Pilot Project 2009/2010

EMBEDDING AN OUTCOME-BASED APPROACH INTO COURSES

Outline

- This Project

- Embedding OBE in your course – overview & initial implementation

- Further Support

The Project

Sharing Ideas & Good Practices:

- Configuring the link with program ILOs
- Setting up ILOs in course outlines
- Explaining things to students
- Adjusting learning activities and assessments
- Evaluating the impact of changes

A wide range of courses

- From all Schools
- Different levels, with different relations to programs
- 54 courses in spring 2009, 60 courses in fall 2009 and a similar number in spring 2010

Today - Embedding OBE in Your Course

- By the end of today's session, you should be able to:
  - Describe the learner and teacher gains of implementing OBE at the course level
  - Describe the broad stages for embedding OBE in your course
  - Construct and evaluate draft intended learning outcomes for your course
  - Demonstrate the contribution of your course to the Program Intended Learning Outcomes (PILOs)

How OBE (constructive alignment) at the course level helps?

- The Student
  - Clarify personal goals
  - Measure success
  - Reduce anxiety
  - Improve studying effectiveness

- The Professor
  - Design relevant classroom material
  - Design relevant assignments
  - Design tests/projects

Improve Learning!

Improve Teaching!

Effective Learning Outcomes

- Express them in terms of <u>observable and measurable behavior</u>
  - Facilitates assessment of learning
- Outcomes should answer these questions:
  - What must students do to show that they have learned.
  - What should students be able to do as a consequence of their learning.
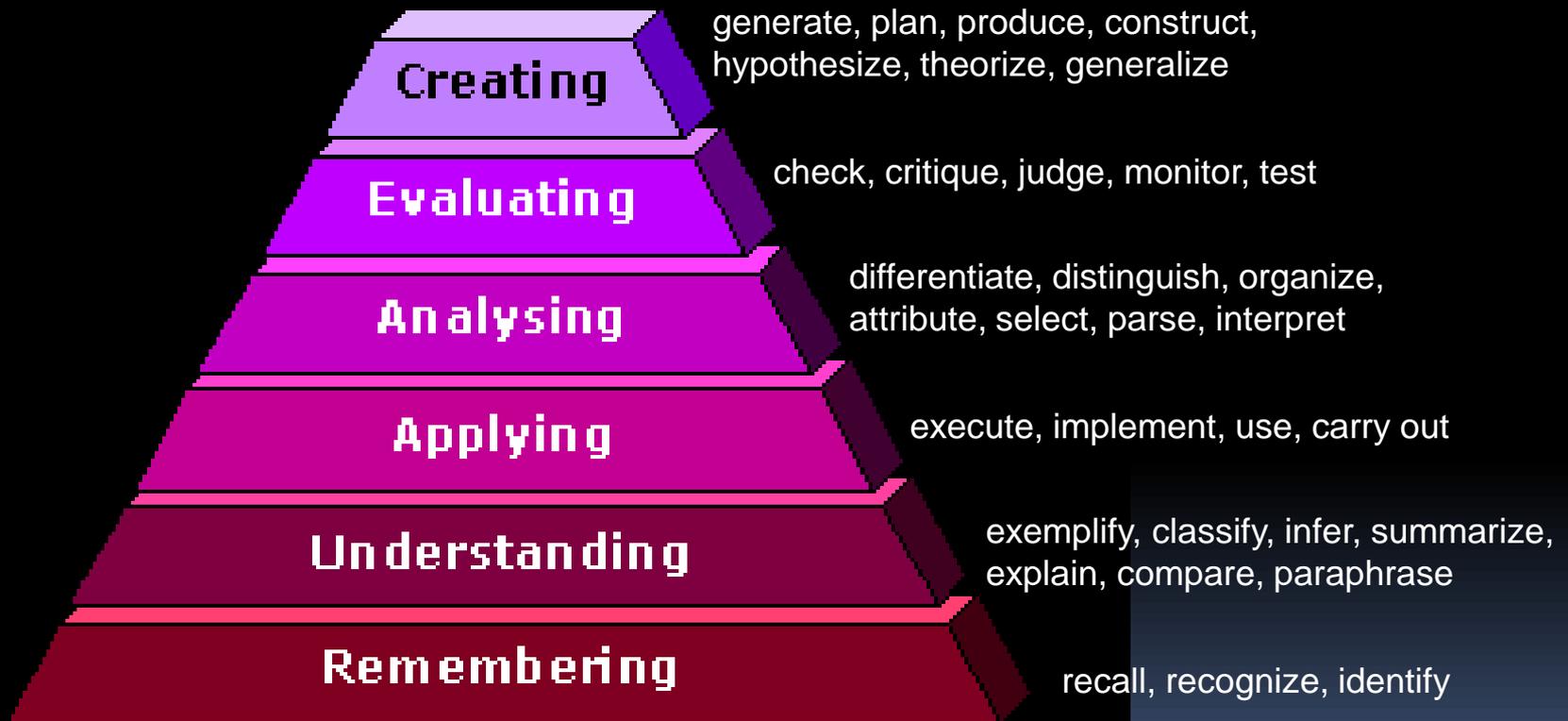
Good learning outcomes address...

