

## The Flipped Classroom - Changing the Traditions in Medical Education

Tayyaba Ahmed

Dear Sir,

Medical education around the world is rapidly evolving which warrants a need for new and improved teaching methods. Many new models are being tested around the world to check for their efficacy in comparison to the traditional classroom teaching. One of the most researched teaching models in the recent past is the 'flipped classroom model'. It has been labelled as the new paradigm for medical education<sup>1</sup>.

The flipped classroom model entails study material, including reading assignments, video lectures and online resources, to be provided to the students before an interactive session with the teacher. This way the students attain sufficient basic knowledge on their own prior to the class, which enables them to participate in interactive activities, such as problem solving, during the class and therefore build up on the previously attained knowledge instead of being exposed to basic knowledge for the first time<sup>2,3</sup>. Even though the flipped classroom model is generally accepted by the students as being more interesting than traditional teaching<sup>4</sup>, researches to find out its true efficacy are still going on.

In a study, both traditional and flipped classroom methods were tested on medical students and results showed that the students belonging from the flipped group performed better on the post-test as compared to the traditional teaching group<sup>5</sup>. Hew KF, et al. in his review also reported better efficacy of flipped classrooms as compared to traditional teaching<sup>6</sup>. This does prove the short term efficacy of flipped classroom over the traditional method of teaching but as highlighted by Chen F, et al. in his systemic review, studies exploring the long term benefits of flipped classroom in terms of knowledge retention and application are scarce. His

Final Year MBBS Student, Karachi Medical and Dental College

**Correspondence:** Tayyaba Ahmed  
Final Year MBBS Student,  
Karachi Medical and Dental College  
Email: t.ahmad.97@gmail.com

**Date of Submission:** 3<sup>rd</sup> November 2020

**Date of Acceptance:** 30<sup>th</sup> May 2021

review also revealed that the flipped classroom model improved interactive abilities and motivation of students in general<sup>7</sup> which shows that flipped classrooms are at least more beneficial if not more efficacious than traditional classrooms.

Despite its benefits, flipped classroom model has still not been chosen as the standard method of teaching in medical schools as researchers around the world are rigorously studying and testing the model for more conclusive results. Unfortunately, no such study has been conducted in Pakistan. In order to produce competent doctors it is essential to evolve with the rapidly evolving medical world. These new and advanced teaching methods must also be tested in local settings to evaluate their efficacy in Pakistani medical students and should be implemented if found efficacious. This will not only improve the quality of doctors being produced but might also improve the healthcare in Pakistan as a whole.

### References

1. Mehta NB, Hull AL, Young JB, Stoller JK. Just imagine: new paradigms for medical education. *Acad Med* 2013;88:1418-23. [doi: 10.1097/ACM.0b013e3182a36a07]
2. Eaton, M. The flipped classroom. *Clin Teach* 2017;14:301-302. [doi:10.1111/tct.12685]
3. Han E, Klein KC. Pre-Class Learning Methods for Flipped Classrooms. *Am J Pharm Educ* 2019;83:6922. [doi: 10.5688/ajpe6922]
4. Ramnanan CJ, Pound LD. Advances in medical education and practice: student perceptions of the flipped classroom. *Adv Med Educ Pract* 2017;8:63-73. [doi: 10.2147/AMEP.S109037]
5. Tang F, Chen C, Zhu Y, Zuo C, Zhong Y, Wang N, Zhou L, Zou Y, Liang D. Comparison between flipped classroom and lecture-based classroom in ophthalmology clerkship. *Med Educ Online* 2017;22:1395679. [doi: 10.1080/10872981.2017.1395679]
6. Hew KF, Lo CK. Flipped classroom improves student learning in health professions education: a meta-analysis. *BMC Med Educ* 2018;18:38. [doi: 10.1186/s12909-018-1144-z]
7. Chen F, Lui AM, Martinelli SM. A systematic review of the effectiveness of flipped classrooms in medical education. *Medical Education* 2017;51:585-597. [doi:10.1111/medu.13272]