

Feedback on Students' Preferences of Online Teaching Methods during COVID -19 Pandemic

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Abstract:

Background: Teaching methods influence on the learning process and the outcome in the education system. The learning styles of students vary depending on their learning preferences. We were left with the online teaching method due to the Covid situation since March 2020. We tried various teaching methods during this period and collected feedback from the students after their university examinations.

Materials and Methods: In this descriptive, qualitative study, Feedback was collected from students of 2nd-year MBBS students on the teaching methods used for Microbiology during online teaching. Students were asked to reflect on the teaching method in google form on 5 points Likert scale. They were also asked to give suggestions in optional paragraph form.

Results: Out of 148 students, 99(67%) responded. Students preferred MCQs after each topic (61.6%) followed shared PowerPoint presentations (52.5%), Applied chart discussion with case scenario (50.5%), Lectures (50%), WhatsApp group discussions (37.4%), Concept mapping (34.3%), Seminars (30.3%). More than 50% of responders liked more than one method.

Key Words: Feedback, Microbiology, Online teaching methods

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I. Introduction

During the pandemic Since March 2020, Medical teachers and students are left with the only option that is an online mode of teaching and learning. This is new for both teachers and students in our curriculum. There were many technical problems during the online mode of teaching. We started making them involved in various methods where there is interaction. We have tried to motivate students to learn the subject by relating the subject to real-time situations. Case scenarios, small group discussions in WhatsApp groups, MCQs were given after completion of each topic followed by a key with an explanation. Topics such as pandemics, bioweapons, emerging and reemerging infectious diseases which are somewhat related to the present pandemic were given as seminar topics. Online lectures with PowerPoint presentations like in the physical classroom are one of the most common methods of online teaching. This technique is more helpful for visual learners. The presentations were shared with students which helped them to revise. Students possess a wide diversity of learning preferences.

A simple learning preference is VARK by Neil Fleming, which groups learners into four categories, Visual learners, Auditory learners, Reading/writing learners, and Kinesthetic learners. This necessitates teachers to effectively deliver according to the needs of the student. Multiple modalities of information presentation are necessary to keep the attention and motivation of our students requiring a shift from the traditional large-group teacher-centric lecture method to an interactive, student-centric multimodal approach.

The present study was aimed at getting feedback from students on teaching-learning methods used during the Covid19 pandemic and to improve teaching and learning methods.

Aim: To determine the learning preferences of the students.

Objective: To get the feedback and analyse the student's preferences of teaching and learning.

II. Material and Methods

Feedback was collected from students of 2nd-year MBBS students on the teaching methods used for Microbiology during online teaching during the Covid 19 pandemic after they have completed their university examination in March 2021. Students were asked via an online survey link to reflect by objective type of questionnaire on Likert scale and also to reflect as paragraph form. Linkert scale of 1 to 5. 1-Poor 2 -Below average 3-Average 4-Good 5-Excellent. Feedback was also taken to reflect as paragraph form. After receiving

their responses, a link was disabled after 10 days of circulating the Google forms. In this way, responses from a total of 99 students were obtained.

| | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 |
|----------------------------|---------|---------|---------|---------|---------|
| WhatsApp group discussion | 1% | 4% | 10.1% | 47.5% | 37.4% |
| Seminars | 1% | 3% | 18.3% | 47.5% | 30.3% |
| Concept mapping | 3% | 2% | 19.2% | 41.4% | 34.3% |
| Applied chart – discussion | 2% | 1% | 10.1% | 36.4% | 50.5% |
| MCQs | 0% | 2% | 7.1% | 29.3% | 61.6% |
| Shared PowerPoint | 3% | 1% | 13.1% | 30.3% | 52.5% |
| Lectures | 0% | 2% | 16.3% | 31.6% | 50% |

III. Results

The strength of the class is 148. Out of these 67 % of students have responded and gave feedback. Students preferred MCQs after each topic (61.6%) followed by shared PowerPoint presentations (52.5%), Applied chart discussion with case scenario (50.5%), Lectures (50%), WhatsApp group discussions (37.4%), Concept mapping (34.3%), Seminars (30.3%). More than 50% of responders liked more than one method. The majority of students liked the interactive sessions and student participation. In university exams also, this batch of students scored good marks with 28 Distinctions, 77 first classes, overall 86.81%.

IV. Discussion

Students prefer MCQ at the end of each session as one of the teaching-learning methods. This is an example of assessment for learning. Interactive methods were appreciated more than didactic lectures without much interaction. This information is gathered from the students' suggestions in the form of paragraphs. Some preferred interactions during online lectures. Though there is a lot of subjective variation in the preferences, interactive sessions were preferred by the majority of students. They preferred PowerPoint presentations to be shared with them so that they can revise before examinations. This type of feedback will help us to choose appropriate teaching methods according to students' preferences. Multiple teaching methods were appreciated to change the monotony of lectures. We should adapt to the situations like COVID where we are left with only an online mode of teaching. Teaching method preferences may vary depending on VARK (visual, auditory, reading, kinetic)6 Learning styles. In our study majority of students preferred activities like MCQ.

Limitation of this study: In this study, the effectiveness of each method varies with the faculty member who is involved. There were some internet problems as well.

V. Conclusion

Students possess a wide diversity of learning preferences. This necessitates teachers to effectively deliver according to the needs of the student. Multiple modalities of information presentation are necessary to keep the attention and motivation of our students requiring a shift from the traditional large-group teacher-centric lecture method to an interactive, student-centric multimodal approach. Teaching methods can be adapted based on student's preferences. All teaching faculty should be given training on using online platforms. Technical support will encourage teaching faculty in more innovative methods for a good outcome. Management and administration should take the necessary steps in supporting the technical issues.

References

- [1]. T. Muthuprasad *et al.* Students' perception and preference for online education in India during COVID -19 pandemic . Social Sciences & Humanities Open : 3 (2021) 100101
- [2]. Mohammad H. Rajab , Abdalla M. Gazal , Khaled Alkattan. Challenges to Online Medical Education During the COVID-19 Pandemic. Cureus 12(7): e8966. DOI 10.7759/cureus.8966
- [3]. Cynthia S. Deale. Learning Preferences Instead of Learning Styles: A Case Study of Hospitality Management Students' Perceptions of How They Learn Best and Implications for Teaching and Learning. IJ-SoTL, Vol. 13 [2019], No. 2, Art. 11
- [4]. S. Senthamarai*. Interactive teaching strategies. Journal of Applied and Advanced Research, 2018: 3(Suppl. 1) S36 -S38
- [5]. I smail *et al.* Preference of teaching and learning methods in a new medical school of Malaysia. Journal of Applied Pharmaceutical Science: 4 (02); 2014: 048-055
- [6]. I J Prithishkumar¹, S A Michael. Understanding your student: using the VARK model. J Postgrad Med ;Apr-Jun 2014;60(2):183-6 DOI: 10.4103/0022-3859.132337
- [7]. Margaret Gillingham & Carol Molinari. Online Courses: Student Preferences Survey. Internet Learning APU. Volume 1, Number 1 • Fall 2012 • Article 3
- [8]. Terri A.Meehan-Andrews. Teaching mode efficiency and learning preferences of first year nursing students. DOI.org/10.1016/j.nedt.2008.06.007