

Presentation outline

- Introduction
- Conventional leaning methods
- Teaching and learning methods
- Examples of modern learning methods
- Examples of modern learning techniques



Think about your learning levels at your institute



Innovative Teaching Methods

- There are many new teaching methods today to help facilitators deliver their messages. They enable facilitators to develop their ability to help student to learn in the most creative ways,
- In turn, students will acquire the knowledge and the required skills to be an effective individual in their society,
- Relying on novel teaching methods depends on the nature of the subject and the scenario of teaching designed by facilitators.

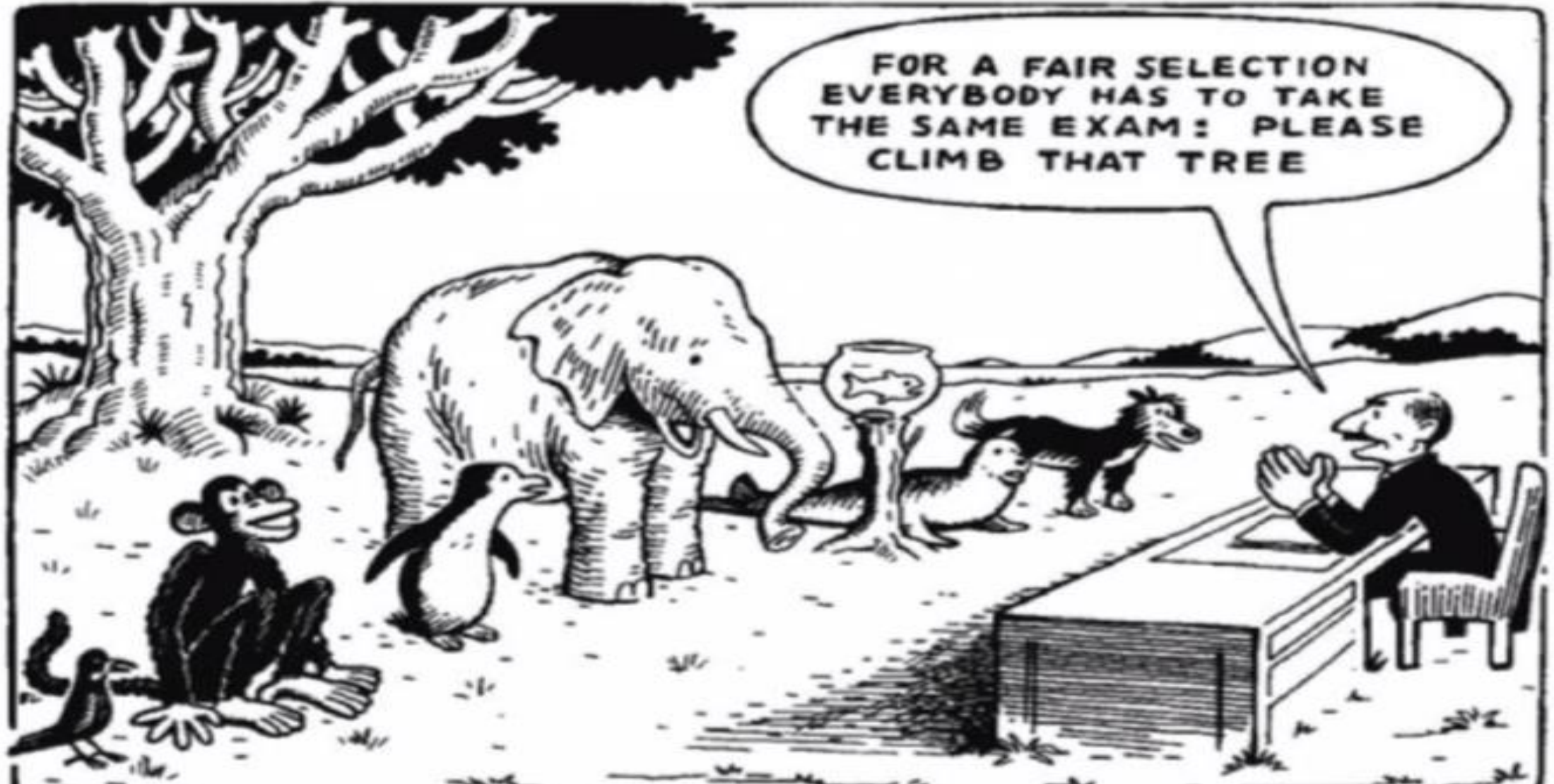
Some facts

- Teachers who have touched our humanity we remember with a deep sense of gratitude,
- Education plays a vital role in the cultural and economic development of any nation. Therefore, effective teaching is essential,
- Effective teaching is not about getting vast amount of knowledge, but rather focusing on how to assist learner to progress from one level to another,
- Education is a state of transition: The old teaching methods are gradually being replaced by new methods of learning

