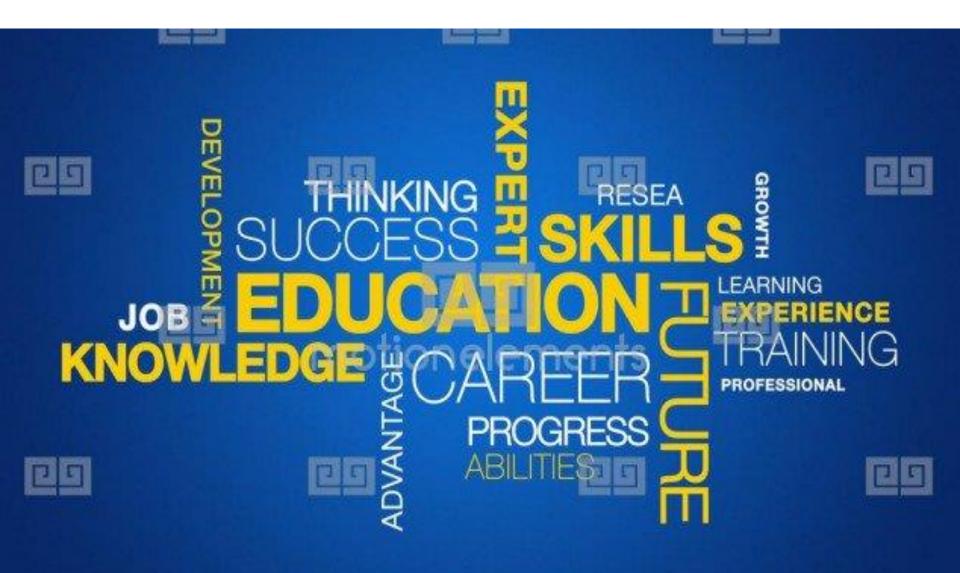
### **Organizing Effective Teaching Learning**



# **OVERVIEW OF THE TRAINING**

- Effective Teaching Learning Methods
- Assessment of Student Performance

### Learning Outcomes

- Ability to select and use effective teaching techniques for better attainment of learning outcomes
- Ability to select appropriate tools and approaches for effective assessment

### (1) Planning and Preparation

#### (2) The Classroom Environment

#### Framework for Teaching: The Four Domains

# (4) Professionalism

(3) Instruction & Assessment Strategies

# A Few Effective Teaching-Learning Methods: <u>OBE</u>

- Inquiry-based TLA
- Problem based
- Team-based
- <u>Case Method</u>
- Lecture-based ----- <u>Interactive</u>

# Inquiry-based Learning

- 1. Field-work .... Work integrated
- 2. Problem based
- 3. Case studies
- 4. Individual and group projects
- 5. Research projects

# **OBE : 4 Key Questions**

- 1. What do we want the students to learn?
- 2. Why do we want them to learn it?
- 3. How can we best help students to learn it?
- 4. How will you know what they have learned?

### **Role of Teachers**

- Preparing the students by explaining the outcomes
- Putting Learning outcomes within an appropriate context
- Facilitating as resource person.
- Assessing the students' prerequisite knowledge and guiding to develop, if they do not have.
- Motivating students to attain the outcomes
- Teachers must help students to understand: what they have to learn, why they should learn it, and how they will know that they have learned

## **Role of Students**

- The learner has full responsibility for her/his learning
- Must be aware about the outcomes
- Questions students should ask themselves: What do I have to learn? Why do I have to learn it? How will I be assessed? How the learning will be useful in career ?

