

TEACHING – LEARNING METHODOLOGIES

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Session Objectives

The participants should be able to

- **list** the various T-L methods
- **select an** appropriate T-L method.
- **discuss the strengths and weaknesses** of teaching -learning in a large group
- **take** effective lecture using various methods of interactive teaching.

Group-size Based Classification

Large Group Methods



- **Lecture** TC
- **Symposia** TC
- **Panel discussion** TC



Small Group Methods

- Free Group discussion • LC
- Bedside clinic • TC
- Workshop • TC
- Tutorial • TC
- Demonstration • TC
- Field visits • TC

Individual Methods



- Project work LC
- Assignments LC
- Self learning LC
- Computer assisted learning (CAL) LC

Factors involved in the choice of T - L methods

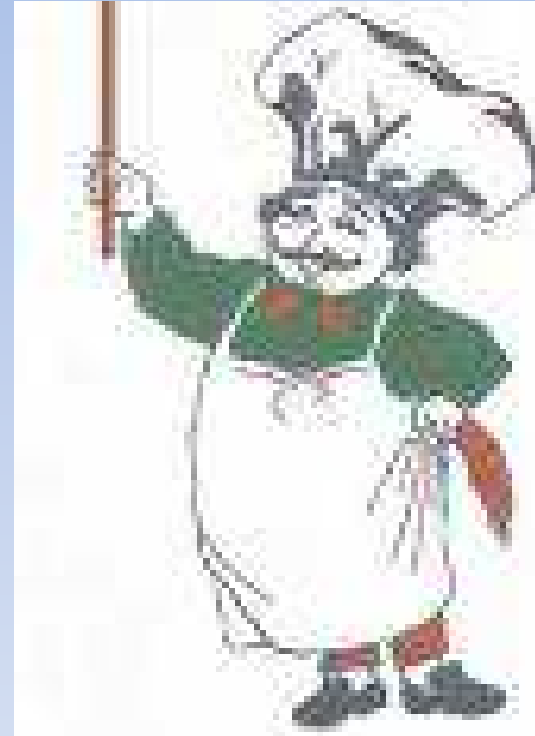
- **Group size**
- **Resources** and **time** available
- **Objectives**
- **Target audience**
- **Coverage** of subject

Selection of Teaching-Learning Method

**that will make an educational
objective easier to attain.**

Group Task

Catering College



Think-Pair-Share

What teaching learning methods will you use in the following situations?

- 1. **Think / write** about your answer individually.
- 2. **Pair** with a partner and discuss your answers.
- 3. **Share** your answer (or your partner's answer) when called upon.

- a) At the end of the session students should be able to prepare a pizza.
- b) At the end of the session students should be able to enumerate the ingredients of pizza.
- c) At the end of the session students should be able to tell advantages and disadvantages of eating pizza.
- d) At the end of the session students should be able to rate the pizzas from different food joints

Large Group Methods

Symposia

Panel discussion

Lecture (Interactive Lecture)

Activity

Divide in 4 groups

Group 1. Adv & Limitations of Symposium

Grp2. Adv & limitations of Panel discussion

Grp.3. How to take a good lecture

Group 4. Advantages & Limitations of lecture

“SYMPOSIUM”



SYMPOSIUM

Advantages

- Concise & logical presentation of ideas.
- Fair analysis
- Comprehensive coverage
- Short speeches & change of speakers
maintain interest

Limitations

- Formal atmosphere
- No discussion between speakers
- Passive audience

PANEL DISCUSSION



Advantages of a panel

- A panel identifies and **explores a problem**
- Audience can understand **various aspects** of the problem
- **Informal contact** with the audience
- Frequent change of speaker **maintains attention**

Limitations

- Subject may **not be** considered in a **logical manner**.
- The panelists, may **not cover all** aspects of a problem & may **overemphasize** only certain aspects of it.
- A **skilled moderator** is necessary.
- Audience is **passive**,
unless some 'question time' is permitted -
it is then called a "Panel - forum".

LECTURE



Definition: Presentation of facts in a
organized way

“ A good lecturer is a

Text-book plus personality .”

