

To Study The Effectiveness Of Faculty Development Programme in Teaching Techniques: Questionnaire Based Study

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Abstract

Background: Teacher's training /workshop are aimed at orienting teaching staff with principles of teaching, learning and evaluations, as a part of faculty development program. However, implementation and effectiveness of such training program have not been evaluated to assess the degree of transfer of teachers' training from teacher to the student. Therefore, a questionnaire based study was undertaken to evaluate the effectiveness of faculty development programme through its implementation in academic curriculum.

Material and Method: All the interns of Sharad Pawar Dental College, Sawangi (M), Wardha were enrolled in the study group. The students those who have not attended a single activity were excluded from the study group. Questionnaire were framed and distributed to the students. Faculty those who have undergone various health profession education training programmes were identified and data was collected from them regarding conduction of various activities.

Result: 78% of the students were in agreement with the designing of curriculum and timely display of syllabus. However, most of the students were not satisfied with the conduction of Problem based learning (PBL) and integrated teaching (ITP). 100% of the faculty was confident to design curriculum for their subject after training as compared to 9% before training. Training programme helped faculty for powerpoint presentation, conduction of PBL, OSCE and setting the question paper as per the guidelines of the University.

Conclusion : Our results confirm that the training package is feasible, acceptable and useful for teachers with possible reinforcement.

Keywords: Faculty development, questionnaire, teaching-learning.

INTRODUCTION

In the present milieu of enhanced responsibility, the assessment of learner is a crucial segment of an institute's training program. Associations regulating the program not exclusively are responsible for what representatives realize, they additionally are responsible for guaranteeing that workers move their insight to their work execution. While customary training assessment techniques center around utilizing the appraisal procedure to improve training conveyance, data ought to likewise be gathered to decide if training is helping the association to improve its business performance.¹

As of late, however clinical advances have been comprehended and embraced by numerous establishments, the equivalent isn't valid for educational planning and implementation. There is a requirement for well-trained faculty who will help improve projects to deliver quality alumni. Along these lines, to address the issues of staff improvement and educator training later on one may begin arranging teacher training to meet the pace of change.²

The multiplication of teacher training programs began in late 1970s and the 1980s. Around then schools began to prepare their educators through short workshops, classes and microteaching techniques.³ Similarly, teacher training programs are additionally begun in Medical Health Science.

"Datta Meghe Institute of Medical Sciences Deemed to be University (DMIMS, DU) being a health science university " runs assortments of academic programs in various disciplines at various levels. The training /workshop are planned at orienting teaching staff with standards of teaching, learning and evaluations, in building capacity of an instructor to obtain abilities as a piece of personnel improvement program. It is normal that trained teachers in teaching techniques will cultivate better learning in students and add to conveyance of value training including better students evaluation. DMIMS DU has been perceived as one of the Nodal preparing Center for Medical education in India and resources are being prepared here since year 2006. Be that as it may, usage and adequacy of such training program have not been assessed to survey the level of move of teachers' training from teacher to the student.

Therefore the present study was undertaken to evaluate the effectiveness of faculty development programme in teaching techniques through its implementation in academic curriculum.

The study was undertaken with the following objectives:

1. To study the perception of the student.
2. To study the perception of the trained faculty before and after training.
3. Assess the effectiveness of Faculty Development programme.

MATERIALS AND METHODS

A short term questionnaire based study was conducted in “Sharad Pawar Dental College, Sawangi (M), Wardha”, a unit of DMIMS DU. Total 74 interns of Dental College, were enrolled and participated in the study. Purpose behind selecting the interns was that, they have already undergone through first to final BDS course; so, they could have more clear ideas regarding curriculum, syllabus, teaching/learning methods and various assessment techniques. They can suggest their view clearly and frankly so that we could come to know how effectively teacher’s training program has been and being implemented in academic curriculum.

