

# The Impact on Teaching Strategies on BDS Students Learning and Academic Improvement at Faryal Dental College

Impact on  
Teaching  
Strategies on  
BDS Students

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## ABSTRACT

**Objective:** To examine the preferences about different teaching strategies of dental students in our institute.

**Study Design:** Descriptive study

**Place and Duration of Study:** This study was conducted at the Faryal Dental College Lahore from November 2018 to April 2019.

**Materials and Methods:** Total one hundred and twenty undergraduate dental students of both genders were included in this study. A self developed questionnaire was distributed to all the students. Student's preferences for different teaching methodologies were recorded. Analyze the views and preferences between all the students.

**Results:** There were 70 (58.33%) males while 41.67% were females. 85% students reported that the lectures schedule should be announced in advance. 85% of students preferred morning lectures and 15% students preferred afternoon lectures. 96 (80%) students preferred power point lectures method. Most of the student reported that they should have received lecture handouts and study materials before the session and practical work at the end of session.

**Conclusion:** Majority of students preferred power point presentation of lectures. Teachers should have to take students opinion before starting the course, this activity will be helpful to develop a good teaching environment and would have a positive impact on student performance.

**Key Words:** Dental students, Teaching Methods, Preferences, Views

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## INTRODUCTION

Worldwide, Teaching environment and teaching strategies plays an important role in improving the student's performance. Now a day it is big challenge for dental teachers to provide a positive teaching environment for enhancing student satisfaction level.<sup>1</sup> Students of dental colleges or dental students want to get education according to their experiences, personality and style and this miscellany preference presents a big challenge for teachers to provide a good teaching environment so that students performance could be increased. Student performance and level of satisfaction improve when the teaching environment is according to their preferences and views.<sup>2</sup> Teachers should adopt the different teaching strategies because it

will be effective for student performance.<sup>3</sup> Effective teaching is critical for student learning, especially in professional-fields such as dentistry. Teaching-effectiveness can be defined as the extent to which the teaching activity fulfills its intended purpose, function and goal.<sup>4</sup> For improving the teaching faculty and teaching environment routine evaluation of teaching strategies is very essential.<sup>5</sup> Since from the 19<sup>th</sup> century many of teaching modalities applied to improve the student performance. Lecture system is very essential for education especially in health care education.<sup>6,7</sup> As per teaching faculty, there are many advantages of lectures and one of the greatest advantage is the ability to share information with a large number of students.<sup>8</sup> Lectures will continue to be the main teaching strategy of choice for delivering the basic-curriculum to as many students as will fit in a lecture theater because of the economic constraint s on institutions, staff, facilities and students.<sup>9</sup>

Many of studies regarding teaching strategies documented that the educators must have to change their teaching modalities according to student preferences and style of learning. It developed a positive interest to the students for getting the education. Multiple studies have been conducted for the preferences and views of dental students towards teaching modalities to improve the student

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performance, impact of dental education on their stress level, teaching effectiveness in classrooms and clinics.<sup>10-12</sup>

## MATERIALS AND METHODS

This descriptive study was conducted at Faryal Dental College Lahore and the duration of this study was 6 months, Nov 2018 to April 2019. In this study total 120 dental students of both genders were included. A self developed questionnaire was distributed to all the students with written aim of study and consent. Not interested students were excluded from the study. Questionnaire consist of 3 parts, first part contains demographical data, 2<sup>nd</sup> part contains student preference for lectures time length, timing of lectures, teaching methods, timing of lectures announcement. The 3<sup>rd</sup> part contains the questions about the lectures and clinical sessions (preference of materials' provision before the session, having an interactive session, and having handouts and clinical demonstration after the lecture). Compare the views and preferences between male and females. Data was analyzed by SPSS 20.0. Chi-square test was applied. P-value <0.05 was considered as significant.

## RESULTS

From all the students 70 (58.33%) were male while 41.67% were females. 60 (50%) of all the students reported that lectures length should be for 40 minutes, 35 (29.17%) students preferred lecture length >40 minute and 25 (20.83%) students preferred <40 minutes. 102 (85%) students preferred morning lectures, 18 (15%) students preferred afternoon lectures (p-value <0.05) [Table 1]. Ninety six (80%) students preferred power point lectures method, 14 (11.67%) preferred online courses, 10 (8.33%) preferred chalkboard lectures method, the difference was statistically significant p-value <0.05 (Table 2).