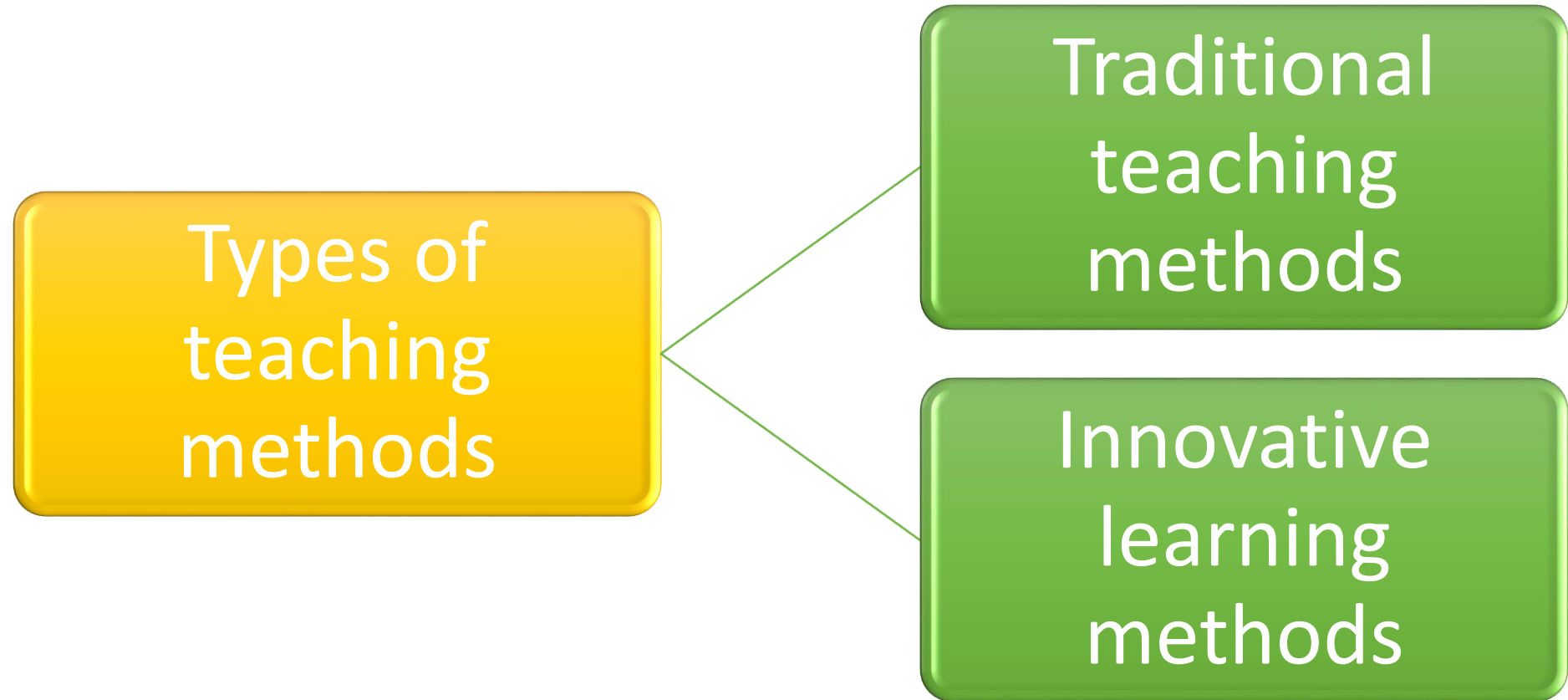
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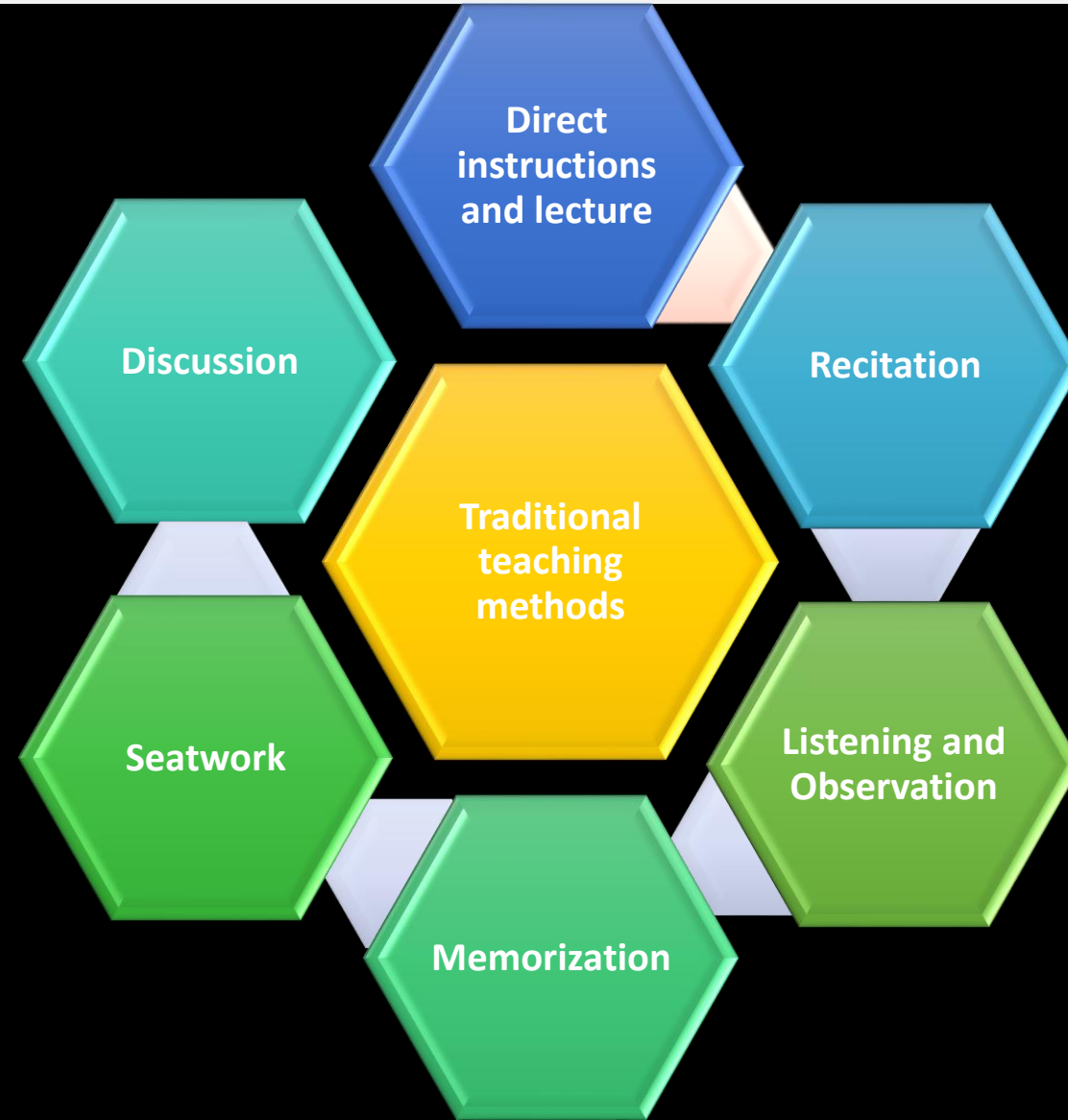
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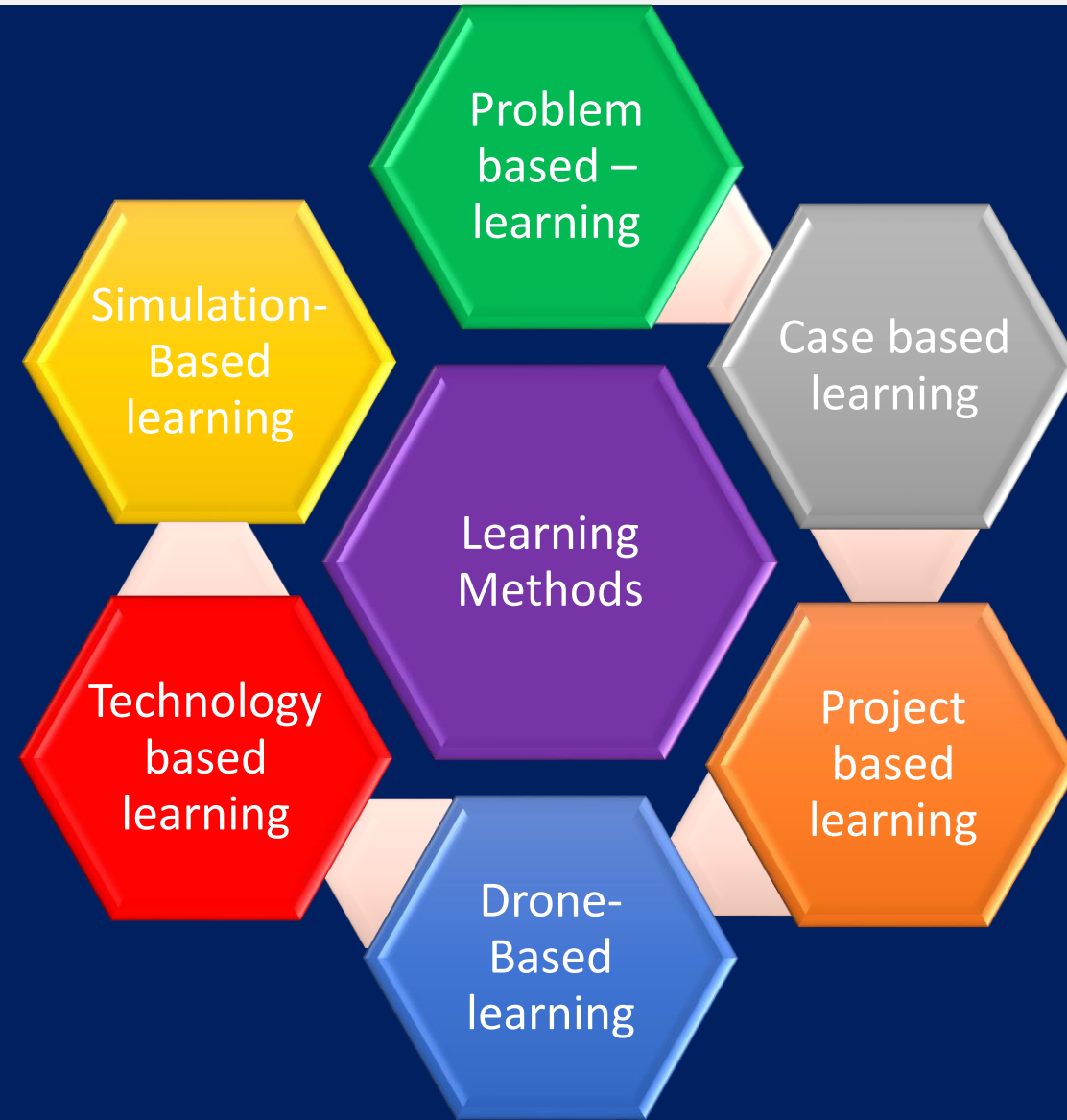
Teaching methods



Brief review to traditional teaching methods



Some examples on Modern Learning Methods





Case-Based Learning:

Characteristics of a Good Case Study

- The case content should align with instructional goals and objectives.
- The case tells a story and focuses on an issue that is interesting for students
- The case clearly states and illuminates the dilemma without resolving it.
- The case is relevant to the reader.
- The case provokes conflict and forces decision making.
- The case is general enough to be used in several applications.
- The case is short.



