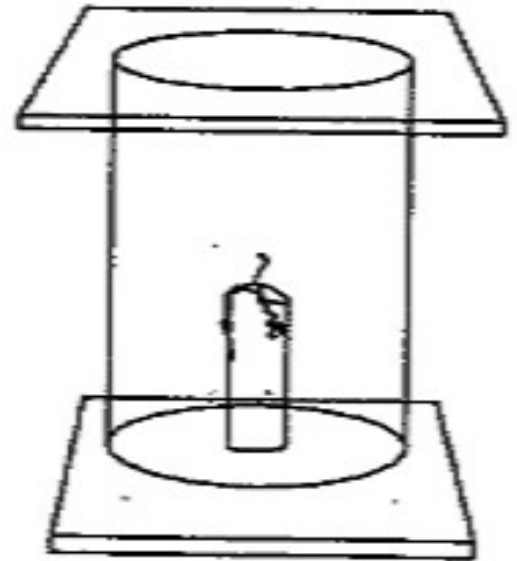
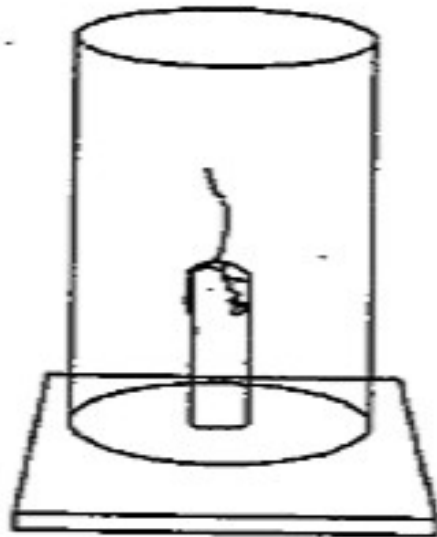
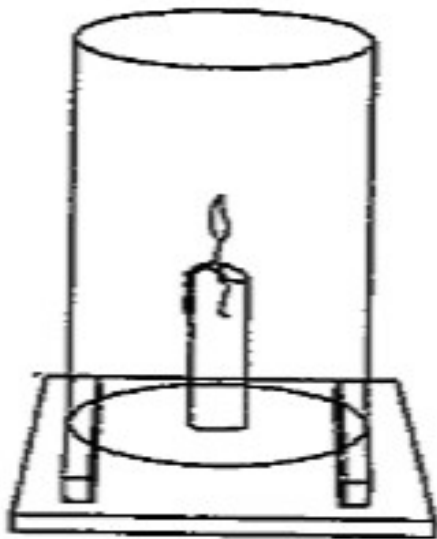
Proportion of oxygen in
air

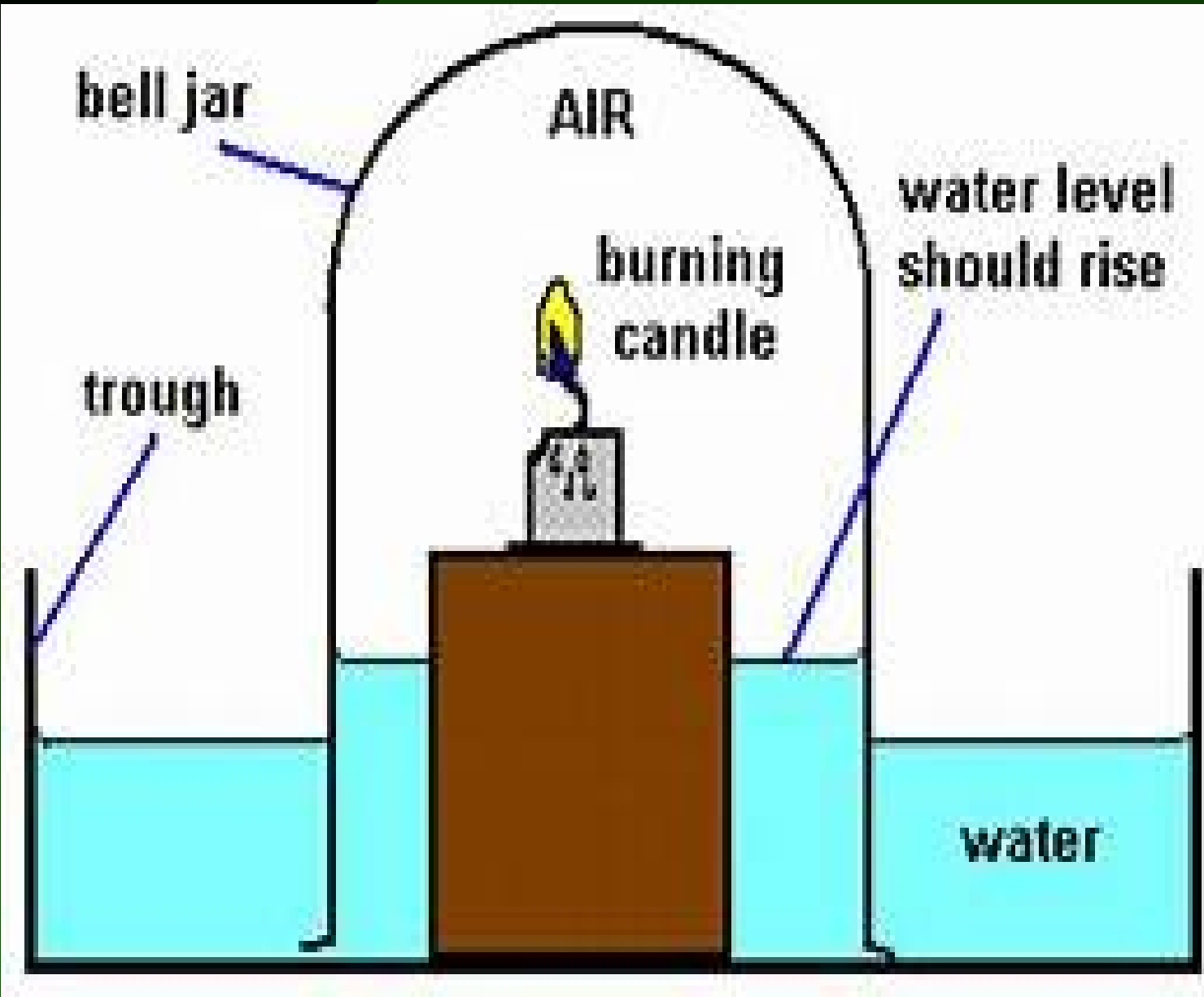
Apparatus:

