Letter to Editor

New Option of Virtual Education in Corona Days: Flipped Classroom

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Nowadays, the COVID-19 pandemic has resulted in an unprecedented interruption of traditional education in the universities and educational centers. Consequently, traditional education has switched to virtual education during COVID-19.

Despite virtual education, experienced teachers still have a positive attitude toward traditional education. In traditional education, which is teacher-centered, plenty of information is transferred to the students in a specified time (1), while, nowadays, in a virtual atmosphere, a new educational environment has been created based on person-centered education (2). In a virtual atmosphere, students usefully prefer to use devices such as mobile, computer, and so on, and can have more convenient access to information (2).

Therefore, to improve the standard of education and increase the learning quality in a person-centered approach in a virtual atmosphere, it is important for the teachers to become familiar with a new approach of virtual education (2). Also, the acquisition of necessary skills will help the students to study independently and participate actively in the learning process (2).

It is doubtful if we can fulfill all the needs of students in the virtual education system as we could with face-to-face interactions in the traditional method.

It seems that the flipped classroom education strategy can facilitate the student learning process during the coronavirus crisis (3, 4)

The flipped classroom is a new educational approach that reverses the traditional education method (3). In this method, at first, the students receive digital educational materials provided by the teacher at home. Then, teachers and students engage in classroom activities to discuss and solve the problems (3, 4).

Today, in the coronavirus crisis, the virtual flipped classroom is used. Virtual flipped classroom activities can facilitate e-learning education under technology (2, 5).

As part of the virtual flipped classroom-based educational strategy, the first activities will take place outside of the classroom, in the form of asynchronous e-learning educations, while the second part of the activities will take place inside of the classroom, in the form of synchronous e-learning educations such as web conference, video conference, and virtual classroom (5).

Asynchronous e-learning education is a type of education that involves teachers and students participating in the process of teaching and learning separately. Synchronous e-learning education is a type of education that involves both teachers and students to participate in the process of teaching and learning simultaneously.

This educational approach enables you to get students to do their assignments on time, can facilitate face-to-face meetings, and thereby letting you partially compensate for the flaws caused by the lack of traditional face-to-face meetings (4, 6). Also, in the first activities of the virtual flipped classroom (outside of the class activities), students learn study material at their own pace (6).

The main drawback in the flipped classroom is time management (4). Flipped classroom uses a variety of teaching and learning approaches to help the teachers to manage the time to solve the students' problems (4).

It is believed that there is no specific method for a flipped classroom. Each flipped classroom is unique and requires planning based on specific goals (7), and the differences between students lead to different teaching-learning approaches. Students are free to select a desirable approach. This model of education promotes an active learning atmosphere for the students. Of course, teachers' feedback plays an important role in this regard (7).

Therefore, it seems that in a flipped classroom, cardinal skills such as critical thinking, creativity, communications, and collaboration will develop (7, 8). An appropriate level of cooperation between teachers and learners takes place. Quality of learning will be improved, and by acquiring motivation, the students take higher responsibility for their learning (4). Under this condition, students' participation will be improved, which will be helpful in increasing motivation (7, 8).

Therefore, proper perception of these conditions, which is accompanied by proper selection of the educational strategy in the universities, facilitates active learning opportunities for students (4).

Under such conditions where virtual education is used, the organization of a flipped classroom can improve the quality of virtual learning to a desirable level.

As a result, in the coronavirus era, by disseminating the pedagogical approach, teachers and learners can gain enough experience in the flipped classroom-based educational strategy that can be applied in the post-corona era as well. **Conflict of Interests:** The authors state no conflict of interest in the current study.

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