AUTHENTICITY
REAL WORLD
CHALLENGE, NEED,
CONCERN, PROBLEM



INQUIRY



**STUDENT VOICE &
CHOICE**



COLLABORATION



STANDARDS
CONTENT KNOWLEDGE &
SKILLS

PROJECT BASED LEARNING



**EMPLOYABILITY
SKILLS**



REFLECTION



**PUBLICLY PRESENTED
PRODUCT**



**FEEDBACK &
REVISION**



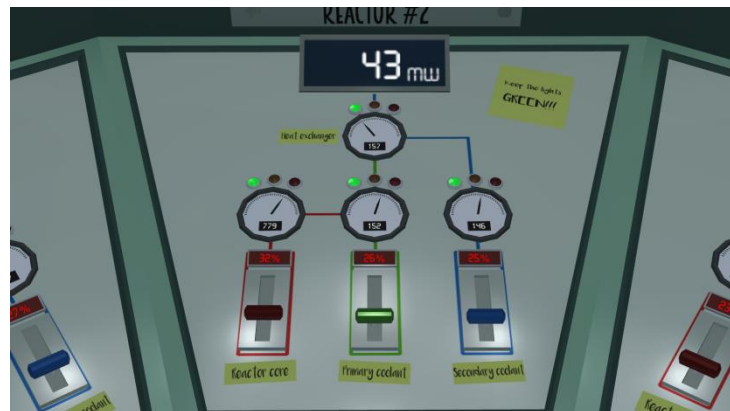
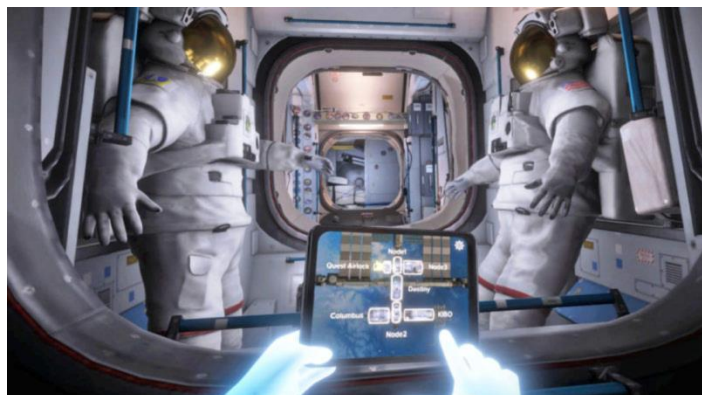
**COMMUNITY
PARTNERS**

Drone-based learning

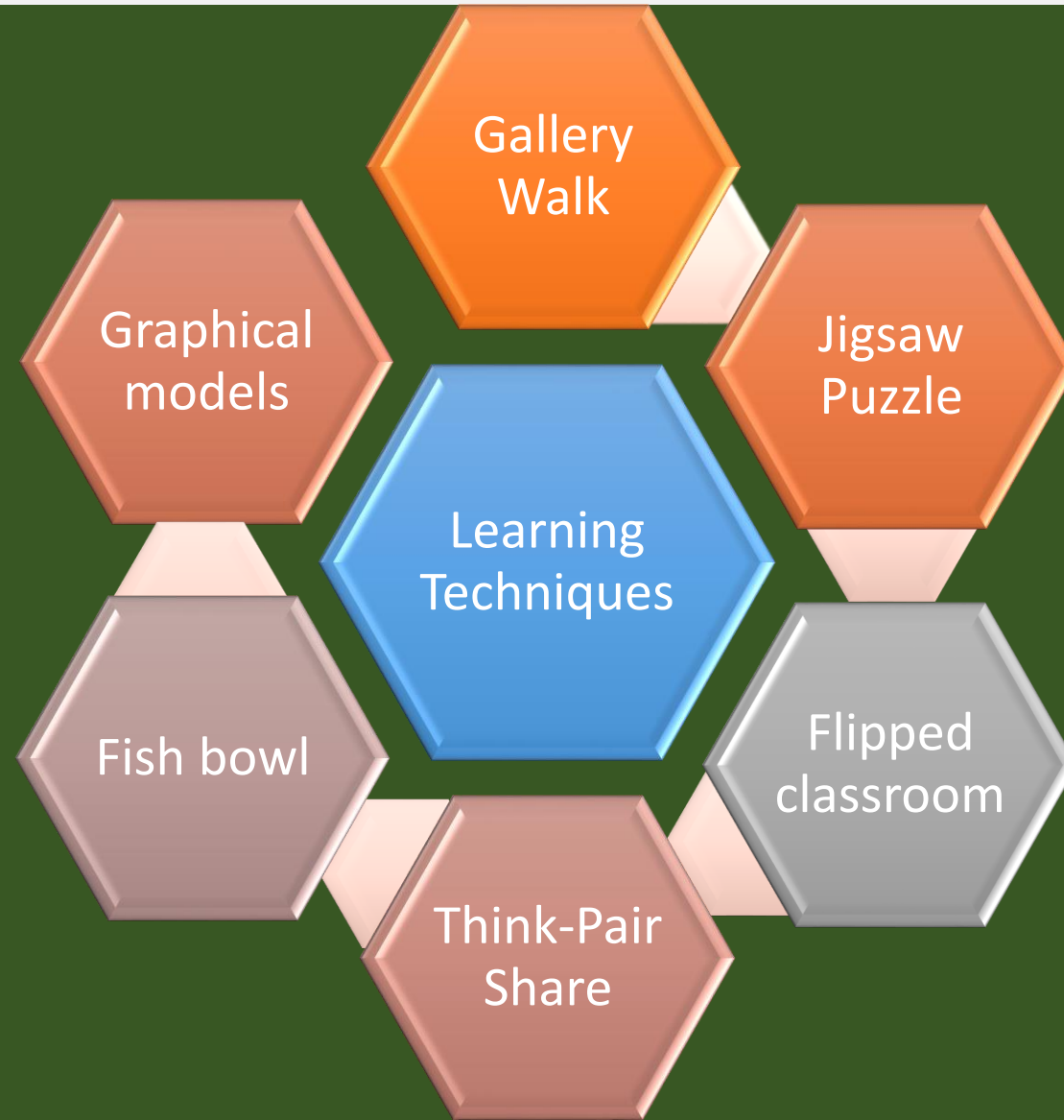
- Drone or UAV: is an aircraft without any human pilot
- Help students see the world from another viewpoint
- Important for making projects, in physics, geography, agriculture, biology,.....
- Encourage group activities
- Other importance such as photography, videography, infrastructure inspections, security and surveillance.....



Simulation-Based learning



Some examples on Modern Learning Techniques



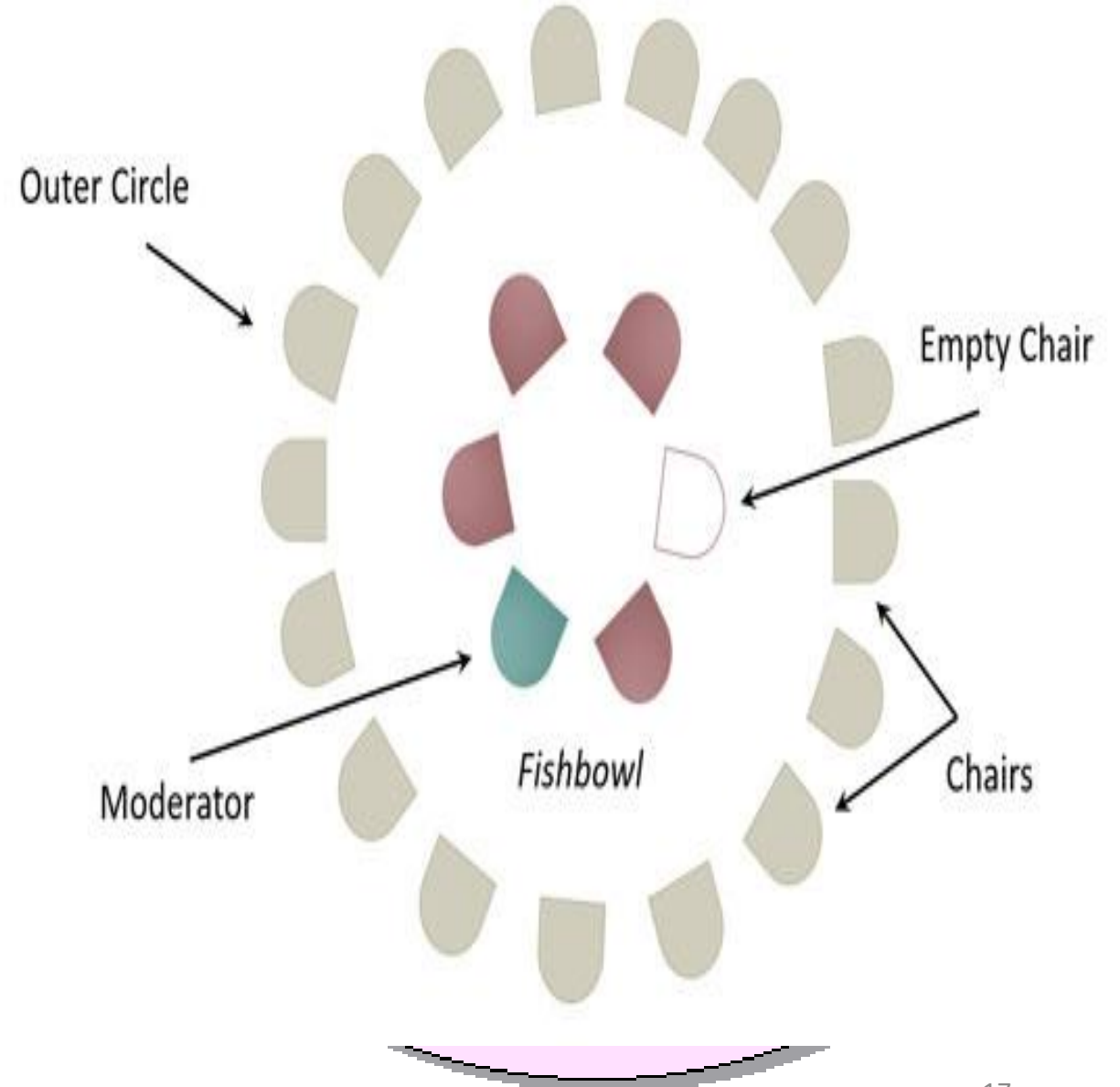
Fishbowl technique

is a strategy for organizing medium- to large-group discussions. Students are separated into an inner and outer circles. In the inner circle, or **fishbowl**, students have a discussion; students in the outer circle listen to the discussion and take notes.

