

# Policy to Increase Active Learning at the UCCSoM

#### I. PURPOSE AND BACKGROUND

The UCC School of Medicine (UCCSoM) recognizes that achieving high education standards that allow excellence in the educational program is the primary goal of medical students. Opinions differ regarding how much of the available information on a particular topic should be presented in a medical school lecture to understand better the effect of lecture information density on learning by medical students.

Several initiatives have been undertaken to promote the development of lifelong learning competences among medical students: 1) inception of a longitudinal problem and evidence-base medicine curriculum, 2) concerted and articulated efforts to reduce lecture time and increase active learning, 3) policies on student workload in the preclinical and clinical years, and 4) assessment of the development of lifelong learning competences through the administration of the Modified Jefferson scale to third-year medical students. Also, standardized patient experiences have been used to complement classroom study and prepare students for patient-centered clinical experience learning.

Research literature has suggested that active learning can enhance academic achievement (Neville, A. J., 2009; Prince, M., 2004; Koh, G.C et al., 2008). Research studies in medical education literature suggest that lectures to medical students are more effective aids to learning when the information density is limited to a few main points that are "essential to know." Literature recommends that undergraduate medical students be exposed to a variety of learning opportunities in their curriculum and increasingly take responsibility for their own learning.

### II. DEFINITIONS

Course: An individual unit of study toward a qualification, identified by a course code and title and carrying a specified grade point value.

Lecture: An instruction or verbal discourse by a speaker before a large group of students. This teaching method has historically been quite prominent in education

because it is an economic way to communicate information to large groups. However, increasing knowledge about the group's difficulties in maintaining concentration and absorbing extensive information while in a passive listening mode has brought the value of lectures under criticism. Audio-visual presentations, demonstration of patients and intermittent discussions can help activate learners.

**Curriculum**: An educational plan that spells out which goals and objectives should be achieved, which topics should be covered and which methods are to be used for learning, teaching and evaluation.

Academic Workload: The amount of time medical students spend in required academic/educational activities, including the total number of hours medical students are required to spend in clinical, community service and educational activities during the preclinical phase of the curriculum.

Active Learning: According to the LCME, active learning is the process by which a medical student 1) independently, or collaboratively with his or her peers, identifies his or her learning objectives and seeks the information necessary to meet the objectives and/or 2) contributes to the learning of a group with information that he or she prepares and discusses. In active learning, the learner has a role defining his or her own learning outcomes or those of his or her peers. (LCME Database Definition)

**Active learning methods**: Includes everything except traditional/passive/didactic lectures.

**Active learning strategies**: instructional tools that can address both content and process objectives that include the development of interpersonal, critical thinking, communication and problem-solving skills.

**Modified Jefferson Scale**: is a psychometrically sound instrument that measures physicians' orientation toward lifelong learning among full-time clinicians and academic clinicians. The instrument can be used to monitor educational programs, assess educational outcomes, and examine group differences.

#### **III. POLICY CONTENT AND GUIELINES**

The Curriculum Committee encourages the UCCSoM faculty to reduce the lecture time with a corresponding increase in innovative teaching and active learning activities aiming at the development of lifelong learning. Faculty is urged to look at lecture time and consider alternative methods of delivering content.

The students should have more active learning periods and interactive class time to enhance these skills in the first two years of their medical education. Thus, the policy aims to achieve an overall 20% increase of active learning by the end of academic year 2015-2016 within the preclinical years' curriculum. This goal will be met in phases following the schedule that is described below:

- 1. By the end of academic year 2012-2013 an overall increase of 5% in active learning will be reached.
- 2. By the end of academic year 2013-2014 an overall increase of 10% in active learning will be reached.
- 3. By the end of academic year 2014-2015 an overall increase of 15% in active learning will be reached.
- 4. By the end of academic year 2015-2016 an overall increase of 20% in active learning will be reached.

The oversight of this policy will be the responsibility of the Associate Dean of Academic Affairs of the SoM, and the ultimate responsibility for which will reside within the Curriculum Committee.

## Specifics of the Policy and Procedures:

- At least annually, Faculty should submit evidence to their corresponding curriculum coordinators of active learning strategies and time used in their courses according to class topics and objectives.
- At completion of each course, the Curriculum Committee will monitor that the
  active learning policy is implemented in all required courses to assure that
  learning is not compromised by an excessively dense educational schedule.

- Any concerns of the Curriculum Committee will be reported immediately to the course coordinator via the SoM Associate Dean of Academic Affairs for corrective action.
- 4. The Associate Dean of Academic Affairs of the SoM, in compliance with the responsibility of oversight of this policy, may conduct periodic visits to class sessions to monitor inclusion of active learning strategies and methods.
- 5. Annually a faculty retreat will be held as a means to engage faculty in professional development around innovative teaching and learning experiences to support active learning. The ultimate goal of this initiative is to transform at least 20% of lecture time in active learning strategies and methods by academic year 2016.
- 6. The assessment of life-long learning competences among medical students (which is currently in place with third-year medical students) will be expanded as a means to evaluate the effectiveness of the implementation of this policy. Thus, the Modified Jefferson Scale will be administered longitudinally beginning with the cohort admitted in 2012-2013.

#### **REFERENCES:**

Ghosh S, Dawka V. (2000). Combination of didactic lecture with problem-based learning sessions in physiology teaching in a developing medical college in Nepal. Advances in Physiology Education, 24(1):8-12.

Glossary of Medical Education Terms. August, 1983.

Koh, G. C., Khoo, H. E., Wong, M. L., & Koh, D. (2008). The effects of problem-based learning during medical school on physician competency: A systematic review. Canadian Medical Association Journal, 178(1), 34-41.

LCME Database Definition, 2012

Mattick K, Crocker G, Bligh. J. (2007). Medical student attendance at non-compulsory lectures. Adv Health Sci Educ Theory Pract., 12: 201-210.

Neville, A. J. (2009). Problem-based learning and medical education forty years on: A review of its effects on knowledge and clinical performance. Medical Principles and Practice, 18, 1-9.

Prince, M. (2004, p. 223). Does active learning work? A review of the research. Journal of Engineering Education, 93(3), 223-231.

Russell, I J; Caris, T N; Harris, G D; Hendricson, W D (1983). Effects of three types of lecture notes on medical student achievement. Journal of Medical Education, 58(8).

Russell IJ, Hendricson WD, Herbert RJ. (1984). Effects of lecture information density on medical student achievement. Journal of Medical Education, 59(11 Pt 1):881-9.

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This Policy will be reviewed on: Every year

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Date: