STEP
Strategic Teaching Enhancement Program
Education Development Office
City University of Hong Kong
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Engaging Students in Active Learning

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Learning outcomes

After this workshop the participants should be able to:

• Describe the nature of active learning and the reasons for implementing it

• Identify some useful strategies for active learning and apply them to their own teaching

• Distinguish PBL from PS and SBL

• Explain what PBL is & its impact on developing students as active learners
Activity

1. Analysing the case
2. Defining active learning
3. Evaluating active learning strategies
4. Introducing problem-based learning
5. Summarising learning, Q & A & giving feedback
Activity 1  Analysing the case

• Take turn to introduce yourself to group members your name and department

• Work with them to analyse the case

• Suggest two things for Professor Smith to do

(10′)
Activity 1 Analysing the case

Professor Smith was employed to teach at CityU. He arrived Hong Kong and had things settled with the help of his colleagues at CityU. From his colleagues, he understood that Hong Kong students are generally passive in class.

Professor Smith met his 200 students the first day in the lecture theatre. He asked his students questions but there were no responses.

Professor Smith felt that he ought to do something about it. He...

Please suggest 2 things Prof Smith might do
Activity 2  Defining active learning

Write down your answer and share with a peer (10’)

• What is active learning?
• Why active learning?
What is active learning?

- Students as self-directed learners who take full responsibility for their learning
- Students engage in deep learning activities to construct & revise their own knowledge
- Teachers as facilitators to work with students to create a stimulating environment for learning
Why active learning?

• Develop students to be independent learners
• Ensure deep learning that leads to qualitative outcomes
• Make a lasting impact on student learning
• Cater for different learning styles (e.g., visual, auditory, tactile)
• Promote balanced development (e.g. cooperative learning, communication skills)
• Channel students’ energy to learning to minimise undesirable behaviours
Activity 3 Evaluating active learning strategies

Two overarching strategies

• Use mini lectures PLUS learning tasks

• Use inductive approach
Activity 3  Evaluating active learning strategies

Use mini lectures PLUS learning tasks

- 10’-15’ mini lecture on key concepts
- 5’-10’ learning tasks to:
  - provide a break for students to digest & reflect on the materials
  - give students an opportunity to demonstrate their understanding by translating concepts into actions
Activity 3 Evaluating active learning strategies

Use inductive approach

- Start with challenges
- Introduce principles & methods on a need-to-know basis in the context of the challenges
INDUCTIVE TEACHING AND LEARNING*

Deductive (traditional)

Fundamentals (scientific principles, analytical methods) → Derivations → Examples → Homework, labs, projects

Inductive (inquiry, problem-based learning,...)

Challenges (questions, problems, observations, data) → Define problems, needs → Instruction (principles, methods) → Find/define solution

Course topics and entire courses can be taught


➢ **Inductively** — start with challenges, introduce principles and methods on a need-to-know basis in the context of the challenges. Various forms—inquiry-based learning, problem-based learning, project-based learning, case-based instruction, just-in-time teaching. Effective at promoting conceptual understanding, long-term retention, transfer.

Deductive presentation does not convey a sense of how science, engineering, and learning in general really happen. Inductive presentation does.
Activity 3 Evaluating active learning strategies

Work with group members to analyse one to two strategies in Reference Materials (2) or your own strategies, share with the whole group (10’):

• What is the strategy?
• How to use it?
• Have you used it in class?
• If yes, what are the effects?
• If no, will you try it out in class? Why?
Activity 4  Introducing PBL

- What is PBL?
- Why PBL?
- What are the activities in the PBL process?
- What are the 4 meetings?
- What is our PBL experience at CityU?
Visiting a PBL class?

Learning to Learn

Session 1
29 Mar, 12 Apr (10:30-12:20)
02 Apr, 16 Apr (10:30-11:20)

Session 2
30 Mar, 12 Apr (10:30-12:20)
03 Apr, 13 Apr (10:30-11:20)
Teaching *Learning to Learn*?

Join the *Facilitator Preparation Programme* at the end of May each year.