Procedure

1. Select a topic
2. Set up a the room
3. Discuss norms and rules (Switch of tap)
4. Debrief

Individuals



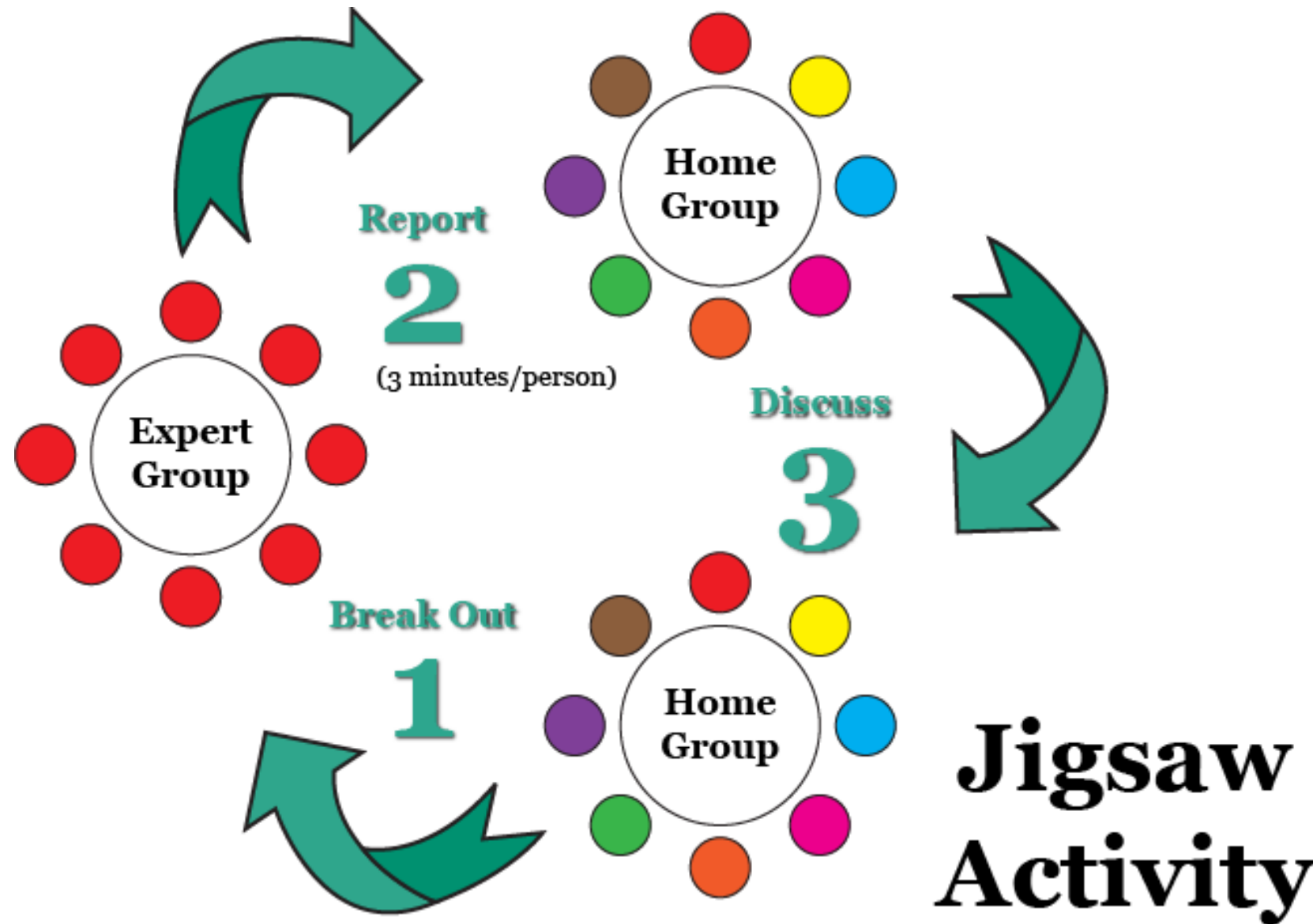
Jigsaw technique

This technique can be done through three steps

1. Breakout learners of home groups into expert groups:

2. Report back to home group:

3. Discuss with home group:



Is a great technique to motivate students and promote higher-level thinking.

1

- Preparation is generally easy and takes a short amount of time.

2

- The personal interaction motivates students who might not generally be interested in the discipline.

3

- It engages the entire class and allows quiet students to answer questions without having to stand out from their classmates.