‘Flexner’

But, often the

personality is missing

Chloroquine

By Mrs Anxiety Regurgitator



Adverse Reactions of chloroquine

- **In proper doses, very safe**
- **Oral therapy (acute attack)** **GI upset, headache**
visual disturbances (loss of accommodation)
urticaria and pruritus
- **Prolonged therapy (suppressive doses)** **blurring of vision, diplopia**
bleaching of hair, pigmentation
confusion, convulsions
widening of QRS interval, abnormal T- wave
Rarely haemolysis, blood dyscrasias

Taking A Lecture



Before

During

At the end

Before the Lecture

- Preparation & Planning – various text books
boosts confidence – lowers anxiety
- Define objectives
- Place in syllabus (must-know, desirable-to-know, nice to know content)
- Organising contents and audio-visual Aids/
diagrams
- Rehearsing

Getting Started

- Introduce yourself
- Set ground rules – phones, questions etc.
- Arouse interest and attention
- List out objectives / themes
- Find out background level of knowledge
- Revise previous topic if related

Arrangement of contents

Simple



Complex

Familiar



Unfamiliar

Basic



Advanced

Problem



Solution

During The Lecture

- Maintain Pace
- Eye contact
- Loud, clear and audible, Voice modulation for emphasis etc.
- Gestures and Overall enthusiasm
- Stimulus variation

During The Lecture

- AV aids – dos and don'ts
- Art of questioning
- Reinforcement
- Controlling the class
- Break every 20 mins or so encouraging participation (Roleplay, activity, video, demo etc.)

At the End of Lecture

- Summarise and state key points
- Ask Qs
- Take feedback
- **Have Students Do Something with the Lecture Material.** (If they use it they can better **retain it and relate it** to the new information they will be given—if **not**, it will **not form long-term memories**)

Advantages of lecture

- **Wide coverage** of a topic
- **Uniform** teaching
- **Easy** to plan
- **Large** number of **students** can attend
- **Saves** time & with **limited** resources