Second population who participated in study was the trained faculty members (n=35) of Sharad Pawar Dental College, Sawangi (M), Wardha. The collected data had three categories of responses:

(1) A questionnaire survey of interns’ participants to determine their perception about effectiveness of Faculty Development programme. Questionnaire was framed and distributed to the students containing 3 components of Faculty Development Programme as: Curriculum, teaching/learning methods and assessment. Each component comprises of 6-10 close-ended questions and 4 qualitative open ended responses. All the 3 category had items with “five-point Likert scale” (strongly disagree – 1, disagree – 2, neutral option –3, agree – 4 and strongly agree - 5) and responses to open-ended statements to document participants general views. For the analytical purpose, “scale 1 and 2 were merged together (category disagree), as 4 and 5 were merged and referred to as agree while retaining the category 3 as neutral response”.

(2) A questionnaire survey of trained faculty participants’ perception to evaluate their perception on usefulness of the workshop expressed in terms of qualitative open ended responses and scores for 7 items as close ended questions, where they had to rate their perception with the following score: “1 = Very Low; 2 = Low; 3 = Average; 4 = High; 5 = Very High”. For the analytical purpose, scale 1 and 2 were merged together (category low), as 4 and 5 were merged and referred to as high while retaining the category 3 as average response.

(3) Focus group discussion was conducted with the interns. 10 participants were randomly selected and were called for the discussion at seminar room, “Department of Periodontics, Sharad Pawar Dental College, Sawangi (M), Wardha” on scheduled time. Themes was designed and approved. One reporter was appointed to note down the suggestions and points of discussion.

All the data was compiled separately for three categories and analyzed for the outcome of the results. The responses of the faculty before training and after training were entered into MS Excel spreadsheet and analyzed by student’s paired t test. A ‘*p*’ value of less than 0.05 was considered statistically significant.

OBSERVATIONS AND RESULTS:

All the participants (interns-74, faculty-35) responded to the questionnaire. Table 1 and figure 1, 2, and 3 shows agreement of the student for the proper functioning of academic activities. The percentage of respondents for each level of agreement was calculated. 78% of the students were in agreement with the proper designing of curriculum specifically with the timely display of syllabus on notice board. Information of Examination schedule at the start of course helps students in preparation of examination (77%). However for teaching /learning

methods most of the students were not satisfied with the conduction of PBL and ITP. For assessment, majority of the students found it well organized. 68% of the students were satisfied with the pattern of assessment and mark distribution for theory and practical examination. 58% of the students believed that OSCE/OSPE method of assessment helped in understanding the management of patient in an entire manner. Students mentioned that there was more syllabus (IV BDS) in 2nd PCT as compared to other two PCTs in final year.

In response to open ended questions, suggestions by the participants for different items were as follows: Regarding distribution of syllabus of each subject throughout the year, students suggested that some subjects (Periodontics) needs more hours of teaching due to vast syllabus. It is difficult to study 8 subjects at once (IV BDS) therefore; there should be semester pattern in final year. Amongst didactic and non-didactic teaching-learning method, students found advantages in both of the methods of teaching. Students suggested that PBL should not be there in curriculum especially in IV BDS as it is topic specific and not possible to cover all the topics of all the subjects. To improve the conduction of activity, students suggested that Clinical picture or power point presentation should be shown with the case scenarios and the topic for PBL should be selected by the students. All the students were satisfied with the assessment pattern of university.

Table 2 and figure 4 shows the significant difference in the perception of faculty before training and after training. 100% of the faculty was confident to design curriculum for their subject after training as compared to 9% before training. 91% of the faculty became aware of different didactic and non-didactic methods of teaching after training whereas none of them was aware before training. Training programme facilitated the faculty in making powerpoint presentation, conduction of PBL & OSCE and setting the Question Paper as per the guidelines of the University.

In general, participants were very positive about the faculty development programme (Table 2, Figure 4). In response to the open-ended questions, majority of participants expressed that such type of training is needed for developing their teaching skills as well as assessment tools alongwith the curriculum designing.

In focus group discussion, over the theme curriculum designing, students showed their satisfaction on the structure and implementation of the BDS course. Students suggested that during their internship, treatment aspect should not be restricted with the use of conventional methods/procedures only. Training should also emphasize on the use of advanced instruments and equipments for managing the patients. It was also pointed out that e-learning and videos should be inculcated as an innovative teaching-learning methods. While discussing about PBL and ITP, students were reluctant on the point that these activities should not be conducted in the Final BDS. Although these activities are beneficiary for studying, they should be conducted with separate time slot in the time table during first to third year of BDS course.