4

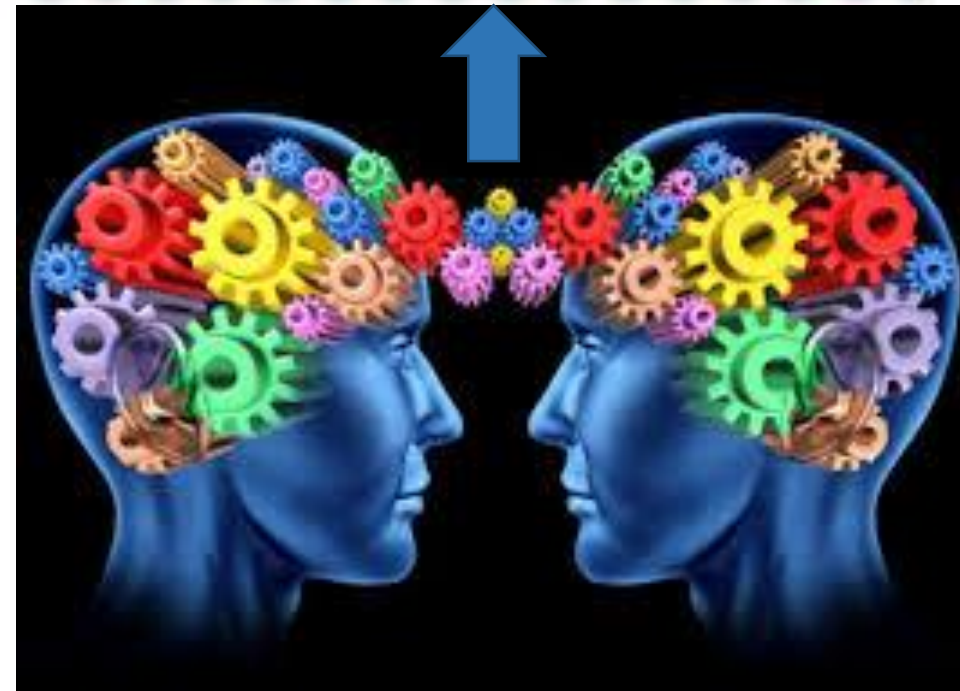
- Assess the levels of student thinking

5

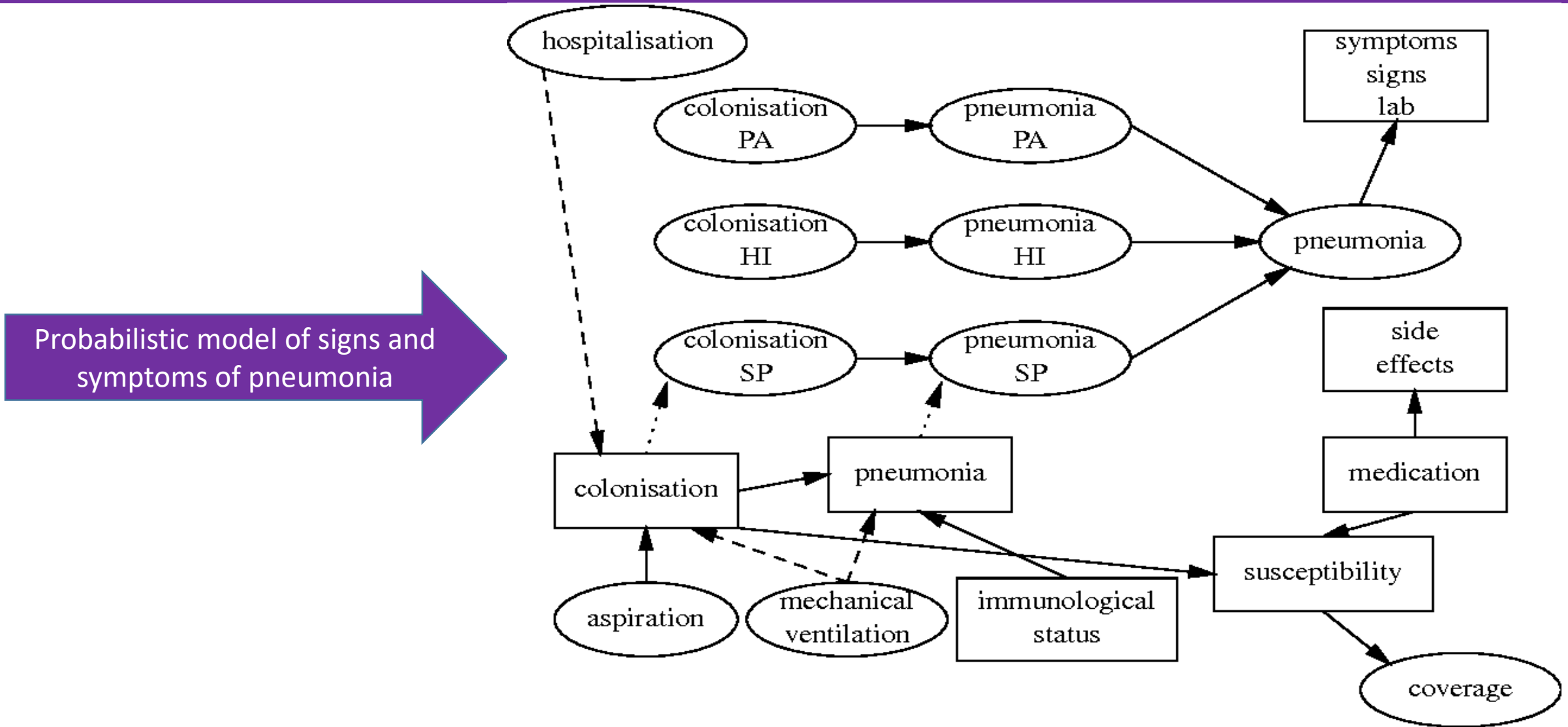
- The fluid nature of group formation makes this technique very effective and popular for use by instructors of large classes.

6

- Improves student comfort levels and willingness to participate throughout a class period.



Graphical Model

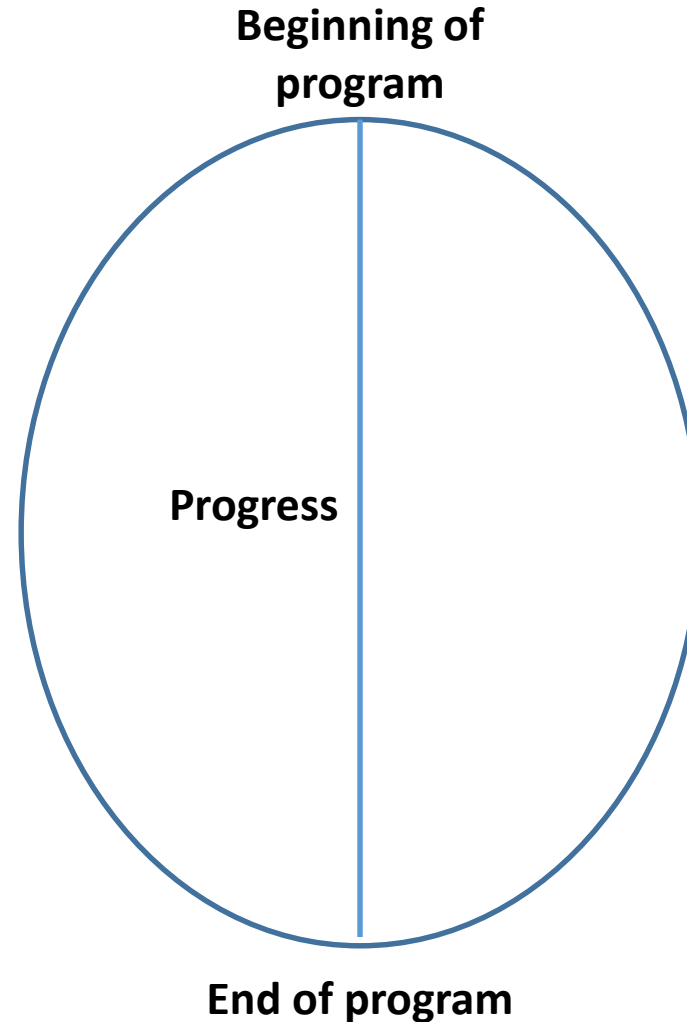


Break
10 minutes



What is Assessment?

Is the process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students' learning and development.



Purposes of assessment?

Purposes for Teachers

- To determine nature of student learning
- To inform instruction
- To diagnose student strengths and weaknesses
- To evaluate students and construct grades

Purposes for Students

- A means of reporting on learning and communicating progress
- A way to motivate and encourage (or discourage)
- To build student independence

Reliability

- Reliability refers to the consistency of results,
- A test with a high degree of reliability would yield the same results repeatedly, independent of outside factors.



Reliability

Types of reliability



Test-retest reliability



Parallel forms reliability



Inter-rater reliability



Internal consistency reliability

Factors affecting assessment reliability

The length of the assessment

The suitability of the questions or tasks for the students being assessed.

The readiness of students for the assessment

Grading design and procedure

The phrasing and terminology of the questions.

Assessment validity

- Validity refers to the accuracy of the assessment.
- It examines if the assessment actually measures what it intends to measure.

10-Minute I/O

Test Validity



Types of Assessment validity

Face validity

- Do the assessment items appear to be appropriate?

Content validity

- Does the assessment content cover what you want to assess?

Criterion-related validity

- How well does the test measure what you want it to?

Construct validity

- Are you measuring what you think you're measuring?

Conceptual Framework for Learning Evaluation

Assessments generally have one of three purposes:

1. **Assessment of learning**

Are a way to find out what students have learned and are usually **grade-based**

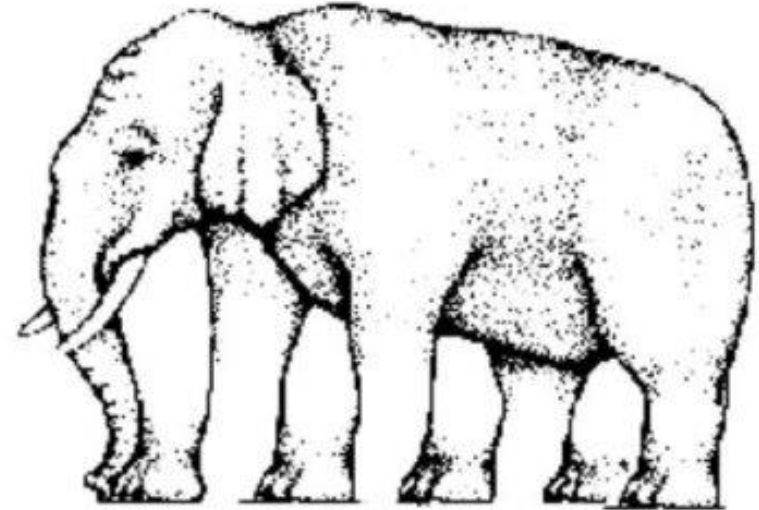
2. **Assessment for learning**

provides a clear snapshot of student learning and understanding

3. **Assessment as learning**

It teaches critical thinking skills, problem-solving and encourages students to set achievable goals for themselves and objectively measure their progress.