3

Basic Elements

1. *What* the student is expected to do after learning. (performance)

2. The *circumstances* under which the student will be able to perform. (condition)

3. The *level* of acceptable performance. (standard)

Indicating Level in Learning Outcomes

CELT OBE Syllabus Builder

Creating — generate, plan, produce, construct, hypothesize, theorize, generalize

Evaluating — check, critique, judge, monitor, test

Analysing — differentiate, distinguish, organize, attribute, select, parse, interpret

Applying — execute, implement, use, carry out

Understanding — exemplify, classify, infer, summarize, explain, compare, paraphrase

Remembering — recall, recognize, identify

*Anderson, L.W., & Krathwohl, D.R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*.Longman: New York, NY.

Developmental Progression

Embedding progressive achievement of intended learning outcomes over four years
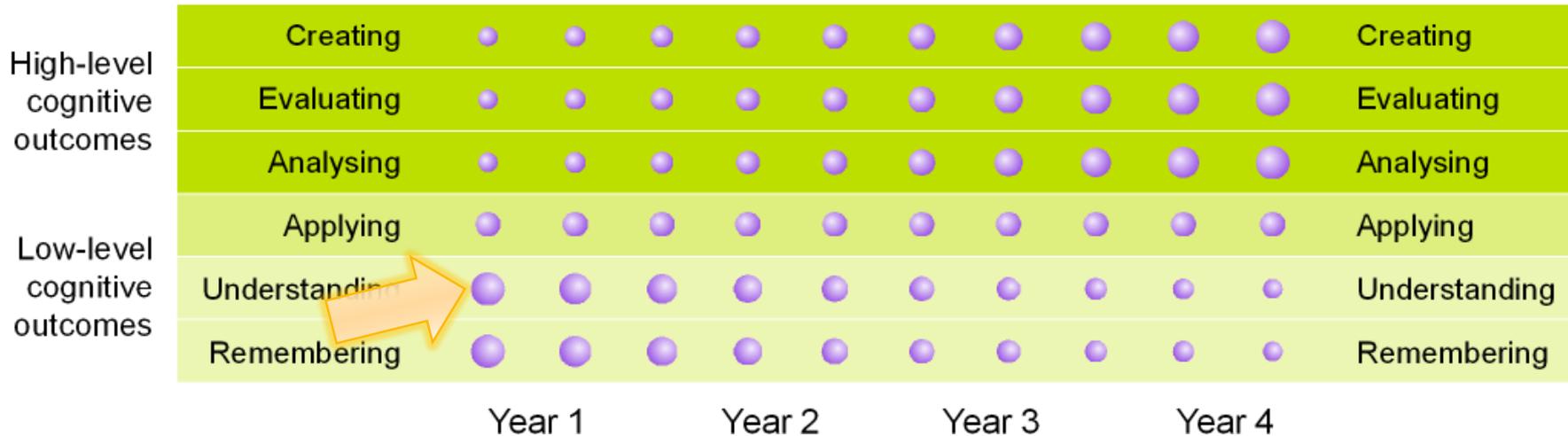
Hands on: With your course syllabus (I)