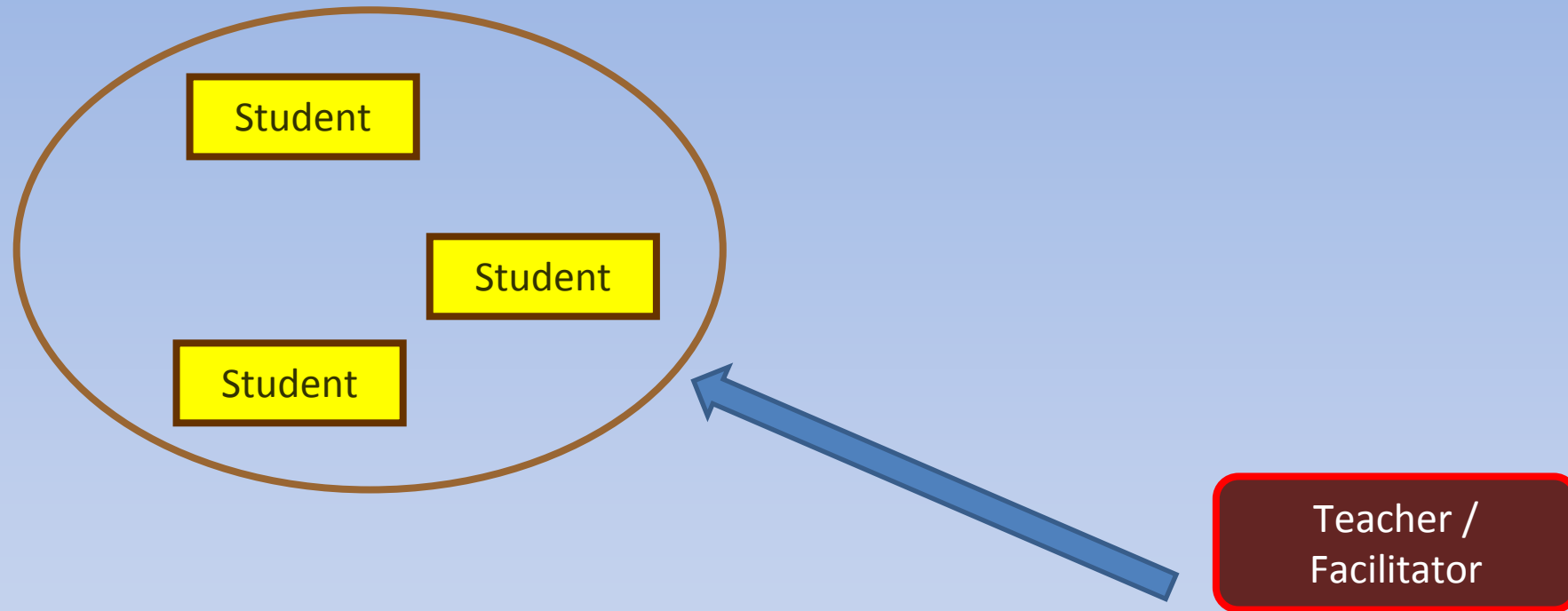
Limitations

- **Passive** way of learning
- **Teacher** centered
- **No interaction** with students
- Difficult to present **complex, detailed/abstract** information and those concerning **feeling and attitude**
- **No training in** psychomotor skills.

“Tell me, and I’ll forget.

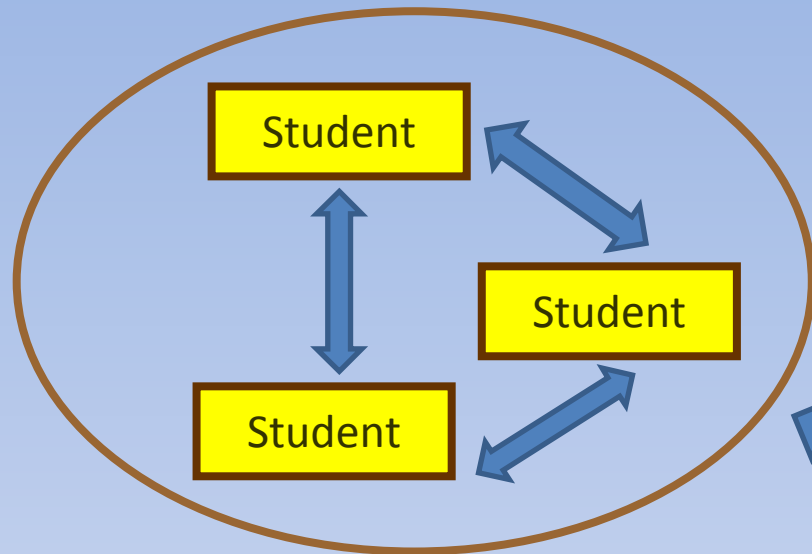
Show me, and I’ll remember.

Involve me and I’ll understand.

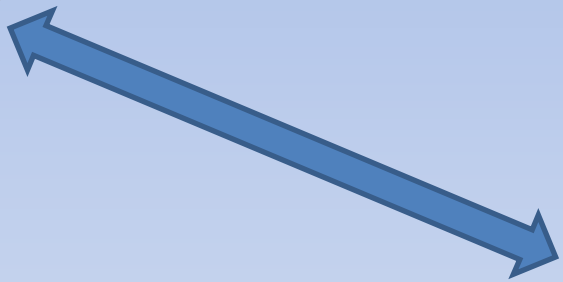


Telling is NOT Teaching

Listening is NOT Learning



Interactive Teaching



Teacher /
Facilitator

- Higher level of understanding
- Ability to apply
- Create an atmosphere / motivate to achieve this