The students were very convinced with the present assessment pattern. However, they pointed out that teachers can be biased while evaluation and there may be discrepancy amongst the staff while evaluation. Therefore, the same staff should be appointed for the complete paper checking. Overall, students did not find any difficulty while completion of their BDS course.

DISCUSSION:

The nature of clinical instruction is controlled by educators, understudies and the educational plan out of which, the previous has gotten the least attention.⁴ Ramilingaswami expressed that: "The issue in clinical instruction isn't the capacity of understudies to adapt yet the capacity of instructors to encourage learning".⁵ Medical schools have been urged to underscore showing capacities while enrolling and elevating staff and to help existing staff to turn out to be better teachers.⁶ The section level preparing of another instructor's vocation is a basic point in the educators' expert turn of events. The point of this investigation was to assess the effectiveness of faculty development program on showing strategies through its impelentation in scholastic educational plan. In the perfect circumstance when assessing training program, one ought to take an interest to have the option to see the genuine contrast between their exhibition toward the start and toward the end. The assessment in this study is progressively unobtrusive and identifies with the instructional class goals being satisfied in the quick present moment. Unmistakably, student participants feel increasingly certain and skillful toward the finish of their BDS course.

It has been set up that the mode of assessment impacts the learning style of students (assessment drives learning) and it has been indicated that medical students are defenseless to this influence.⁷ Curriculum planning, teaching-learning methods and assessment are significant parts of the educational spiral. Generally, the aftereffect of this study shows that the training for faculty development is worthy to the trainee, i.e., trained faculty of our institution. For all inquiries a large portion of the members made steady reactions. The impression of teacher in regent to training has been important and helpful as obvious from their inputs (Table 1 and 2, Fig 1,2,3,4). Taking the reaction on assessment method or tool, participants have been able to demonstrate improvement in the utilization of OSPE, OSCE, and so on. Taking the reaction with the highest percent from agreeable to disagreeable for every item, the entire participants (100%) settled upon the training being informative and learned new things about the curriculum plan, teaching- learning and assessment methods. All the members concurred that there were adequate open doors for cooperation among the members and facilitators during the training.

Faculty members proposed for holding similar training for fortification with increment in the span for training. The findings of our study are in accordance with Baral et al (2011)² where they assessed the adequacy of teachers' training in assessment techniques by participants' discernment and discovered noteworthy addition in information by the participants.

CONCLUSION:

Faculty development program in medical education not just upgrade the effectiveness of teachers to design curriculum, deliver various teaching-learning methods and carry out assessment process but also indirectly benefits the students to become more confident and competent in health care profession. By and large, our outcomes affirms that the current training package is attainable, worthy and helpful for teachers with conceivable support. Be that as it may, development and impact study of such training should be assessed time to time in future.

Table 1. Questionnaire distributed to the students

Sr. No.	Your observations	Lickert's Scale				
		SD	D	N	A	SA
I	CURRICULUM					
1.	Time allotted for didactic (1/3) and nondidactic (2/3) teaching method is appropriate	15 (20%)	12 (16%)	47 (64%)		
2.	I am satisfied with the fixed quota for clinical cases in each department.	24 (32%)	13 (18%)	37 (50%)		
3.	Syllabus of each subject was displayed on notice board prior to the examination.	8 (11%)	8 (11%)	58 (78%)		
4.	Information of Examination schedule at the start of course helps us in preparation of examination.	6 (8%)	11 (15%)	57 (77%)		
5.	I am satisfied with the duration of preparatory leave given before the final university exam.	21 (28%)	13 (18%)	41 (55%)		
6.	Academic audit conducted at the end of marker point helped in evaluating and thus improving the teaching process.	14 (19%)	15 (20%)	45 (61%)		
II	TEACHING / LEARNING METHOD					
1	In understanding a particular topic, didactic lectures are more useful than non-didactic method (PBL, Tutorials).	17 (23%)	12 (16%)	45 (61%)		
2	I had a better understanding of diagnosis and treatment planning by PBL/CBL method than didactic method.	23 (31%)	23 (31%)	28 (38%)		
3	Teaching-Learning by PBL/CBL method encouraged student participation more as compared to traditional method.	21 (28%)	20 (27%)	33 (45%)		
4	Integrated teaching programme provides link of topics to other subjects also (mainly clinical)	19 (26%)	11 (15%)	44 (59%)		
5	During PBL sessions, tutor guidance was helpful	17 (23%)	20 (27%)	37 (50%)		
6	PBL/ITP helped me in preparing the final university examination	27 (36%)	24 (32%)	23 (31%)		
7	PBL method stimulated me to carry out more literature search.	24 (32%)	27 (36%)	23 (31%)		
8.	The way didactic and non-didactic classes were taught, encouraged me to attend more classes in future	20 (27%)	26 (35%)	28 (38%)		
9.	I feel that there should be a judicious mixture of didactic lecture and PBL sessions for a better understanding of particular subject and associated clinical cases.	19 (26%)	16 (22%)	39 (53%)		
III	ASSESSMENT					
1.	I am satisfied with the mark distribution for theory, practicals/clinical and internal assessment examination.	13 (18%)	11 (15%)	50 (68%)		
2.	I am satisfied with the percentage of marks allotted for attendance in internal assessment exam	25 (34%)	13 (18%)	36 (49%)		
3.	I am satisfied with the pattern of assessment of theory	12	12	50		

	and practical examination.	(16%)	(16%)	(68%)
4.	I think the time allotted for clinical examination during University exam is sufficient.	15 (20%)	18 (24%)	41 (55%)
5.	I believe that treating patient during clinical examination is a better tool of assessment.	8 (11%)	13 (18%)	53 (71%)
6.	OSCE/OSPE method of assessment helped us in understanding the management of patient in an entire manner.	11 (15%)	20 (27%)	43 (58%)

Figure 1.

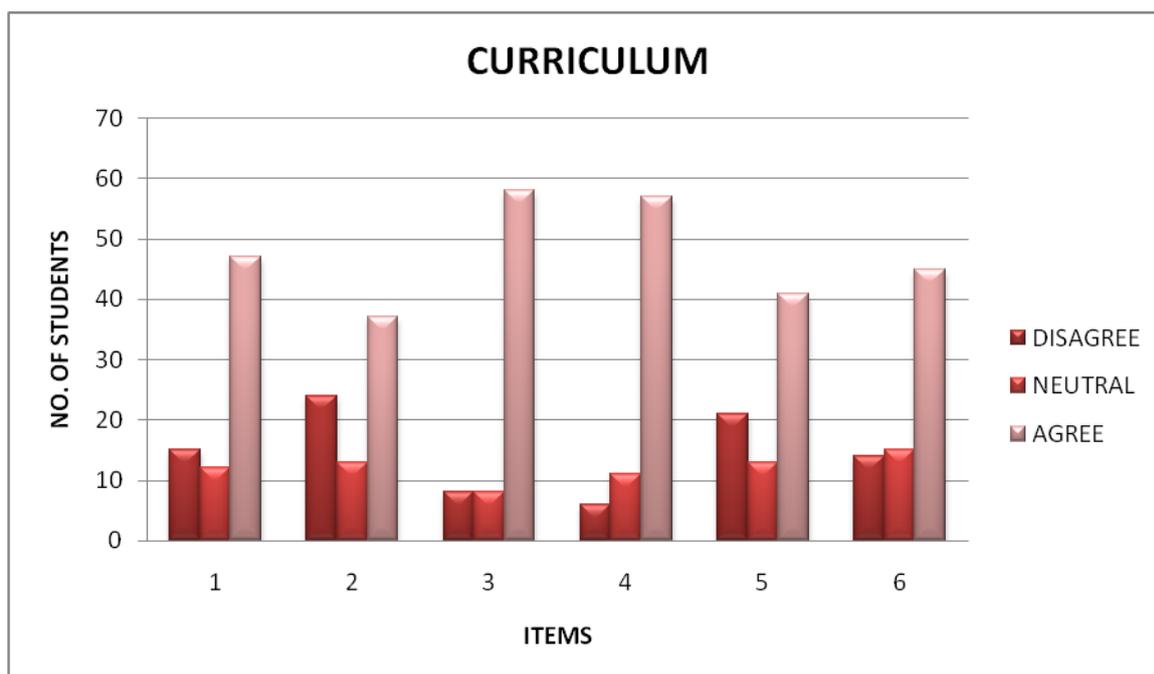


Figure 2.

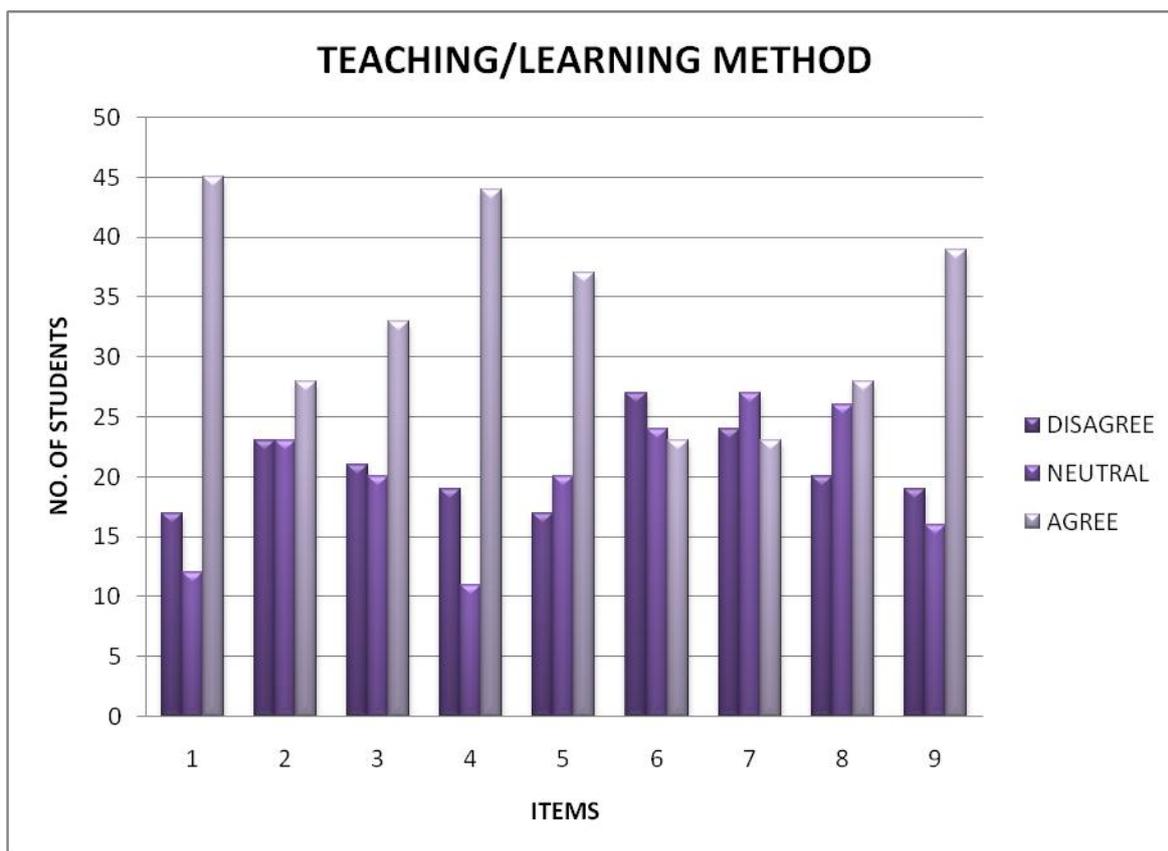


Figure 3.

