Good Practices in Teaching and Learning Identified from Common Core Course Cycle Review 2016-17

The Committee on Undergraduate Core Education (CUCE) noted from the 2016-17 Common Core Course Cycle Review exercise the following good practices in teaching and learning from courses in different areas. Through sharing these with the Schools/Departments/Units and placed on the Common Core Program website, common core instructors may consider these where appropriate for enhancing the teaching and learning effectiveness in their courses. The letters in brackets indicate the common core area of the course from which the practice is identified.

Class Management

(a) Set expectation for students

Write down instructors' expectation clearly in the course outline for students' reference. (SA)

(b) Know the students

Introduce mandatory meeting hours for the instructor and students to help them know each other and improve the teaching and learning effectiveness. (S&T)

Class Preparation

Prepare Course Materials

- i) Keep lectures very up-to-date; revise syllabus and course content every semester with reference to TA and student feedback; combine basic concepts and knowledge with interesting stories. (SA)
- ii) Prepare lectures with many examples, demonstrations and video footage to facilitate students in understanding fundamental concepts in an interactive learning atmosphere. (S&T) Use insightful videos, documentary films and video clips to portray the issues. (SA)
- iii) Invite guest speakers from the industries to stimulate the connections between the CILOs and the real-world needs/applications. (S&T)
- iv) Use daily and real-life examples to complement theories. (SA)
- v) Use lots of case studies for discussion and explanation of the subject matters. (S&T)
- vi) Teaching is customized to students' needs and interests. Students' learning abilities and difficulties are identified to ensure that the teaching is relevant to and suitable for them. (C-Comm)
- vii) The course objectives and ILOs are listed in the course book, course website and well-communicated to teachers and students during class and meetings. Classes begin with clear learning outcomes about what students should know and be able to do by the end of the class period. (C-Comm)

Course Delivery

(a) Design teaching pedagogy

- i) Use a mix of teaching methods (lectures, videos, group discussion, individual/group projects, experiment, debate, in-class exercises, simulation game) to enhance students' interest in understanding basic knowledge. (SA)
- ii) Adopt multiple forms of teaching and learning activities. Class activities include small group discussion in the classroom, small group writing exercises outside class and group oral presentations. In class, students are divided into groups based on their levels of proficiency and prior knowledge. A relaxing atmosphere is created in the classroom with lots of pair and group work. (C-Comm)

- iii) Divide the class into parts, with each part handling one main question. Allow short (10-min) breaks to help student refresh. Use pop quizzes to motivate students to attend, pay attention to lecture, and give feedback to instructor about their learning progress. (SA)
- iv) Move some topics to open-source/access and online software (e.g., Google Web Design) for lab sessions rather than sticking with the out-dated and licensed production software (e.g. Adobe Flash) for animation production. This enables students to use their own laptops and reduce costs for the course/department for the latest technologies and newer software adopted in the industries. (S&T)
- v) Adopt flipped classroom in order to engage students' interest in the course content through the interactive in-class activities. Students enjoyed the in-class activities and online video lectures, which stimulate critical thinking and application of the course content. (S&T)

(b) Adopt strategies and measures for ensuring effectiveness of teaching and learning activities (C-Comm)

- i) Student-centered approach;
- ii) Clear and specific teaching objectives;
- iii) Focus on knowledge learning, transfer and application;
- iv) Suitable level of difficulty;
- v) A great deal of interaction and communication among students;
- vi) Sufficient pre-task input and demonstration;
- vii) Interesting learning activities relating to daily life; and
- viii) Timely feedback after each task.

(c) Engage students in learning and encourage class participation

- i) Use role-playing for stakeholders in scenario questions, make decision and explain their decision, discuss these decisions in the class and map them to lecture materials. (SA)
- ii) Use class-based experiments and in-class quizzes to help encouraging students to attend and actively participate in classes. (S&T)
- iii) Conduct and engage students in live demonstration to help stimulating students' interest and create a lively learning atmosphere. (S&T)
- iv) Use multimedia in teaching, such as animation, simulation, video and apps to arouse students' interest in learning. Students found those simple experimental demonstrations useful in understanding abstract theories and principles. (S&T)

(d) Promote peer learning

Use Facebook for students to submit and share their course work for references and comments to/from other students to encourage peer-stimulation and learning. (S&T)

(e) Promote instructor-student interaction

Set up WhatsApp groups to facilitate effective communication between instructor and students for small classes. (S&T)

(f) Use student feedback to adjust teaching

- i) Conduct mid-term surveys to obtain students' feedback on the teaching. The teaching style, course content, assessment method can be adjusted in a timely manner. (S&T)
- ii) Create a productive and positive learning environment by talking to students and knowing their learning needs, giving immediate feedback and individual guidance. (C-Comm)

Assessment

(a) Design assessment scheme

- i) Use multiple forms of assessment to ensure validity and reliability of assessment. (C-Comm)
- ii) Include both summative assessment (mid-term test and final exam) and practical element (experiential project) to assess students' knowledge. (S&T)

- iii) Open book exam makes the assessments less demanding on memorizing theories and relieves students' study stress, which is suitable for a common core course with students of diverse academic background. (S&T)
- iv) The criterion-referenced assessments bring about positive washback, and help students to take charge of their learning progress. Also, standardization meetings involving all teachers in the course are held after individual assessments to ensure inter-rater reliability. (C-Comm)

(b) Adopt strategies and measures for ensuring effectiveness of assessment tasks (C-Comm)

- i) Assessment tasks are relevant to the teaching content, objectives and ILOs to ensure that they are constructively aligned.
- ii) Provide timely feedback on students' performance after the corresponding assessment.
- iii) Collect students' feedback on the assessed tasks.
- iv) Self-reflection.

(c) Design exam questions

- i) Draw up mid-term and final exams from current and daily affairs (not from textbook) to truly test students' understanding of the subject matter. (SA)
- ii) Minimize repetition of exam questions to ensure fairness of exam across semesters. (SA)
- iii) Use exam questions that require a reasoning process instead of asking factual questions. (SA)
- iv) In addition to multiple-choice questions, include short-answer questions that require explanation and illustration of calculation steps in quizzes and final exam. These effectively assess students' knowledge in a more comprehensive approach. (S&T)

(d) Provide feedback on assessment to students

Provide detailed comments on students' research projects at every stage (initial research proposal, progress report, presentation) to help them refine their research paper for final submission. (SA)

(e) Grading

- i) Peer-assess group activities to minimize/overcome the risk of free-riding. (SA)
- ii) Adopt the same assessment rubric for both final presentation and peer evaluation on group presentations such that students can have sound understanding of the instructors' requirements and expectations. (S&T)

Others

- i) Adopt an 'open-door' policy for after-class interaction to build up trust and relation and to take care of students' problem. (SA)
- ii) Feedback from students is encouraged and collected in a timely fashion via both informal and formal channels. (S&T)