**Table No.1: Students preference about length and timing of lectures**

Variable	No.	%
<b>Gender</b>		
Male	70	58.33
Female	50	41.67
<b>Lecture Length</b>		
<40 minutes	25	20.83
40 minutes	60	50
>40 minutes	35	29.17
<b>Lecture Timing</b>		
Morning	102	85
Afternoon	18	15

P-value <0.05

One hundred and two (85%) students agreed, 13 (10.83%) reported neutral and 5 (4.17%) student was disagreed about the lectures schedule should be

announced in advance (P-value <0.05 (Table 3). Eighty four (70%) students agreed that they should have received study material before lectures while 28 (23.33%) reported neutral and 8 (6.67%) reported disagreed (Table 4)

105 (87.5%) students preferred that they should have lectures handouts while 10 (8.33%) students opinion was neutral and 5 (4.17%) students reported disagreed. 108 (90%) students were agreed to have practical demonstration after lectures while 10 (8.33%) were neutral and only 2 (1.67%) were disagreed. (Table 5)

**Table No.2: Preference of students for teaching method**

Variable	No.	%
Powerpoint	96	80.0
Chalkboard	10	8.33
Online	14	11.67

P-value <0.05

**Table No.3: % figure 2: Student preference about the lecture schedule announcement**

Variable	No.	%
Agreed	102	85
Neutral	13	10.83
Disagree	5	4.17

P-value <0.05

**Table No.4: Provision of study material before lecture**

Variable	No.	%
Agreed	84	70
Neutral	28	23.33
Disagree	8	6.67

**Table No.5: Students opinion about lectures handouts and practical demonstration after lectures**

Variable	No.	%
<b>Should have Lecture Handouts</b>		
Agreed	105	87.5
Neutral	10	8.33
Disagree	5	4.17
<b>Practical Work After Lectures</b>		
Agreed	108	90
Neutral	10	8.33
Disagree	2	1.67

P-value <0.05

## DISCUSSION

Teaching strategies plays an important role to develop a positive environment between teachers and students also effective for student's performances.<sup>13</sup> The present study was conducted aimed to analyze the students preferences towards teaching strategies so that it could be helpful to develop a positive teaching environment. In this study 120 students were included in which 70 (58.33%) were male while 41.67% were females. These results showed similarity to some other studies in which

male student population was high as compared to female students<sup>14,15</sup> but some international studies showed different in which females student was high in numbers as compared to female.<sup>16</sup>

In our study the questionnaire demonstrated that majority of the students preferred morning time classes 85% and there was no significant difference between male and female p-value >0.05 while 15% student shows interest in afternoon lectures and in these students mostly were males with p-value <0.05. These results was similar to the some other studies conducted regarding teaching strategies in which majority of students preferred morning classes.<sup>17</sup> In present study we found that 96 (80%) students preferred power point lectures method, 14 (11.67%) preferred online courses, 10 (8.33%) preferred chalkboard lectures method, the difference was statistically significant p-value <0.05. A study they reported that majority of students preferred powerpoint lectures presentation.

In our study, 102 (85%) students agreed, 13 (10.83%) reported neutral and 5 (4.17%) student was disagreed about the lectures schedule should be announced in advance. Many of studies illustrated that schedule of lectures should be announced in advance is very helpful for the students in preparation of lectures and class.<sup>18,19</sup> We found that 84 (70%) students agreed that they should have received study material before lectures. A study<sup>20</sup> reported active learning as a process that encourages students to interact with the material being presented. Another study demonstrated prepared slides before lecture is helpful for student to maintain the performance.<sup>21</sup> In our study, 105 (87.5%) students preferred that they should have lectures handouts while 10 (8.33%) students opinion was neutral and 5 (4.17%) students reported disagreed. 108 (90%) students were agreed to have practical demonstration after lectures while 10 (8.33%) were neutral and only 2 (1.67%) were disagreed. Previous researches reported that the distribution of handouts before lecture is very effective for student concentration during lecture instead of working on taking notes. This strategy is very effective and produce a positive impact on student academic performance.<sup>20,21</sup>

## CONCLUSION

It is concluded that majority of students preferred power point presentation of lectures. Teachers should have to take students opinion before starting the course, this activity will be helpful to develop a good teaching environment and would have a positive impact on student performance.

### Author's Contribution:

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**Conflict of Interest:** The study has no conflict of interest to declare by any author.

## REFERENCES

1. Fang AL. Utilization of learning styles in dental curriculum development, The New York State Dent J 2002; 68( 8): 34–8.
2. Lujan HL Dicarlo SE. First-year medical students prefer multiple learning styles. Adv Physiol Edu 2006; 30(1): 13–6.
3. Murphy RJ, Gray SA, Straja SR, Bogert MC, Student learning preferences and teaching implications. J Dent Edu 2004;68(8): 859–66.
4. Jahangiri L, Mucciolo TW, Choi M, Spielman AI. Assessment of teaching effectiveness in U.S. dental schools and the value of triangulation. J Dent Edu 2008;72(6): 707–18.
5. Endorf M, McNeff M. The adult learner: five types. Adult Learning 1991; 2(7): 20–5.
6. DaRosa DA, Kolm P, Follmer HC, Pemberton LB, Pearce WH, Leapman S. Evaluating the effectiveness of the lecture versus independent study. Evaluation Program Planning 1991;14(3): 141–6.
7. Novak JC. Active learning in continuing professional education: the challenge of leadership. New Directions Adult Continuing Edu 1992; 1994(56):63–81.
8. Lake DA. Student performance and perceptions of a lecture-based course compared with the same course utilizing group discussion. Phys Therap 2001; 81(3): 896–902.
9. Perrin R, Laing G. The lecture: a teaching strategy through the looking glass. J Business Edu Scholarship Teaching 2014; 8(1): 67.
10. Berk NW, Close JM, Weyant RJ. Do student perceptions of their dental curriculum change over time? J Dent Edu 1998; 62(11): 934–7.
11. Henzi D, Davis E, Jasinevicius R, Hendricson W, Cintron L, Isaacs M. Appraisal of the dental school learning environment: the students' view. J Dent Edu 2005; 69(10): 1137–47.
12. Clark DM, Oyen OJ, Feil P. The use of specific dental school-taught restorative techniques by practicing clinicians. J Dent Edu 2001; 65(8): 760–65.
13. Ebrahimipourtaher A. Methodological preferences of engineering students in relation to EFL: Focus on gender. Procedia-Social Behav Sci 2013; 70: 841–52.

14. Mokhtari H. A quantitative survey on the influence of students' epistemic beliefs on their general information seeking behavior. *J Acad Librarianship* 2014; 40(3/4): 259-63.
15. Graham S, Liu X, Bartlett B, Ng C, Harris RK, Aitken A, et al. Reading for writing: a meta-analysis of the impact of reading interventions on writing. *Rev Educ Res* 2018;88:243–84.
16. Gore A, Chavan P, Kadam Y, Dhumale G. Application of biostatistics in research by teaching faculty and final-year postgraduate students in colleges of modern medicine: A cross-sectional study. *Int J Appl Basic Med Res* [Internet] 2012;2(1):11.
17. Weissgerber TL, Garovic VD, Milin-Lazovic JS, Winham SJ, Obradovic Z, Trzeciakowski JP, et al. Reinventing Biostatistics Education for Basic Scientists. *PLoS Biol* 2016;14(4).
18. Milic NM, Masic S, Milin-Lazovic J, Trajkovic G, Bukumiric Z, Savic M, et al. The importance of medical students' attitudes regarding cognitive competence for teaching applied statistics: Multi-site study and meta-analysis. *PLoS One* 2016; 11(10).
19. Fielding S, Poobalan A, Prescott GJ, Marais D, Aucott L. Views of medical students: what, when and how do they want statistics taught? *Scott Med J* 2015;60(4):164–9.
20. Milic NM, Trajkovic GZ, Bukumiric ZM, Cirkovic A, Nikolic IM, Milin JS, et al. Improving education in medical statistics: Implementing a blended learning model in the existing curriculum. *PLoS One* 2016;11(2).
21. Rubio Hurtado MJ, Ruiz-Bueno A, Martínez-Olmo F. Students' perceptions of the usefulness of learning activities for the development of competencies. *Rev Investig Educ* 2016;34(1): 221–40.