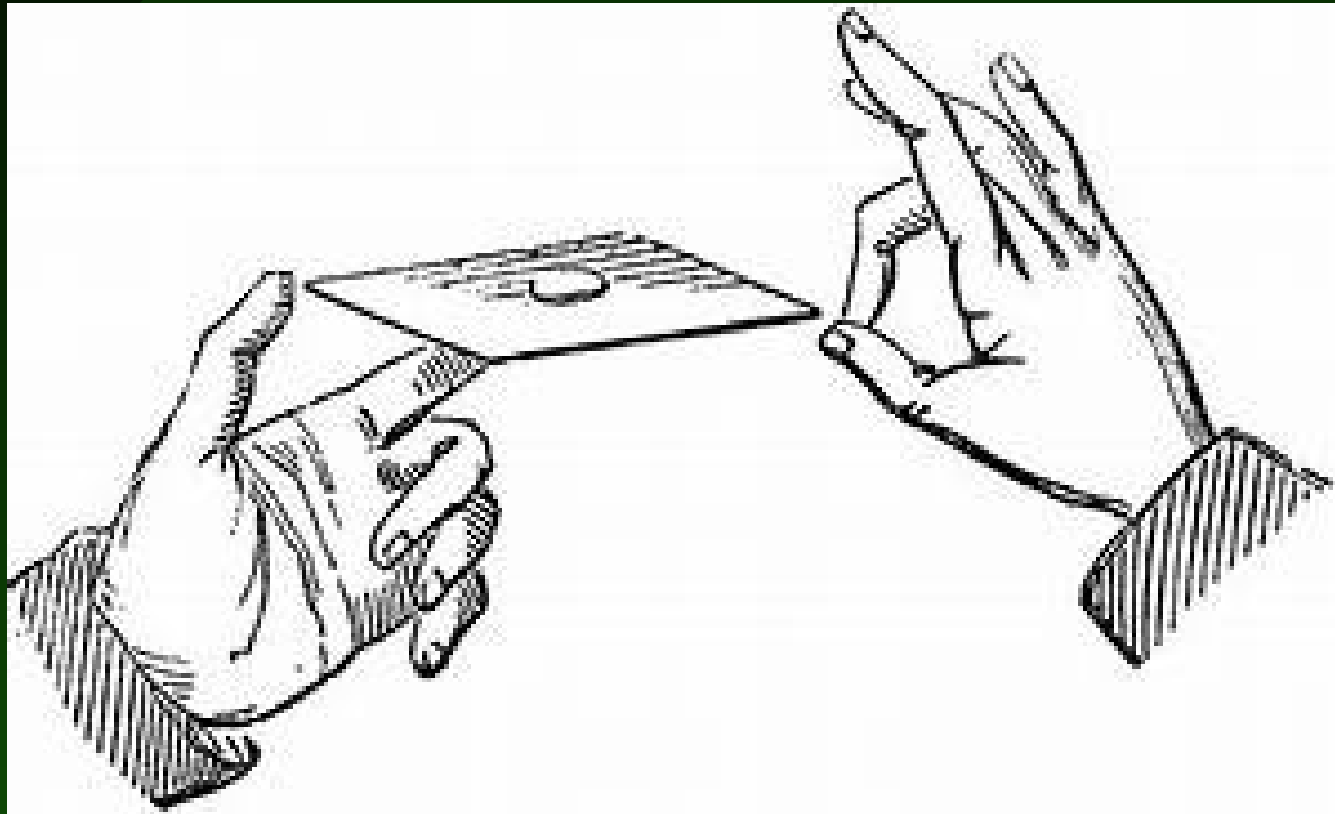
Organisation diagram





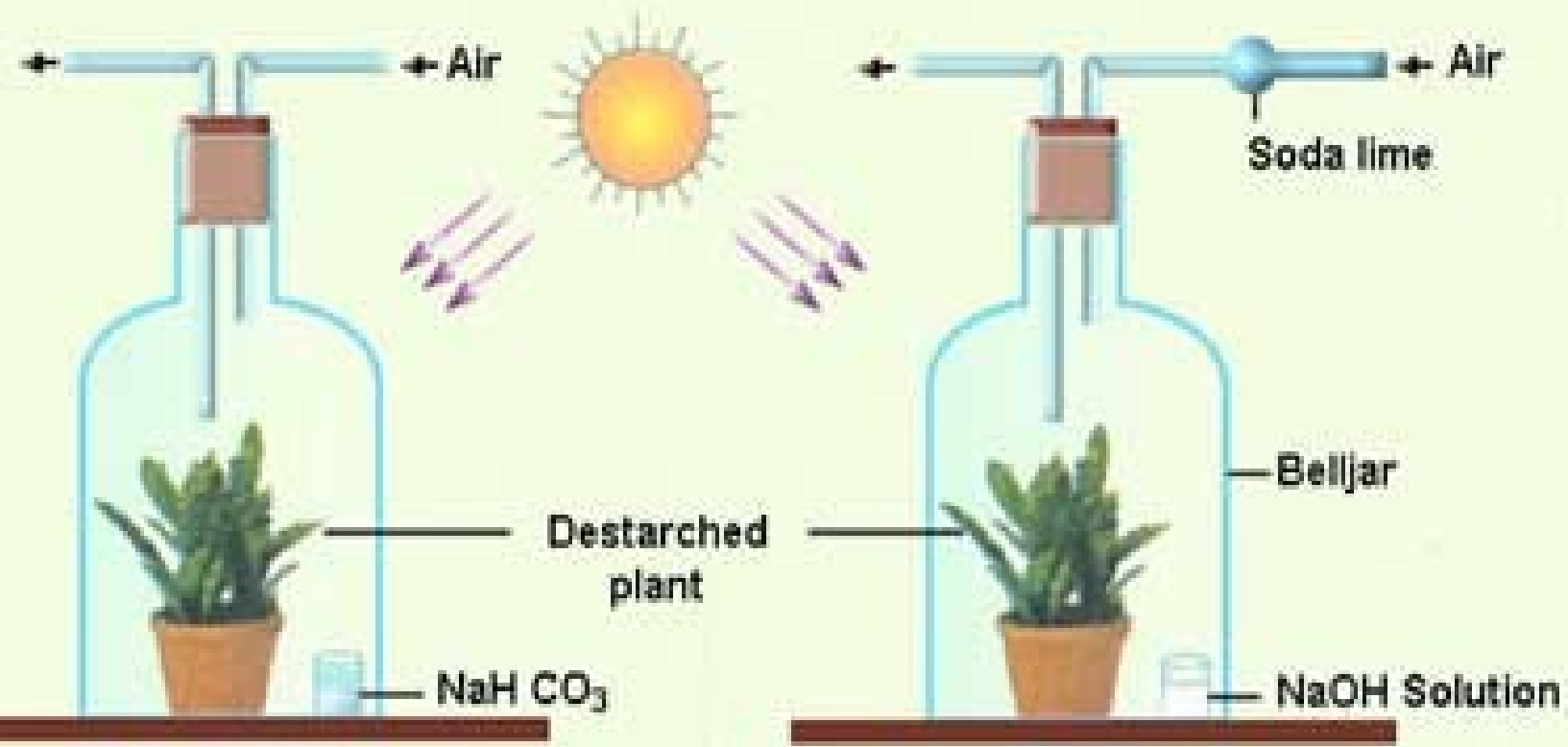








CO₂ IS NECESSARY FOR PHOTOSYNTHESIS



- <https://www.youtube.com/watch?v=wz01pTvuMa0>
- <https://www.youtube.com/watch?v=ViZNgU-Yt-Y>
- <https://www.youtube.com/watch?v=kRjUzHye6nQ>

Activity

1. Selection of Unit
2. Preparation of lesson note
3. Demonstration

- *Any Question?*

Thank You!