Question



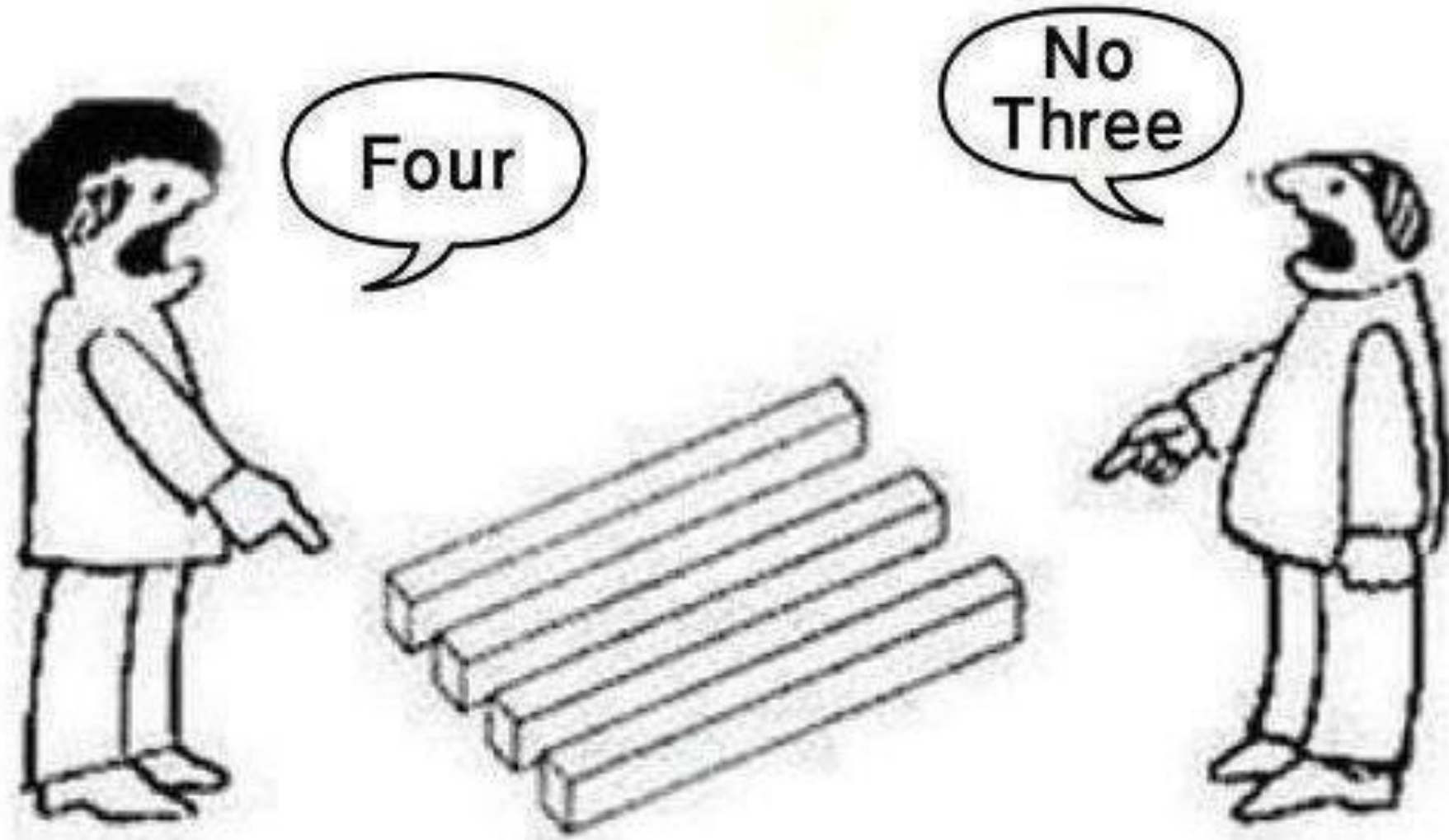
How many legs?

a) 5

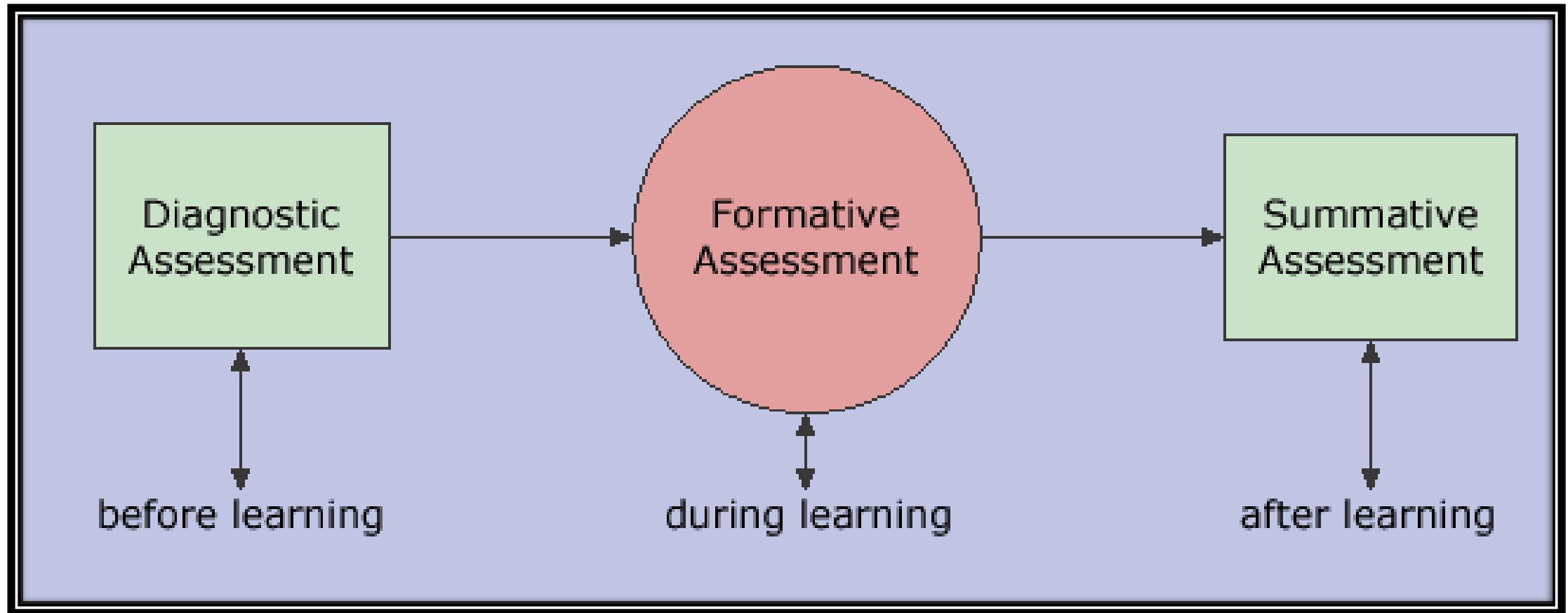
b) 4

c) It depends

Introduction: Perspectives on Assessment



Main types of assessments



Other types of assessments

1

- Norm-referenced assessment

2

- Criterion-referenced assessment

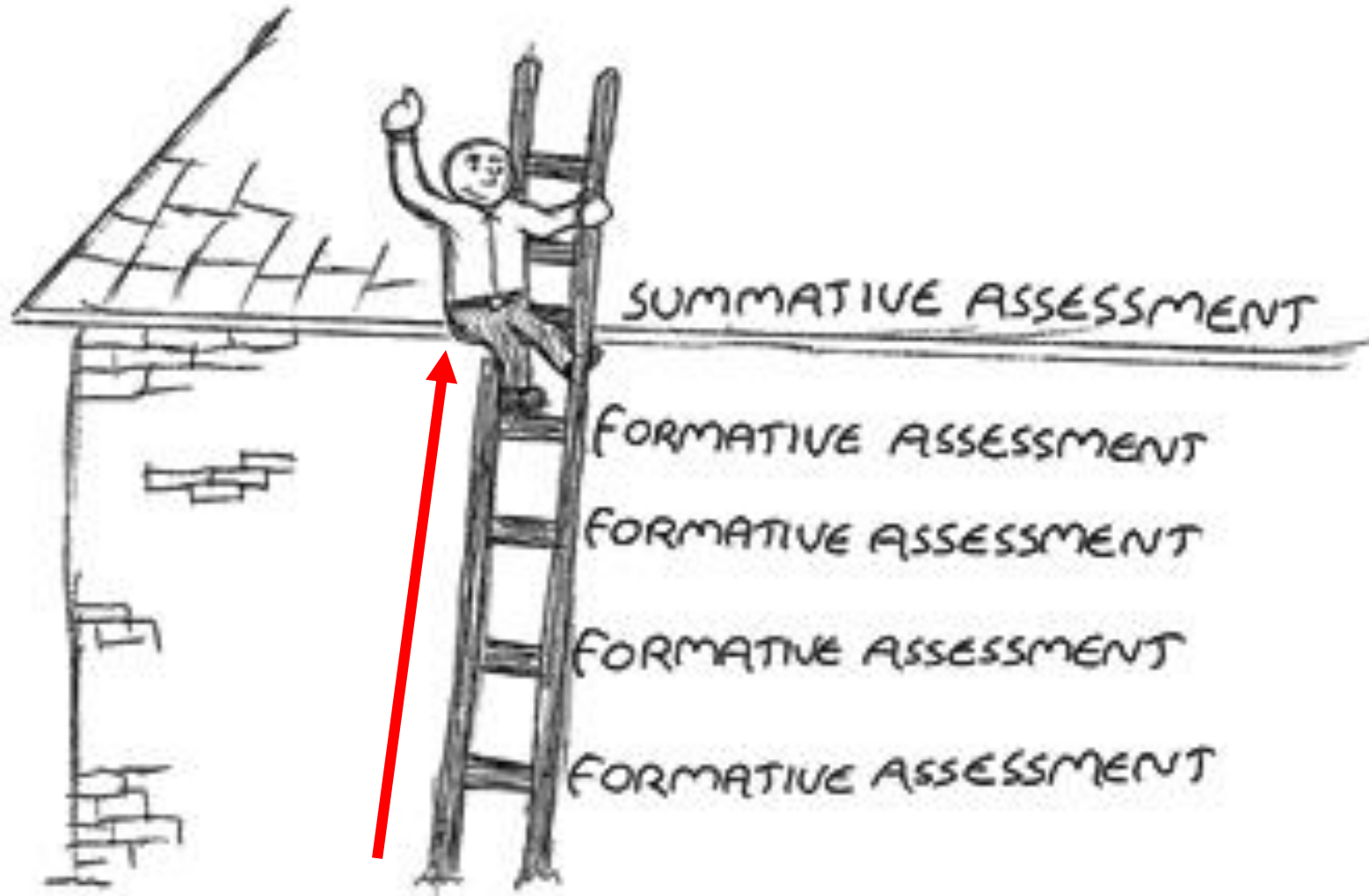
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- Ipsative assessment