- Today - Review & Tune Course Syllabus
  - Review Program ILOs, mapping

  - Review your Course objectives and from these refine or create as intended learning outcomes (ILOs)
    1. Are they phrased as learning outcomes / objectives (i.e. what the student will be able to do by the end of your course)?
    2. Share your thoughts with the group – similar/different, key points to note

- Now to end Apr
  - Review the assessment tasks you have students engaged in for alignment with ILOs and teaching and learning activities

  - Review the teaching and learning activities for alignment with the course ILOs

SSCI OBE Pioneers – Spring 2010 Course Learning Outcomes

BISC 314 Course Outcomes

On successful completion of this course, students will be able to:

- Understand and explain basic concepts in cancer biology;
- Acquire and evaluate information from biomedical literature;
- Organize biomedical information and communicate it with an audience and readership;
- Collaborate and lead in teamwork.

PHYS 121 Course Outcomes

After completing this course the students should be able to:

- Perform simple calculations by applying the basic concepts of electromagnetism and thermodynamics;
- Classify the nature of electric and magnetic fields, which occur in numerous applications in industry and technology, as well as and in every day's life;
- Describe and apply the energy conservation law;
- Conduct simple experiments in a teamwork environment, analyse and compare data with literature data, and present experimental results in form of a simple scientific report

Hands on: With your course syllabus (II)

- Are they at the right cognitive level for the stage in the curriculum (100 level, 200 level, etc)?

- Are they realistic for the in-class and out-of-class learning time anticipated?

- Tune as appropriate (for today choose at least one course goal/objective)

- Share and review with past and current OBE pioneer colleagues

Course Syllabus Tuning: Next Steps

- Finish ILOs for your course keeping in mind the appropriateness of the learning levels to students' expected level for year
  - CELT OBE Syllabus Builder
- Review learning activities and assessment for alignment and revise as needed
- Seek feedback from last semester's OBE pioneers, OBE team
- Finalize course syllabus

Project Timelines

- Spring 2010
  - Lunch teaching workshop on 15 Jan 2010
  - 1:1 Facilitation from OBE team before 1 Feb 2010
  - A Sharing session about challenges and successes (during the semester – see good practices and share experience)
  - Get Mid-course and End-course feedback from students (CELT)
  - Get End-course feedback from teachers
  - Evaluation of instructor response at the end of the semester

Student Feedback (OBE Pilot – Fall 09)

- About ILOs:
  - Favored the stating of ILOs as this helped them get the focus and expectation of the courses
  - Course contents in general matched the ILOs, and most ILOs were addressed and achieved throughout the courses
  - Better not to have too many ILOs
  - Consider contents of ILOs and the level of difficulty based on the students' needs
  - Some practical skills in the ILOs, such as communication and critical thinking skills, were important

- About Teaching and Learning:
  - Arrange different kinds of activities to extend students' exposure to the outside world
  - Focus on the ILOs when designing teaching and learning activities and regard students' achievement of ILOs as ultimate goal of the course

- About Assessment:
  - Assessments basically addressed all the ILOs
  - There should not be a big gap between the assignments and examinations in terms of the level of difficulty and the subject areas covered

Support

- School
  - OBE pioneer colleagues from the previous semester
  - School Intended Learning Outcomes
  - Program Intended Learning Outcomes
  - Syllabi of 1st and 2nd round OBE pilot courses
  - Good practice sharing notes

- CELT
  - If you need help from CELT, then please contact Nick: email - ctnick or ext 6809
  - Please visit the OBE web site at http://celt.ust.hk/obe – this is regularly updated