### **Principles of Student-Centered Learning**

- The learner has full responsibility for her/his learning
- Questioning mind: what why how
- Involvement and participation are necessary
- The relationship among the learners (Group)
- The teacher becomes a facilitator and resource person

## **Student-centered Teaching Learning**

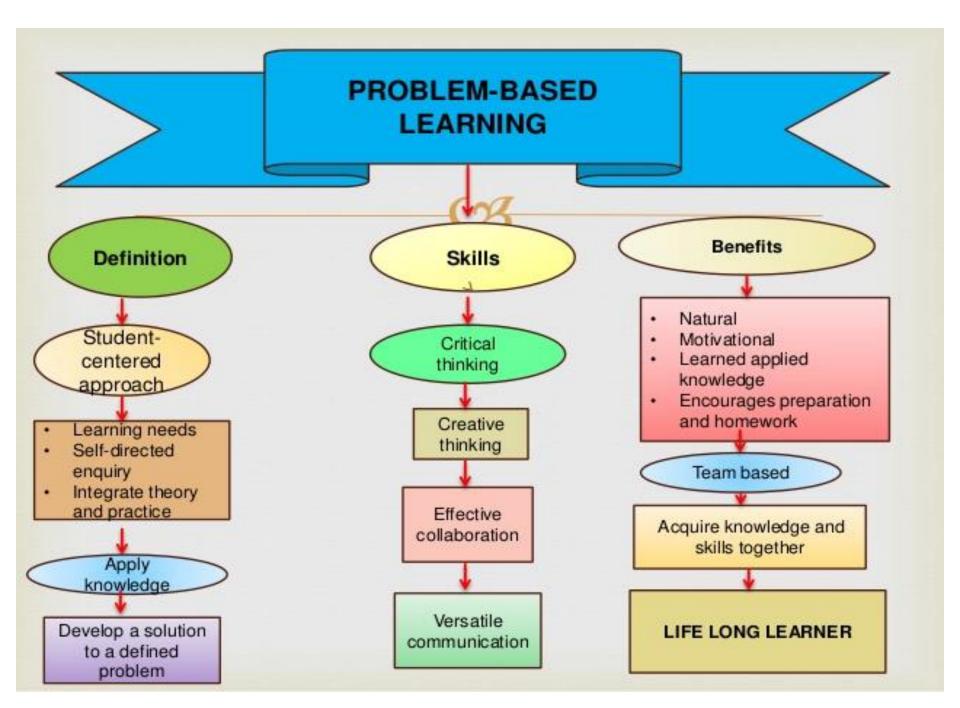
- High level of student choice
- Active Student
- Higher level of engagement
- Self-motivation
- Commitment
- Fun & Learn

## **Interactive Teaching Learning**

- **D**ifferent ways to create an involvement like:
- Teacher-student interaction
- Student-student interaction
- Use of audio, visuals, video
- Hands-on demonstrations and exercises

# PBL is ....

- Learn through the experience of solving an open-ended problem
- Focusing on problem solving, but it allows for the development of other desirable skills and attributes.



### **PBL** Process

- Learners are presented with a problem;
- Research & define the problem(s)
- Develop possible theories or hypotheses to explain the problem
- Construct a shared primary model to explain the problem at hand.
- The students re-group to discuss their findings and refine their initial explanations
- Design the process/approach to solve the problem
- Act & Socialize

# TBL...?

- TBL is an innovative teaching-learning techniques that employs small groups
- Team must be formed properly
- Students must be accountable for both individual and teamwork
- Frequent and immediate student feedback

# Appropriateness of TBL

- Team building
- Leadership
- Communication skills
- Empathy
- Cooperative attitude
- Respect to others

# **Case Method**

- Participants will try to resolve the problems analyzing given information.
- Make decisions about strategy for growth and sustainability.
- Address higher order thinking skills (HOTS)

# Features of Case Study

- A story of real characters in actual situations.
- Involving issues and conflicts.
- May not have single solution.
- Requiring a decision.

(Stanford University Newsletter on Teaching, 1994)

### **Getting Started: Teacher**

- Selecting a Case in Respect of CLO
- Be Prepared to Guide the Discussion
- Prepare Your Students for case analysis
- Allow sufficient time for students to meet with members
- Classroom Set-up
- Facilitate the Discussions
- Asking Questions
- Classroom Activities: Allow Students for Arguments
- Evaluation: Summarizing

(Adopted: Schwartz, 2009)

### How to get in: Students ?

 Read the case carefully for two/three times or more (if needed),

Identify the key facts, Clarify the nature of the problem(s) Determine decisions need to be made.



