# **Flipped Class and Nursing Education**

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Abstract: While continuous development of technology necessitates integration of technology into education, education systems are obliged to continuously develop and change in order to meet the needs of the age and adapt to the age at every stage from pre-school education to university. In nursing education process; The use of alternative models in addition to traditional methods in the development of students' cognitive, affective and psychomotor skills, using active learning methods such as reverse-face application of students instead of an instructor-centered and memorized education, and the use of education methods that will contribute to the training of the individuals who take responsibility and take responsibility are important.

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#### I. Introduction

Currently, with the rapid spread of usage and production of information and communication technologies in our age; It offers many options regarding educational environments, methods and tools. While continuous development of technology necessitates integration of technology into education, education systems are obliged to continuously develop and change in order to meet the needs of the age and adapt to the age at every stage from pre-school education to university. Based on these changes, a paradigm shift from "behavioral" approach to "constructivist" approach is tried to be achieved in the education system (Kertil, 2008). This change has led to the emergence of new approaches to teaching and learning, and brought forth the feasibility of the flipped classroom system, a new educational strategy in the teaching-learning process.

Flipped class reverses the traditional course of learning, foreseeing students to learn from the recorded material in the electronic environment outside class hours (Bergman, Sams; 2012). During the class hours, it is possible to deepen and reinforce learning by discussing the subject and performing reinforcing exercises. In the traditional way, the instructor tells the lesson in the classroom, the student listens to the lesson passively. After the lesson, the students do the homework on their own, which are more complicated. In the flipped class, students do the part of the first step, which is relatively easy, that is, listening to the lesson themselves at home. They perform the applications of the upper and lower levels which are difficult and complex in the classroom with the help of the instructor with active learning methods. In the simplest sense, it is the replacement of homework and classroom instruction. In contrast to the traditional teaching method in the flipped classroom system, students learn the theoretical part of the course with multimedia tools such as online videos, presentations, and learning management systems at home. Moreover, in addition to the basic course materials given by the teacher on the subject, they acquire the responsibility for individual learning by conducting the necessary research on the content. In the classroom environment, students have the opportunity to share and reinforce the knowledge they have gained through the active role of the teacher to help them, such as the practices prepared on the subject and the discussion environments offered to share what they have learned.(Seaman & Gaines, 2013). When the flipped classroom environment is supported by a digital learning environment, the student has access to information 24/7 while studying in a collaborative and engaging learning environment. In addition, digital environments offer a more effective education compared to the traditional method by increasing the efficiency level of education as it customizes and improves teaching when used in consideration of the pedagogical characteristics of the student. (Seamen & Gaines, 2013). Since the flipped class system requires individual learning skills in a sense, individuals living in the information society; they have to learn how to access and classify information, how to produce and share it with other individuals, and how to adapt to changing circumstances.

## **Theoretical Foundations of Flipped Classroom Practice**

The pedagogical foundations of the flipped class are based on constructivist learning theory. According to this theory, students do not receive the information as they are in the learning process.On the contrary, students receive information as active constructivist participants in the learning process. The process of structuring knowledge is achieved through problem-based learning, simulation, and active learning strategies such as match-share. The process of out-of-class learning in the flipped class is entirely based on self-regulated learning. Constructivist theory does not reject the role of the trainer in the learning process. According to the

constructivist theory, the instructor is not the wise person who knows everything on the stage and is the person who is with the student in cooperation with the student during the learning process. In the reverse side of the classroom, the instructor does not teach, but plays a facilitating role in the active learning process in the classroom. The student is centered and has full responsibility for learning. It is stated that the flipped learning model is also suitable for Kolb's theories of experiential learning, adult learning and activity. (Tan, Brainard, Larkin 2015; Bösner, Pickert, Stibane 2015; Gillois et. Al. 2015).

#### **Development of Flipped Classroom Application**

Based on the constructivist approach in education, flipped class has been used for nearly fifteen years, but its use has become widespread in recent years(Kim, Kim, Khera, &Getman, 2014). The flipped class system was first introduced by the professors of economics at the University of Miami because of the multitude of reading assignments in business, law, sociology, psychology, and philosophy(Lage, Platt, &Treglia, 2000). The system used in education has attracted the attention of other teachers when Jonathan Bergman and Aaron Sams, teachers at Woodland High School, produced software to record powerpoint presentations and began recording and broadcasting live lessons for students who missed the coursein 2007. However, it began to become widespread in a few months with over 3,000 participants at the University of Northern Colorada(Talbert, 2012), as lecturers began using online and downloadable videos to present the content of the lesson, devoting their time in the classroom to collaborative work and practice(Bergmann &Sams, 2012).

#### **Flipped Class Application Process**

The flipped class system is implemented as follows;(1) preparing the student for the activities in the classroom(2) teacher's assessment of the students' preparation course outside the classroom (3) giving the student the opportunity to collaborative and problem-based learning in the classroom, other than just listening and taking notes(4) to give the student the opportunity to practice and get immediate feedback under the guidance of the teacher, besides learning theoretical knowledge(McGivney&Xue, 2013). Given this method of implementation, the flipped class system offers more student-centered, active teaching than the traditional method, which helps to achieve more effective teaching(Talbert, 2012). According to Toto and Nguyen (2009), since the flipped class system provides the student with the guidance of teacher, collaborative learning, problem-based learning, active learning, group work and in-class discussion, it provides the student with the opportunity to create his / her own knowledge and apply the theoretical knowledge learned.

#### Flipped Class System and Nursing Education

It is of great importance that nursing students develop continuous learning skills in the maintenance and realization of their roles and responsibilities. Nursing education, which includes theoretical and applied learning and teaching methods, is expected to provide students with the ability to adapt to the innovations and continuous development through effective learning. In Turkey, the Association of Evaluation and Accreditation of Nursing Education Programs (HEPDAK) aims to provide quality assurance and support the continuous improvement of nursing programs in order to meet the expectations of the stakeholders for the standards of nursing undergraduate education program. From this point of view, in nursing education process; the use of alternative models in addition to traditional methods in the development of students' cognitive, affective and psychomotor skills, the use of active learning methods such as flipped class application of students instead of an instructor-centered and memorized education, and the use of education methods that will contribute to the training of the individuals who take responsibility and take responsibility are important. When the studies related to the subject are examined, the reverse face class application; nursing students have positive effects on knowledge, skills, attitudes, self-learning skills, working satisfaction, critical thinking and problem solving skills, perception of professionalism through active learning (Tan, Yue, Fu 2017; Hannafin, Philips 2017)

## II. Conclusion

In the education process, the use of active learning strategies that lead the student to learn, take responsibility, develop thinking skills and motivate them, and lead them to questioning for research will positively affect the quality of learning. The flipped class, which supports the student's active participation in the learning process, is also thought to contribute to the development of the traditional learning approach. It is also important to be able to apply in nursing education and to reveal possible positive and negative consequences. So, it is important to identify the technological methods to be used and to structure the relevant materials, to reduce potential risks by taking into consideration the disadvantages and to work together with all stakeholders (eg faculty, students, administrators).

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