

**Title:** Instituting student centered active learning strategies for dental education

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**What problem was addressed:** The process of accreditation and meeting up standards for quality education stimulates need for quality control process. Student feedback forms the core component of this process. The analysis of feedback forms demonstrated that our Faculty provided insufficient opportunity for interaction in the traditional lecture class and lowest scores for vast majority of Faculty for being monotonous. In response to this and also need for the new university mandating faculty to focus and improve effectiveness of teaching, a meeting was conducted. As a member of Internal quality assurance unit, discussed this issue with the Dean that culminated in meeting between senior faculty members and members of Dental Education unit. After many deliberations it was decided to work on strategies to address two main problems:

1. Poor student satisfaction in classroom teaching for majority of Faculty
2. Lack of skills to fulfill the university's mandate to adapt new educational strategies that align with outcome based curriculum.

**What was tried:** A deeper look into the data collected revealed that the lower scores were predominantly allotted to items on faculty being monotonous in the class room and lack of being interactive. Therefore series of consultative meeting was conducted with senior faculty with good experience in health profession education to address these problems. After many deliberations a faculty development program to equip faculty to adopt interactive teaching learning methods was planned. The training was designed to align with standard protocol of being convenient, need based and to provide comprehensive information and skills with hands on experience. Therefore sessions on educational objectives, Interactive teaching learning methods, writing lesson plan, art of giving feedback and adult learning principles and microteaching practice sessions were considered. It was a two days workshop with break of 4 days for preparing for microteaching practice sessions. Resource persons were from Health Profession Education background and the program was delivered in the form of workshop. Totally 25 faculty were recruited to the workshop and remaining opted out, a decision taken based on previous training session they had attended of the same kind. The project was institutionalized first by involving Dean and Registrar Academics. In the second stage members of Dental Education Unit were involved to work on logistics. In the third stage Board of studies Chairman was requested to send circular for mandatory submission and maintaining of teaching schedule, lesson plan and teaching diary.

**What lessons were learned:** Engage and involve All, need based project are two primary reasons for institutionalization of the project. The project outcome can be considered as successful as assessed by session evaluation scores and post workshop faculty perception,

verification of lesson plans, performance during practice sessions given as feedback by session moderators and reflections of student volunteers who participated in the practice sessions. This study demonstrated that the program can be designed and delivered effectively to meet specific needs. Meticulous planning to involve participants much ahead of the program by requesting them to write their details on Bio sketch and also to complete the sentence- I chose to be a Teacher because----- and Dean's letter of invite mentioning the program objectives and the expectation from them after the program added to develop participants interest in the program. The Resource Persons were another reason for the success because of their active participation and their role model behavior- "Do what you Preach" by adopting interactive teaching learning methods, writing lesson plans for their sessions, distribution of hand outs, appropriate use of media etc. Considering Kirkpatrick's tool for program assessment, we can confidently say the level 1 and 2 were achieved ie Reactions and Learning. The evidence for level 1 is obtained from free comments, program evaluation form and also participant's response. Findings from student reflections like: "Teaching was different than the usual class", "there was lot of interaction", "very interesting and fun", also indicate the success of program. The evidence for level 2 was obtained by verifying the lesson plan submitted. The components assessed were- writing learning objectives, indicating interactive method that would be adopted, adding an assessment component etc. The skill was also assessed by the actual performance during microteaching practice sessions. The feedback on session is shown in table. More than 50% of the faculty had used interactive methods like, muddiest point, one minute paper, work sheet, pass the pointer, brain storming etc. 21 participants had written lesson plans and out of which 10 of them written active verbs and another 10 had some but not all.

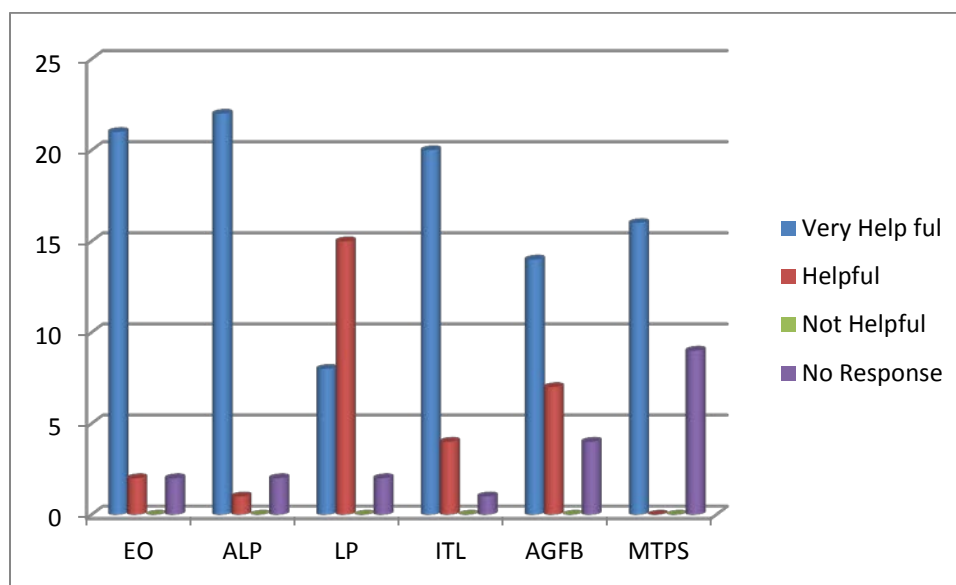
**Outcome of the Project:** Immediately followed by this was university policy informing all faculty to prepare class notes for the next academic year which mandated writing intended learning outcomes using active verbs from blooms taxonomy and also indication regarding what methods one will be adopting to meet the outcomes mentioned. The project was integrated into the curriculum as the new university had drafted outcome based curriculum therefore a good alignment to the workshop objectives. The program enabled Faculty to respond to the University mandate.

Future plan is to encourage faculty to consider peer evaluation for self improvement and incorporate items in student feedback forms to capture the strategies to appreciate the change in scores.

**Table depicting participant responses to the workshop sessions**

Criteria	Educational objectives	Adult learning principles	Lesson plan	Interactive TL methods	Art giving Feedback	Micro Teaching Practice Session
<b>Very Helpful</b>	21	22	8	20	14	16
<b>Helpful</b>	2	1	15	4	7	-
<b>Not Helpful</b>	-	-	-	-	-	-
<b>No Response</b>	2	2	2	1	4	9
<b>Total</b>	25	25	25	25	25	25

**Graph showing participant responses to the workshop sessions**



**Reference:**

1. Joel Michael. Where’s the evidence that active learning works? *Adv Physiol Educ* 30: 159-167, 2006

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