

SHORT COMMUNICATION

ONLINE FLIPPED CLASSROOM (e-FCR): WAY FORWARD IN COVID 19 ERA

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Online teaching and learning have been in place for the last two decades. COVID-19 pandemic has intensely augmented institutions towards implementation of online teaching. Literature reported benefits of online learning including flexibility and self-direction. In addition, researchers reported that virtual learning pedagogy is encouraging, as it mainly inspires lifelong learning due to its self-paced and self-directed instruction. Flipped classroom is an active pedagogical instructional strategy that uses online resources external to the classroom, and then employs small group pedagogies within the classroom. Flipped classroom strategy allows use of lecture time for active learning activities. This active model restructures the traditional lecture paradigm, in that students acquire basic course content before coming to the classroom, while class time is dedicated for problem solving learning activities. Flipped classroom utilizes time in student interaction sometimes one to one, addressing to their concerns and queries regarding the content. This strategy gives opportunity to the teachers to share their relevant real-life experiences and design small group problem solving activities.

Keywords: Flipped classroom

Citation: Babar S, Hadayat M. Online Flipped Classroom (e-FCR): Way forward in COVID 19 Era. J Ayub Med Coll Abbottabad 2022;34(4 Suppl 1):1056-7.

DOI: 10.55519/JAMC-04-S4-10282

INTRODUCTION

The COVID-19 has compelled everyone into isolation and replaced face to face teaching and learning to virtual platform. Education has been delivered online by many institutions for more than a decade, however this pandemic presented a challenge for medical educators who were used to face-to-face instruction.¹ It was imperative that educational institutions continue to provide effective educational services. Scholars in all areas of education did relook their resources and opted for innovations for student engagement in current pandemic.²

Online teaching is distinguished in synchronous and asynchronous instruction. The learners interact with the teacher in actual face to face during synchronous teaching while in asynchronous mode, prepared learning material is uploaded via digital platform. Flipped classroom has been endeavoured in various disciplines and has been effective in improving student engagement, interaction and retention. Additionally, students appreciate the self directed nature of flipped classroom (FCR). FCR is a learning pedagogical method that encourages high level cognition with stimulation of active learning resulting in “a more intense learning experience that goes beyond memorization”.^{3,4} Its effects on students' commitment, inspiration, self-satisfaction and positive deep learning in medical and health science disciplines have been outlined in the literature.³

When the learners are asked to prepare earlier for their virtual lecture, they develop self-directed learning skills. As health care professionals, learners need to keep abreast with the current evidence-based patient centered interventions. A good flipped classroom model should inculcate self-directed learning skills in learners.

A typical model of FCR can be categorized into before class, in-class and after class activities.⁵ The lecture should aim for higher-order thinking and lifelong learning, and not on rote memorization. Videos, quizzes, pre-recorded lectures and module assignments on learning content are uploaded online in before class activity of FCR.⁶ During the in-class activity knowledge is consolidated through student centered group activities, like problem-based learning, role-plays, interactive discussions, and collaboration.⁷

The in class activities and interaction create a more student-centred environment and are based in constructivist approach rather than a behaviourist approach.⁸ Student engagement is based on teachers' direction to select materials that stimulate students' interaction by elaboration of an idea as an answer, enabling of student self-directed learning, and teachers contribution for instructional support.⁹ In the after-class sessions reflection from students, peer feedback, and feedback from teachers can be provided. There are few models that emphasize more on self-regulation and motivation.² Self-regulation skills includes self-monitoring, effective use of self-

instructions, self-reinforcement, time management, goal setting and trouble shooting.² Considering learners' self-regulation skills before a FCR could help teachers to identify learners needs regarding study habits and skills. Appropriate teaching strategies can contribute in improving learners' self-regulation skills.²

Researches show that learners were motivated to be active in self-directed learning and critical thinking under the FCR model. In this regard, some studies highlighted the significance of videos, recorded lectures, and group discussions, to nurture learning. As evidenced from literature, the significance of learners' engagement during the pandemic forced the educators to inculcate student engagement culture.⁴

The importance of online FCR is evident from the desired results obtained in nurturing students' interest in learning, improving autonomous learning abilities and independent thinking.¹⁰ Deep learning and learners' academic achievement by an online FCR model on 'Medical Terminology Course' has been documented.¹¹ Development of this model has guided faculty to design active learning activities and assess student learning within their classrooms.¹² The success of an e- FCR depends on an effective virtual learning environment (VLE) aimed to engage both the facilitators and students for an effective learning environment, faculty and resource preparedness. This pandemic has refocused the educational institutes to "Emergency Remote Teaching" with a shift of curricula from a mix of direct and distant teaching.⁴

Agung *et al.* highlighted that few studies reported some technology-based problems faced by students as they were less passionate about online learning mainly due to limited internet access.² The challenges associated to teachers included difficulties in dealing with technology in short space of time and also content related desired for effective flipped teaching. One of the barriers among the teachers in development and implementation of online learning was inefficient computer skills.¹³ Deficient computer and digital skills together with poor infrastructure can constrain teachers' readiness for online learning. They highlighted the challenges for teachers in identifying learning materials for creating their own lecture videos, slides and other learning resources.²

CONCLUSION

The incorporation of flipped learning model in online instruction is considered to be effective in times of disruption during Covid 19. As the flipped classroom instruction also employs digital resources, it is assumed that a new blended learning model can be proposed. Further research and reflection are needed on the application of innovative FCR models and strategies to improve learners' outcomes.

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Submitted: October 19, 2021

Revised: February 1, 2022

Accepted: March 22, 2022

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