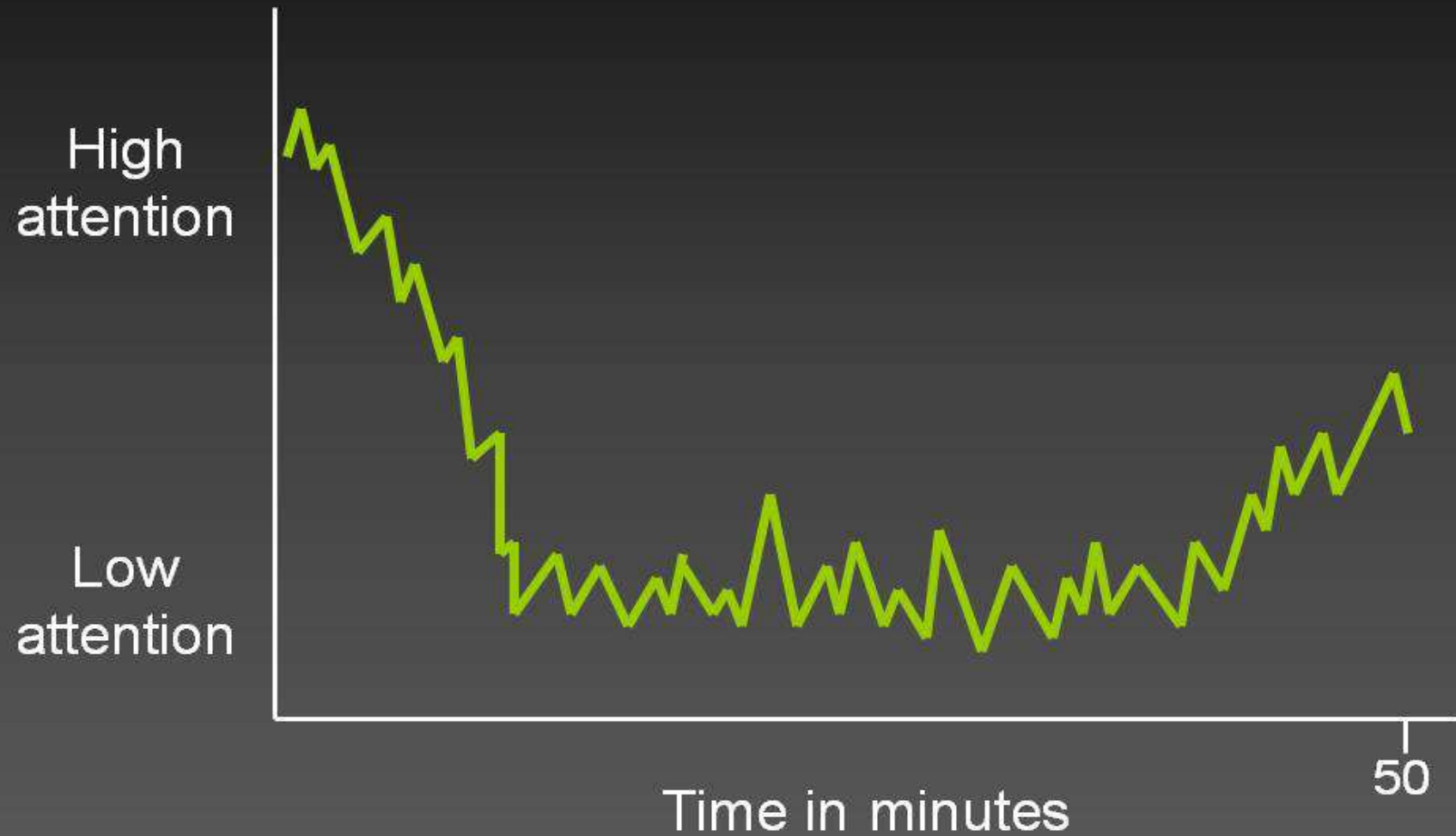
**Design & Development
of
Interactive Lecture**

