



FACILITATION AND EVALUATION OF STUDENTS LEARNING

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ABSTRACT

Various methods of teaching are lectures, seminars, tutorials, group discussions and demonstrations. Most of these methods involve only passive learning. Increased emphasis is being laid on students centred and integrated teaching. Both vertical and horizontal integrated teaching has been recommended by the medical council of India. The superiority of such novel methods over other existing methods in facilitating students learning has not been adequately assessed and hence the present study was undertaken. A 3 year study was performed in MBBS Phase -II students of 3 batches. Integrated teaching (seminar on various segments of a topic) was carried out in 3 different ways to each batch of students. Batch 1: Subject experts (faculty) delivered talk on segments of topic allotted. Batch 2: Randomly selected 7-10 students presented the topic (it was guided by faculty) Batch 3: similar to batch 2 but here a pre-session test (validated MCQs) was conducted. About 10 topics were covered in a year (same for all the batches) and were announced 15days prior to the seminar for the students to prepare. The seminar was for 2 hrs and a post -session test was conducted using pre- validated MCQs to assess the learning outcome. Post-sessions score (mean \pm SD) of all batches was calculated and analyzed by ANOVA. There was a significant improvement in the performance of batch 3 as compared to other batches. Pre-session tests promote students participation in teaching learning activities and also facilitates the learning process and the outcome

Keywords: MCQs, teaching

INTRODUCTION

Various methods of teaching in medical colleges according to medical council of India are lectures, tutorials, but all these involve passive learning, compelling to assess learning outcomes. The early curriculum is expected to lay foundation for the other subjects who follow. It is left to the students to solve the jigsaw puzzle. Let us see an example. If you give the students individual ingredients of a cake - flour, egg and sugar to eat, even if you force them to swallow it, will they be able to digest it? On the other hand, if you mix the ingredients, blend it well and bake it - the students would love to eat it and definitely will have no problem to digest it. Flaws with the present system are:

1. Unnecessary repetition
2. Disjointed approach to teaching
3. Confusion in student's mind due to difference in opinion which in turn leads to
4. Disunity and hence the subject as a whole is never grasped. This discourages students from learning and they get disinterested in applying the knowledge achieved into practice.

Knowledge Learnt in Isolation is Rapidly Forgotten "Here comes the importance of integration. The dictionary meaning is "to make entire". Integration is defined as organization of teaching matter to interrelate or unify subjects frequently taught in separate academic courses or departments¹. Our own nervous system gives us a good example of integration and its effectiveness. There are approximately ten million afferent (input or sensory) neurons, fifty billions integrating neurons and only half million efferent (output or motor) neurons. This provides a ratio of about 20:1 between the aggregate input and output channels. Thus by integration vast amount of information can be presented to the students in a concise and comprehensive manner. Of course, a lot of effort

is required to process and organise the information. This is only possible if departmental (both intradepartmental and inter-departmental) barriers are completely broken down and the curriculum is revamped². Integrated teaching is a relative novel method of training students recommended by the medical council of India. Its superiority over other existing methods in facilitating students learning needs to be assessed and hence the present study was undertaken³.

Aim of the study

A pre-test to evaluate the student performance in integrated teaching

METHODS

3 year study performed in MBBS Phase -II students of 3 batches.

Integrated teaching seminar on various (segments of a topic Anaesthesia, Psychopharmacology, Hypertension, Diabetes mellitus, Peptic ulcer, Bronchial asthma, Malaria, Tuberculosis and Leprosy. Essential drug concept principles of rational use of drugs) was carried out in 3 different ways to each batch of students⁴.

Batch 1: Subject experts (faculty) delivered talk on segments of topic allotted.

Batch 2: Randomly selected 7-10 students presented the topic (it was guided by faculty)

Batch 3: similar to batch 2 but here a pre-session test (validated MCQ's) was conducted.

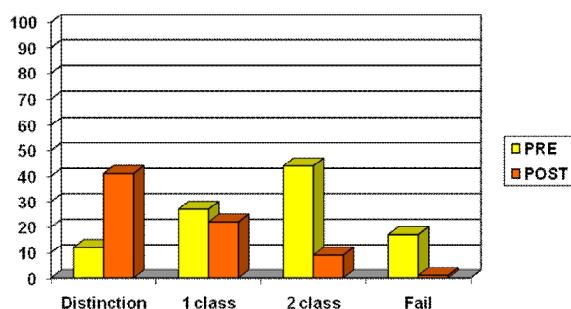
About 10 topics were covered in a year (same for all the batches) and were announced 15days prior to the seminar for the student to prepare. The seminar was for 2 hrs and a post -session was conducted using pre- validated MCQ's following it to assess the learning outcome⁵.

Results: Effectiveness of integrated teaching

Pre evaluation	Post evaluation							Total students
	6 marks	8 marks	9 marks	10 marks	11 marks	12 marks	13 marks	
3 marks					1			01
6 marks		1		1	1	2		05
7 marks			2	4	3	2	1	12
8 marks	1	2	3	6	4	6	4	26
9 marks				7	2	5	4	18
10 marks				3	7	6	1	17
11 marks			1	1	2	2	3	09
12 marks				1	6	2	3	12
Total Students	1	3	6	23	26	25	16	100

Post-sessions scores (mean +SD) of all batches was calculated and was analysed by ANOVA. There was a significant improvement in the performance of batch 3 as compared to other batches.

Comparison of pre & post integrated teaching



DISCUSSION

Pre session test facilitates students learning by making them aware of the must to known area of a topic⁶. It will also help in facilitating student's learning and uncover the thrust areas. Suggest remedial measures to improve the student seminar as module for teaching and learning⁷. Student seminar will enhance participation of students and create interest in subject. It will improve the presentation and communication skills. Over all it help in improving the standard of institution

CONCLUSION

Pre session tests promote students participation in teaching learning activities and also facilitates the learning process.

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