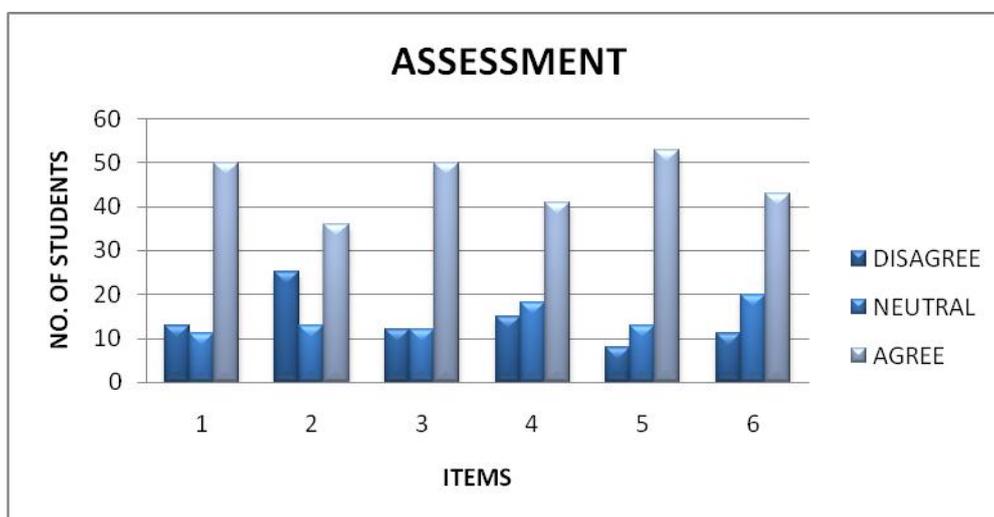
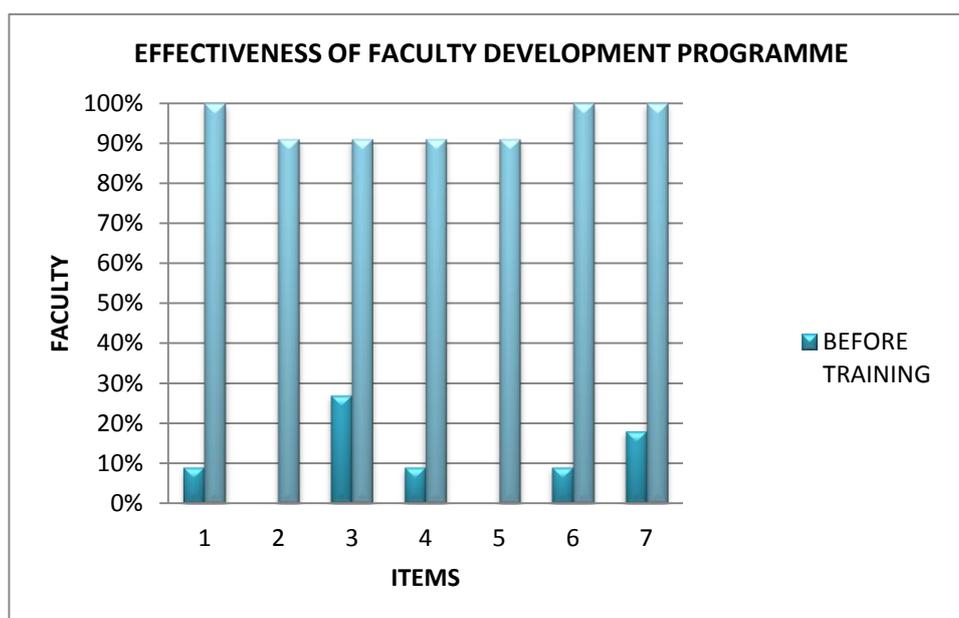


Table 2. Questionnaire distributed to the Faculty

Before Training					Items	After Training				
1	2	3	4	5		1	2	3	4	5
	8 (73%)	2 (18%)	1 (9%)		I can design curriculum for my subject		0	0	11 (100%)	
	8 (73%)	3 (27%)	0		My awareness regarding different didactic and non-didactic methods of teaching		0	1 (9%)	10 (91%)	
	5 (45%)	3 (27%)	3 (27%)		I can prepare and optimally utilize the powerpoint presentation		0	1 (9%)	10 (91%)	
	9 (82%)	1 (9%)	1 (9%)		My ability to conduct PBL		1 (9%)	0	10 (91%)	
	5 (45%)	6 (55%)	0		I have a better understanding of the opportunities and limitation of assessment		0	1 (9%)	10 (91%)	
	10 (91%)	0	1 (9%)		I can conduct OSCE properly		0	0	11(100%)	
	5 (45%)	4 (36%)	2 (18%)		I can set Question Paper as per the guidelines of University		0	0	11(100%)	

Figure 4.



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