

FLIPPED CLASSROOM MODEL IN EDUCATION

Eğitimde Ters-Yüz Edilmiş Sınıf Modeli

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ÖZET

Sanayi devriminden bu yana hayatın çoğu aşamasında köklü değişimler meydana gelmiştir. Bilimsel ve Teknoloji alanındaki gelişimler ekonomik ve sosyal alanda değişimlere neden olmuştur. Son iki yüz yılda her alanda köklü değişimler olmasına rağmen eğitim konusunda çoğunlukla halen aynı yöntemler kullanılmaya devam edilmektedir. Şöyle ki öğretmen merkezli, ödev ağırlıklı sistem halen çoğunlukla kullanılmaktadır. Teknoloji ile iç içe olan, sosyal ağları iyi kullanan öğrencilerin bilgi çağında, Web 2.0 tabanlı uygulamalarla derse katılımlarının artırılacağı, derslerin programdaki hedeflerine ulaşılmasına katkı sağlayacağı düşünülmektedir. Bu nedenle bu çalışmada hem teknolojiyi kullanan hem de öğrenciye sorumluluk vererek dersi sahiplenmesi sağlayan eğitim yöntemlerinden biri olan "ters-yüz edilmiş sınıf" modeline yer verilmiştir.

Anahtar kelimeler: Ters-yüz sınıf, Eğitim Yöntemleri, Web 2.0 uygulamaları

ABSTRACT

Significant changes have occurred in most stages of life since the industrial revolution. The developments in the field of Scientific and Technology caused changes in the economic and social fields. Although there have been radical changes in every field in the last two hundred years, the same methods still continue to be used in education. Namely, teacher-centered, homework-based system is still used mostly. In the information age of students who are integrated with technology and who use social networks well, it is thought that their participation in the course will be increased with Web 2.0-based applications, and the lessons will contribute to reaching the goals of the program. For this reason, in this study, the "flipped classroom" application, which is one of the educational methods that uses technology and provides responsibility for the student, is included.

Keywords: Flipped classroom, Education Methods, Web 2.0 applications

1. INTRODUCTION

In the Flipped Classroom model, it tries to make the best use of technological infrastructures, multimedia resources and digital technologies to support learning and school activities arranged to be daily life and student activities. In this method, teachers have a great role in the preparation and selection of supportive learning materials that can be used by students wherever and whenever they want. In this sense, teachers should be encouraged. In addition, the teacher supporting different learning styles should be a guide in the classroom (Bhagat et al, 2016). In traditional learning, the teacher applies the method in the classroom within the framework of his own plan in the classroom. Although the teacher takes into account the individual differences of the students, these classes are generally teacher-centered (Herala et al, 2015). Regularly, in the classroom, based on the available resources of the class and following the same pace established by a teacher, all students must follow the same activities (Ash, 2012). Sometimes, the teacher gives some homework or asks for exercises to be completed outside the classroom to reinforce knowledge or raise other questions. In the flipped classroom model, the materials created or selected by the teacher (Short videos, Screencasts or Podcasts) are prepared for students to use outside the classroom (Tolks et al, 2016). In accordance with the learning rhythm of the student, the learning activity can be done whenever and wherever it feels most comfortable. In this model, the student works on the materials and resources shown by the teacher, and determines the issues that he has difficulty in and wants to clarify. Students also look for extra information and track their own learning rhythms, and they can review learning materials whenever they need. During the lesson, students who are divided into small groups are used in a more personalized learning environment to deepen the time allocated to the lesson, questioning and knowledge (Fautch, 2015). Meanwhile, the teacher helps to eliminate their misunderstandings and guides the students. In addition, the teacher should provide resources for

students and plan learning opportunities and suggest specific questions that can guide the learning process. Based on their own experience, the teacher should be able to predict and intervene where the students will need the most help, to be able to produce or select quality resources that lead students to learn on their own. In addition, the teacher has to constantly monitor their students by evaluating their work and provide them with every urgent and relevant feedback. The "turned" teacher is a reflexive professional in his own practice, who can flexibly manage his own lesson plan, understand different learning rhythms that can arise with students, know the interests of students, and take into account problems that may arise with students, and if a problem arises this is the guide (Cotta et al, 2016).

2. HISTORY OF FC APPLICATIONS

This method was first introduced in 2000 at an International Conference on Teaching, Learning by J. Wesley Baker. The translated classroom method, which is web-based learning management In the same year, Maureen Lage and her colleagues (Lage, Platt & Treglia, 2000) mentioned this method in an article published in the "Journal of Economic Education". Lage et al. Realized that the development of technologies and multimedia resources, their easy access and use, and the enthusiasm of students for them created a positive environment for their integration into teaching and learning processes (Zuber, 2016). Jon Bergman, who is known as the person who implemented and implemented the 'Translated Class' model at Warren High School in Chicago in the United States, says the following about this educational model: "The idea of the 'Translated Class' model is Jon Bergman: In 2007, and while we were teaching at a small school in Colorado in 2007, we noticed that some of our students had difficulties with some of the basic issues described in the classroom when they went home. So we realized that the best way for them to learn is with us in the classroom So the 'Translated Class' model is a really simple method. You take the part you teach in the class, your students watch these lessons at home thanks to some software. " This method allows students to become their own teachers and to be responsible for their own training. In this way, students can watch the videos of their lessons at home (Maher et al, 2015). The results of the researches on the preparation of the course by students and doing their homework in the classroom revealed that the method in question significantly increased the success of the students (Rahman et al, 2016).