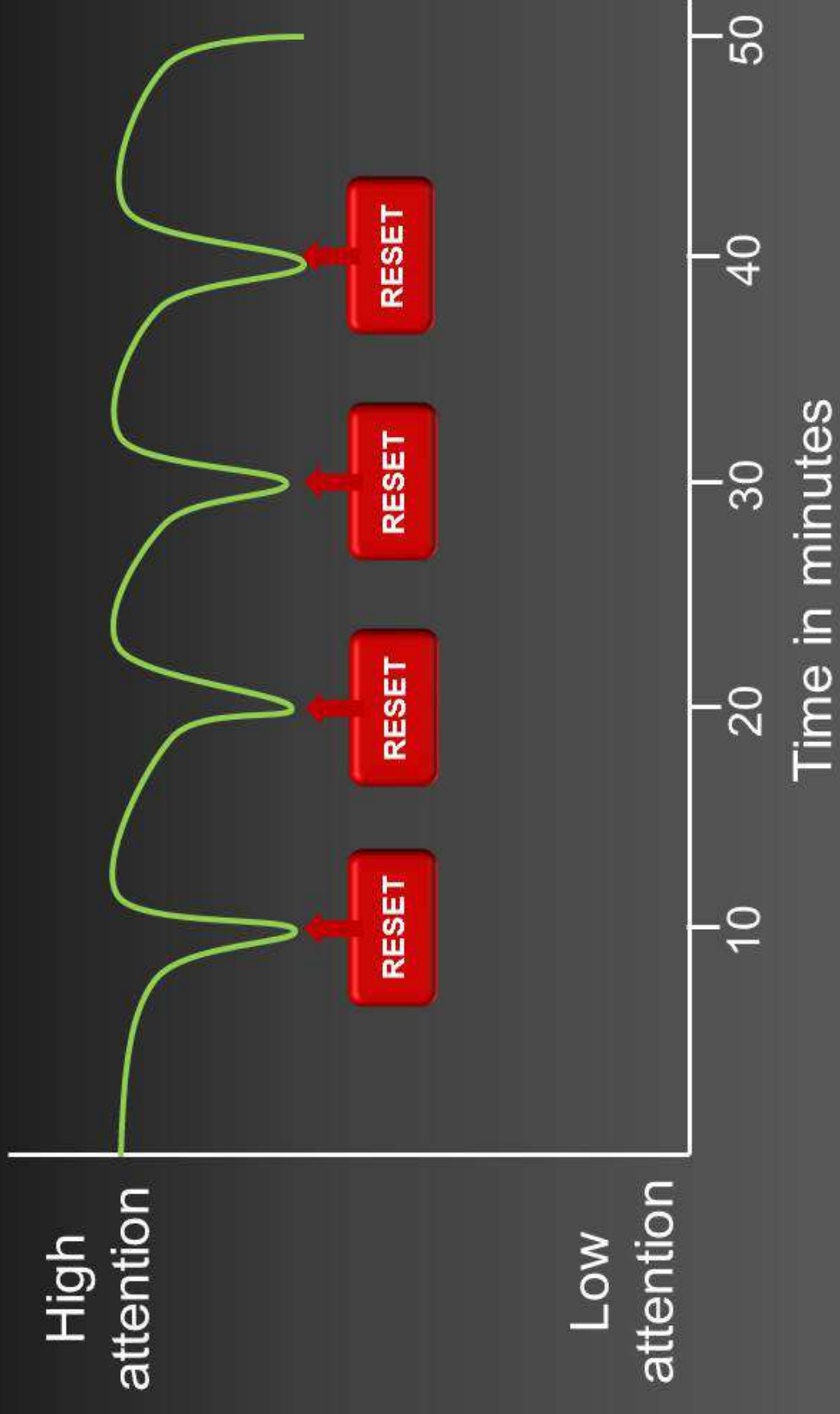
Principles

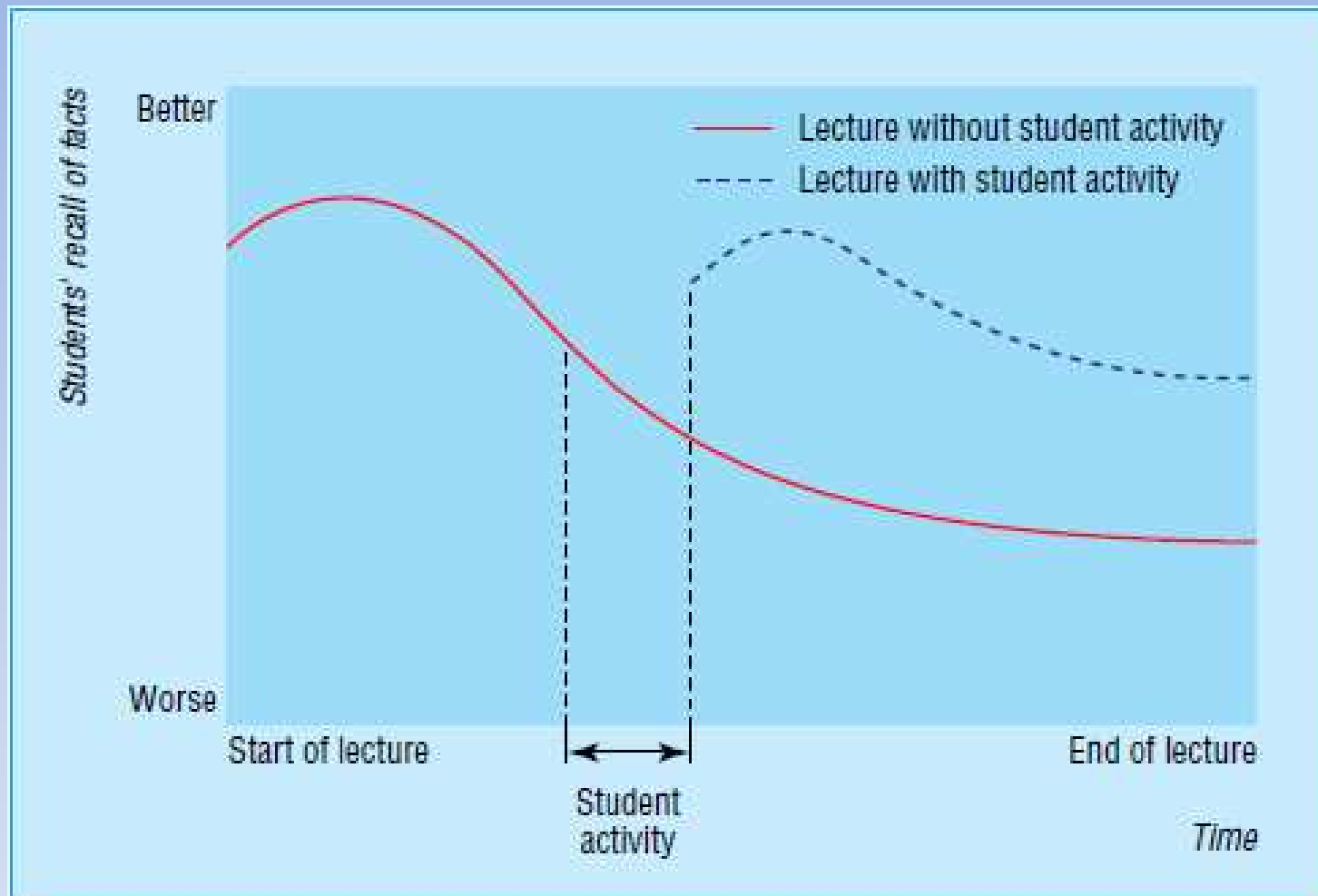
The design is based on 2 guidelines:

- Break the lecture into segments
- Make the students actively participate

Attention Span Of A Student







Relation of student's interaction and their ability to recall what they have heard in the lecture

Strategies for Engaging Students in a Large Class

- Think-Pair Share
- Jigsaw
- Concep Tests
- Quick Thinks
- One minute Paper

Think → Pair → Share

- Pose a question or problem

2 problems arise –

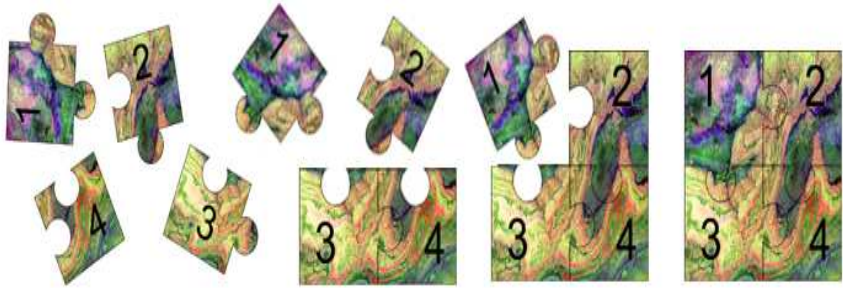
- A) few students answer
- B) we give less than a second to answer