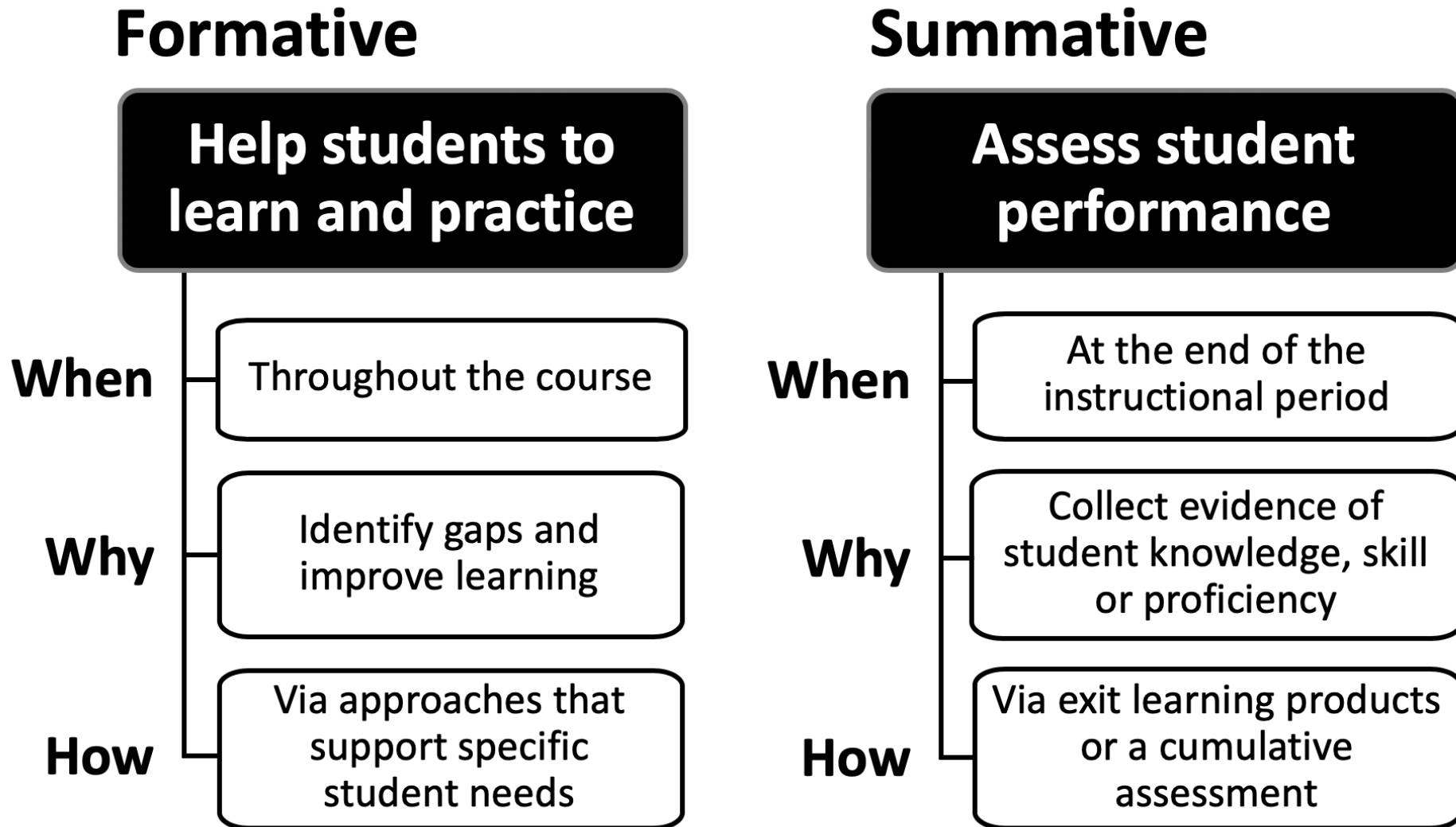
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- Authentic assessment

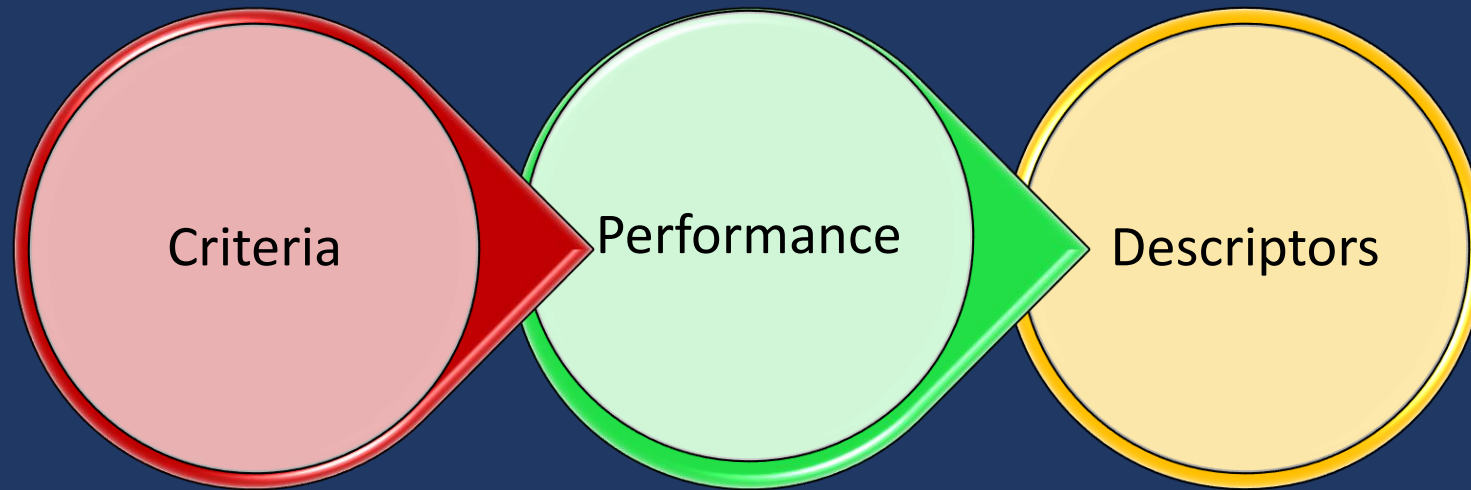
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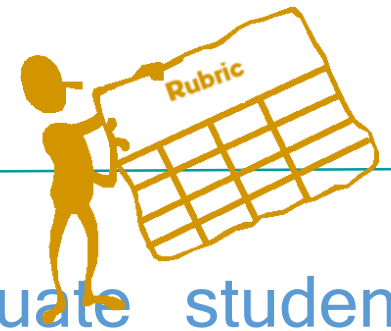
2. Formative & Summative Assessment



