

Title: Improving Educational Impact through Core Learning Objectives

Author: Nazan Canbulat

What problem was addressed: Evaluation and improvement of educational impact in a continuous fashion is critical for the development of a successful medical curriculum. There are limited standardized methods for the assessment of educational impact in medical curriculum in Turkey. Currently at Koç University School of Medicine (KUSOM) we do not have a standardized method (such as a board examination, certification or graduation examination) to quantify and improve educational impact. This project was initiated to provide tools to quantify and improve educational impact of our current curriculum at KUSOM. Our project aimed at understanding the following challenges:

- 1) How can we assess and quantify undergraduate medical educational impact?
- 2) How can we improve educational impact and quantify the improvement?
- 3) Can we quantify educational impact by measuring the level of achievement of core learning objectives?
- 4) How do we measure achievement of core learning objectives?
- 5) How can we increase achievement of core learning objectives among our students?

What was done: We used achievement of core learning objectives (CLO) as a measure of evaluating educational impact, through analysis of student surveys and written examination results. Initially, we identified CLO's as a subset of specific learning objectives (SLO) with the help of KUSOM faculty and in accordance with the National Council of Higher Education (YOK) guidelines. This required refinement and reformulation of SLOs and CLOs as appropriate and SMART learning objectives. Education of faculty in writing appropriate SLOs and CLOs became necessary during this process, and we developed educator's workshops to accomplish this. Once appropriate CLOs were constructed, the project team identified a subset to be included in a student survey evaluating the level of confidence in achieving the specific CLOs. The survey consisted of 38 questions using a five item Likert scale and was introduced to select senior students and graduates. We compared the level of confidence expressed by students with written exam questions addressing the same CLOs. The comparison attempted to identify the elements of the curriculum that require reinforcement, modification or elimination. We shared our findings with KUSOM Curriculum Development Committee (CDC).

What was learned: At this stage of our project we have concluded the following:

- There is a need to educate the faculty in constructing SMART SLOs and CLOs, and we will continue organizing educator's workshops for the new and existing faculty.
- We noticed the limited number of questions that directly address CLOs in written examinations. We will work with the faculty in constructing written exam items that directly correlate with CLOs
- There were insufficient data to draw specific conclusions for some CLOs. Therefore we could not provide sufficient evidence to decide on the level of mastery for these CLOs. We will need to collect more data to provide conclusive results.

- For some CLOs there were sufficient data to suggest that these objectives were well mastered by the students and graduates
- We recognized the need to encourage students to participate in the surveys as well as the need to send the survey to the target audience several times.
- We aim to work with the curriculum development committee to identify weaknesses in the current curriculum to effectively deliver CLOs to our students, and enhance their mastery.
- We learned the need to engage the senior faculty and motivate them during our educational workshops to help achieve our objectives in these workshops.