To get many students actively involved

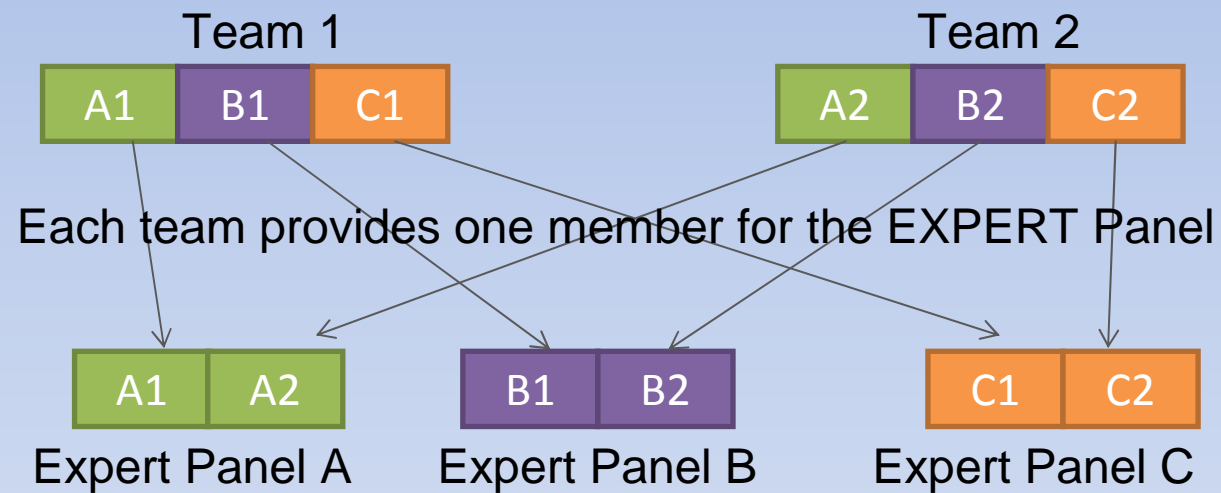
- Give participants one minute to **THINK** about their answers individually
- Have them **PAIR** with a partner to compare answers
- Ask them to **SHARE** their responses with the class

You can put up this slide

- **Think-Pair-Share**
- 1. **Think** about your answer individually.
- 2. **Pair** with a partner and discuss your answers.
- 3. **Share** your answer (or your partner's answer) when called upon.



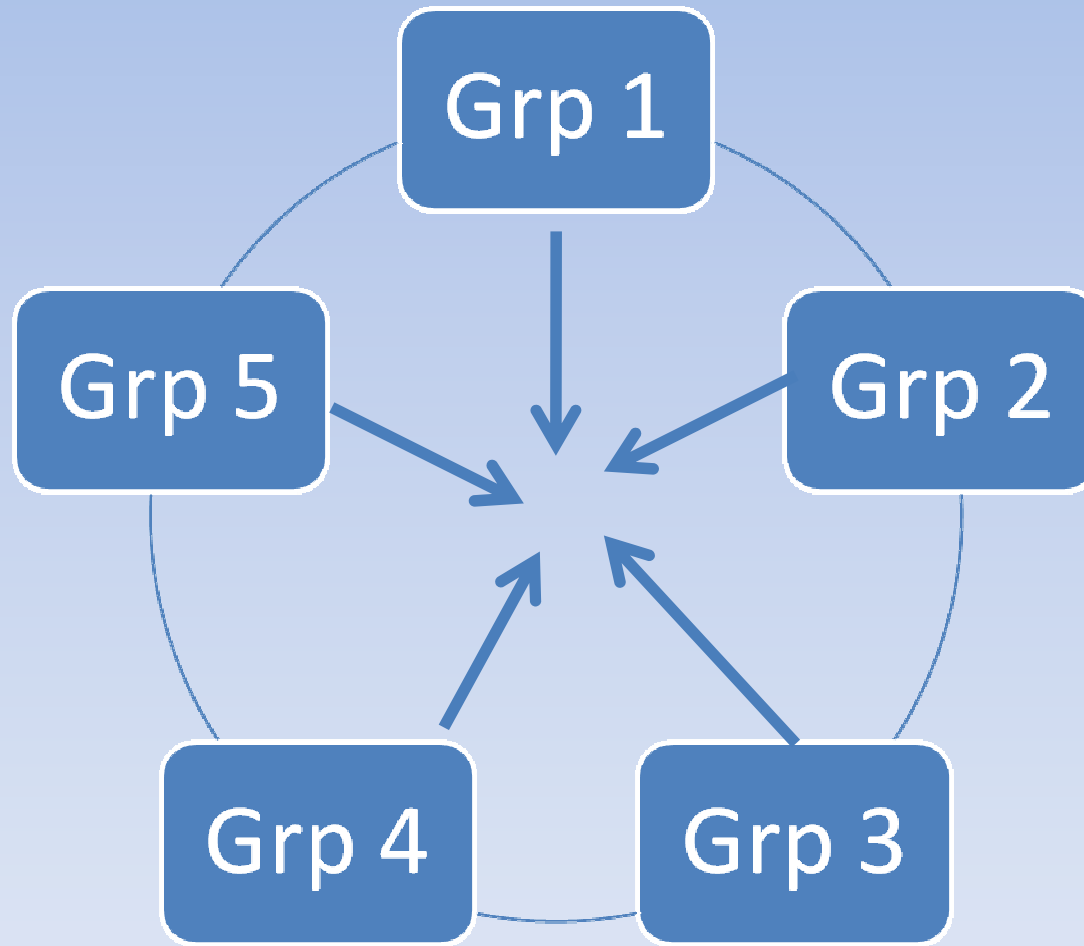
The Jigsaw Method



Teams later regroup for peer teaching and writing a report



Jigsaw puzzle



Ultimate goal of the jigsaw approach

- Teaching of “cooperation as a skill”.
- The deeper understanding - when they are required to teach a concept to other students
- Reinforcement when they teach
- Learner autonomy - students less dependent on the teacher.

Concep Tests

“When you think they understood, they did not understand.”

- Conceptual multiple choice questions
- Focus on process and reasoning as opposed to factual content
- Identify and help resolve misconceptions

Concep Tests- Example

- It takes 24 hrs for one complete rotation of earth. How long would it take for the sun to strike each and every location on the earth if the earth did not rotate on it's axis.
 - a) 24 hrs
 - b) One season
 - c) 1 year
 - d) Never

Responses to concep tests

- "It's not that someone just told me; I actually figured it out. And because I can figure it out now, that means I can figure it out on the exam. And I can figure it out for the rest of my life."

Quick-Thinks

- Correct the error
- Support a statement (conclusion, inference)
- Reorder the steps
- Paraphrase the idea (definition, theory, opinion)

Arrange these steps of group dynamics in correct order

- Norming
 - Forming
 - Performing
 - Storming
 - Adjourning
- 1. Forming
 - 2. Storming
 - 3. Norming
 - 4. Performing
 - 5. Adjourning

Correct the statement

- Microteaching involves teaching micro-details to students in very small groups
- Microteaching is organised practice teaching where teachers practice their teaching skills in front of a small group of peers or experts to get effective feedback for improvement.

"One-minute" paper worksheet

Name: _____

Date: _____

Lecture title: _____

Directions: Take a moment to think about the lecture you have just attended, and then answer the following questions.

1. What was the most important thing you learned in today's lecture?

2. What question remains uppermost in your mind at the end of today's lecture?

3. What was the "muddiest point" in today's lecture?

Example of a one-minute paper

Summary

..... and so, we have learnt:

- The strengths and weaknesses of Teaching-Learning in a large group
- Guidelines to effectively implement the T-L methods in a large group
- What is Interactive Teaching
- Tips to design an interactive lecture

THANK YOU