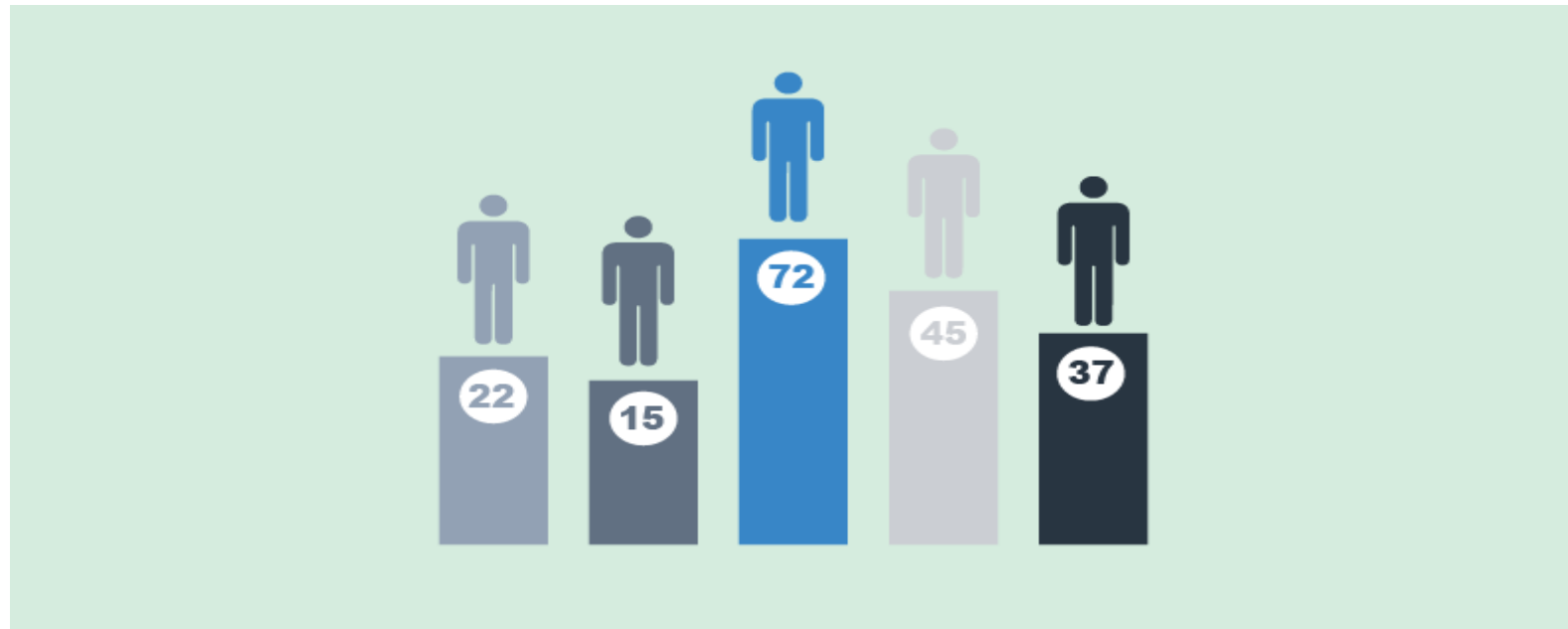
Rubrics for Assessment



What is a Rubric



A rubric is a scoring guide that helps teachers evaluate student performance, based on a range of criteria. A rubric lists the criteria, or characteristics, that student work should exhibit and describes specific quality levels for those criteria.



Why Rubric

Why my score is less than!

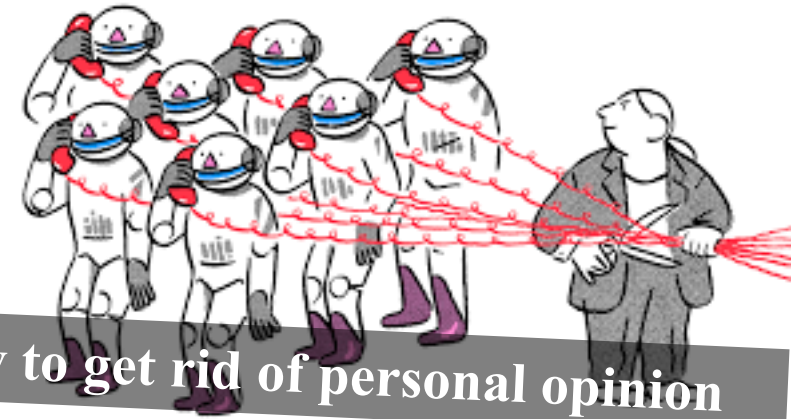


Improve student performance



Meets international accreditation requirements

A measure of student learning of skills



A way to get rid of personal opinion

The student feels credible in giving the evaluation

Give a clear methodology for evaluation

Improve student learning

What can rubric be used for?

<i>Assignments</i>	<i>Homework</i>	<i>Participation</i>	<i>Projects</i>
<i>Essay exams</i>	<i>In-class activities</i>	<i>Performances</i>	<i>Self-assessment</i>
<i>Group work</i>	<i>Lab reports</i>	<i>portfolios</i>	<i>Term papers</i>

Elements of Rubric


Figure 1
Simple Grading Rubric


History Research Paper Rubric			
Criteria	Excellent	Good	Poor
	3	2	1
<i>Number of sources</i>	Ten to twelve	Five to nine	One to four
<i>Historical accuracy</i>	No apparent inaccuracies	Few inaccuracies	Lots of historical inaccuracies
<i>Organization</i>	Can easily tell from which sources information was drawn	Can tell with difficulty from where information came	Cannot tell from which source information came
<i>Bibliography</i>	All relevant bibliographic information is included	Bibliography contains most relevant information	Bibliography contains very little information

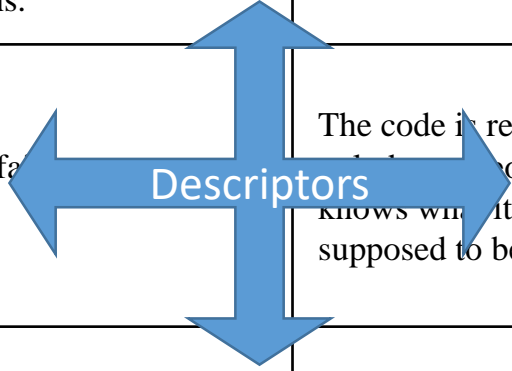
The diagram includes several callout boxes with leader lines pointing to specific parts of the rubric table:

- Criterion**: Points to the 'Criteria' column header.
- Task**: Points to the title 'History Research Paper Rubric'.
- Level of Performance**: Points to the 'Excellent', 'Good', and 'Poor' performance levels.
- Score**: Points to the numerical scores 3, 2, and 1.
- Descriptor**: Points to the descriptive text within the 'Bibliography' row.

Using Rubric as an effective tool of assessment strategy

Level of performance 	Exceptional	Acceptable	Amateur	Unsatisfactory
Specifications	The program works and meets all of the specification	The program works and produces the correct results and displays them correctly. It also meets most of the other specifications.	The program produces correct results but does not display them correctly	The program produces correct results but does not display them correctly
Readability	The code is exceptionally well organized and very easy to follow	The code is fairly easy to read.	The code is readable but only by someone who knows what it is supposed to be doing	The code is poorly organized and very difficult to read
Reusability	The code could be reused as a whole or each routine could be reused.	Most of the code could be reused in other programs	Some parts of the code could be reused in other programs	The code is not organized for reusability.
Delivery	The program was delivered on time	The program was delivered within a week of the due date.	The code was within 2 weeks of the due date	The code was more than 2 weeks overdue.

Assessment criteria 

Descriptors 

Rubric to Grading Scientific Paper

Capstone Rubric	Excellent 3	Satisfactory 2	Poor 1	Total Score
Paper topic	New, original, innovative and important	Important, but it is covered in a limited manner	It has been published a lot, it is useless to study it	
Paper Title	Accurately expresses the subject of the research, abbreviated, formulated scientific in fluent language	Expresses the subject of the research, longer or shorter than necessary Some of his vocabulary are slang	Lacking the appropriate wording	
Introduction	Pave the way for research, Interesting and supported by opinions and documented results, going from public to private. Raised the importance of studying the topic	Give an idea of the research problem, Include sufficient information on the subject	Do not explain the subject of the study, Put it up weak and dominated by personal opinion.	
Paper Problem	Specific and clear, valuable, New, studyable,	Well defined, important, relatively new, studyable	Previously addressed, vague, difficult to study	
Research questions	Exactly addresses the problem of the study, Their answers require research, Not overlapping, It can be answered using one of the research methods	تCovering the research problem Most of the answers require research Most of them can be covered by one of the research methods	Their relationship to the problem of research is weak, difficult addressed one of research methods, not suitable	
research aims	Precisely defined, value, verifiable	Most specific, acceptable, most of them can be achieved	Exaggerated, or unrealistic, inappropriate	
research importance	An accurate clarification of the benefits of scientific and practical research	Significant clarification of the benefits of scientific and practical research with little overlap with objectives	Unclear, overlapping with goals	
Documentation and references	Totally committed to documenting one system, use more than 5 references	Committed a major commitment to document system, Astkhaddm5-4mraja	Documentation system is inaccurate, use less than 4 references	
Directing	The research is printed, numbered, and ordered, containing the basic data.	Printed, numbered, arranged graphically, with most baseline data.	Unprinted, lacking a lot of organization.	

Conclusions

- Modern learning methods and techniques have to replace the traditional ones in the educational system
- Assessment is much more than exam
- Assessment is a lifelong process