Try to establish the significance of information presented in the exhibits (if any).

New insights may be gained combining and manipulating (crunching) data.

### Assessment ?

- The process of obtaining information for decision
- The systematic process of collecting, analyzing and interpreting information to determine the extent to which learning outcomes have been achieved.
- Creating a basis for judgment on the performance of Student
- Measuring level of competence or Skill

### Assessment...

• What ?

Qualifications that refer learning outcomes

• WHY?

Refers to the purposes

• How ?

Validity & reliability

### Assessment ...... Why ?

WHY? -- refers to the purposes

#### • Instructional

- 1. To assess the adequacy and appropriateness of instruction
- 2. To identify the improvement opportunities in instruction

#### • Administrative

- 1. To grade or rank students
- 2. To select for future courses
- Guidance & Counseling
  - 1. To provide feedback to improve learning
  - 2. To motivate students
- Research
  - 1. To evaluate effectiveness of teaching and learning
  - 2. To determine the preparedness for real life situation
  - 3. To asses employability

# Assessment ..... How ?

- Define the learning outcomes
- Design assessment tasks
- Define assessment criteria
- Develop performance standard
- Construct overall achievement standard to grade
- Ensure Validity & Reliability

Validity: Does it measure what is supposed to measure?

## Formative Vs. Summative Assessment

|          | Formative   | Summative   |
|----------|---|---|
| When?    | Before or during instruction  | End of instruction  |
| Purpose? | Guide the teacher in<br>planning and<br>improving instruction;<br>help students improve<br>learning | Let teachers and<br>students know the level<br>of accomplishment<br>attained. |

# Assessment Tasks/Tools

- Written examination (Objective tests/Essay type /MCQ)
- Oral defense/Exam
- Group activity/Project work (Individual/Group)
- Presentation/ Demonstration
- Simulation ----- Role play (Like TIMS)
- Case Analysis (WAC)/Assignment
- Open-book exam
- Work/Activity based assessment
- Practical exam
- Reflection paper/Report Writing

#### Assessment Tasks and Instruments

| Elements to be<br>Assessed                  | Outcomes to be<br>Measured  | Assessment Tasks   | Instruments            |
|---|---|--|------------------------|
| Creativity                                  | Ability to generate/<br>create/design<br>something unique, &<br>outstanding | Creative project / product<br>design/ model<br>building/Performance                      | Rubric                 |
| Leadership                                  | Ability to lead a group<br>of students to<br>undertake a project.           | Group project/organizing<br>event/conducting mini<br>research, Presentation or<br>Debate | Rubric/<br>Observation |
| Critical thinking<br>and problem<br>solving | Ability to diagnose,<br>analyze, implement<br>and suggest solution.         | Tests / Exams /Lab<br>experimentation /Projects<br>/Studio work /WAC                     | Question/<br>Rubric    |

## Features of Effective Assessment Tools

- Have a specific purpose
- Be clear in meaning
- Stimulate thought
- Encourage to use learning information..
- Validity

Refers to the appropriateness & usefulness of the results of an assessment procedure

# Rubrics ....

- Rubrics is a scoring guide
- It seeks to evaluate a student's performance based on predetermined criteria
- A rubric is an authentic assessment tool used to measure students' work
- A rubric explicitly describes the expectations for an assignment or piece of work.

## **Developing Rubrics**

- Decide what you want students to demonstrate
- Decide how many levels of achievement
- Give score on each level of performance with a numerical scale. (i.e., "excellent-4, very good-3, good-2, poor-1, unacceptable-0)
- Develop a different rubric for each types of assessment tasks

## **Components of A Rubrics**

- Criteria: Aspects of performance (e.g., argument, evidence, clarity) that will be assessed
- Descriptors: Characteristics associated with each dimension (e.g., argument is demonstrable and original, evidence is diverse and significant)
- Performance levels: Rating scale that identifies students' level of mastery within each criterion