3. STAGES OF FC APPLICATIONS

The most important feature of this model is that it takes individual differences into consideration. It includes students who are unable to concentrate on lessons with low learning rhythm, as well as students who learn fast and are impatient when teachers constantly repeat explanations and demonstrations. This learning model can also be considered as an alternative for students who do not have the opportunity to attend classes. When teachers are closer to students and interact with them more often, they naturally get to know them better (Phillips and Trainor, 2014). In this way, the teacher-student relationship increases even more. In addition, the working environment in groups allows students to socialize. In addition to increasing the socialization of the students working in their own rhythms in groups, it also eliminates the learning inequalities caused by the learning activity offered by the teacher in his own unilateral rhythm. In short, students who learn very fast and are bored with the lesson, or students who do not understand the subject due to not catching the rhythm of the late learner and teacher are not available in this system. The student understands the subject of the course with video or slide documents at home, and does homework in the classroom (Slomanson, 2016).

4. PURPOSE OF FC APPLICATIONS

In the Flipped Classroom (FC), the teacher is responsible for determining all the course resources and materials. The students take part in the preparation of a prototype class or workshop on the subject to be covered. It is aimed to make students work on the subject by presenting content and designing the classroom and workshop environment. Students organize themselves in teams

according to their technical, aesthetic and organizational preferences in order to present content. Therefore, most of the work takes place outside the classroom, at home, at their own pace and according to their own preferences. Video content related to the course produced by students should be accessible at any time from anywhere. The main idea is to enable students to engage with new content in an engaging and motivating natural way. The main objectives of the FC learning model can be listed as follows; development of individual skills, collaboration and self-study, self-learning organization, research, development of critical thinking and learning to learn. In FC practices, the teacher should give the working groups sufficient time and be familiar with the roles and competencies of the group members (Missildine et al, 2013).

5. WEBSITES DESIGNED FOR FC APPLICATIONS

5.1. Popplet

Used as a mind map, Popplet helps students visually think and learn. Students can capture concepts, thoughts, and images, and learn to relate. Students can share their mind maps on social media, print them as pdf, jpg, png, and send them via e-mail. You can make enough use of the free version of the program. Although the program is in English, thanks to the translation plugin in the search engines, the student can use it in their own language and download it to computers, tablets, phones.

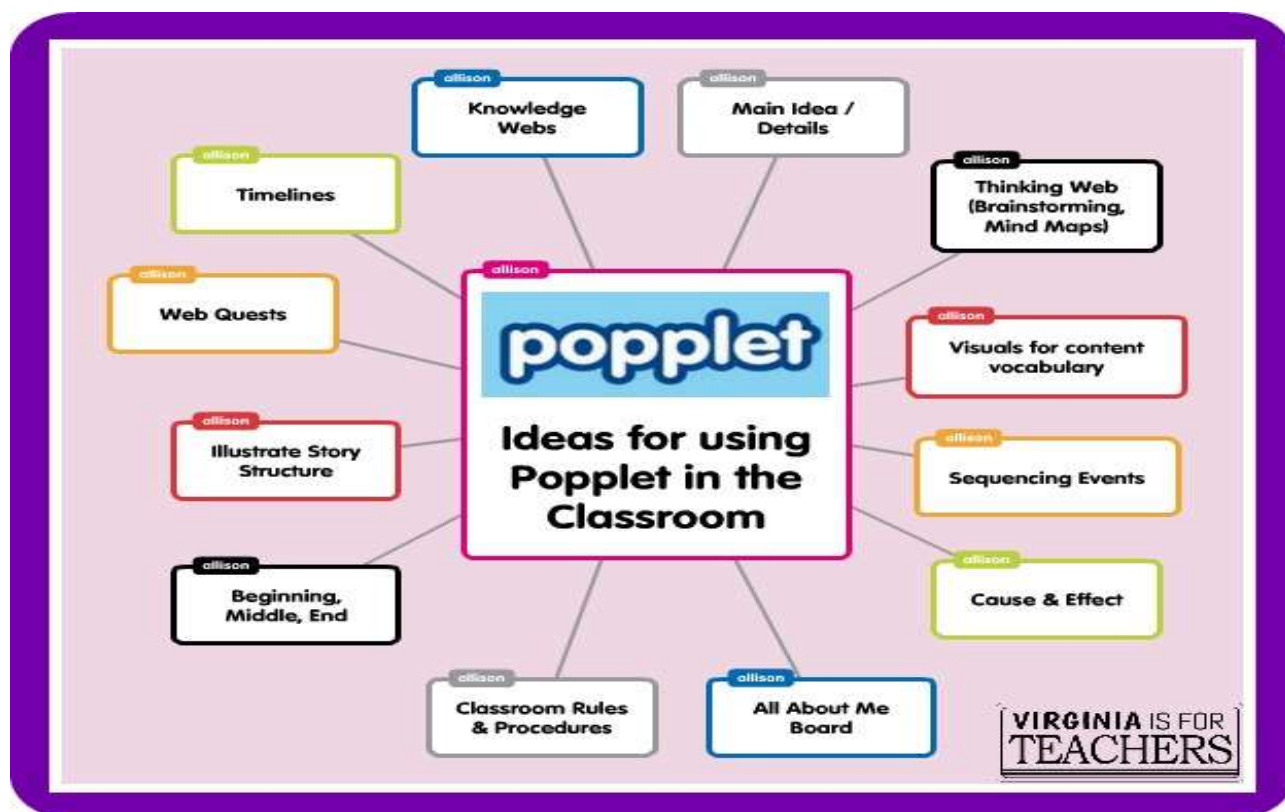
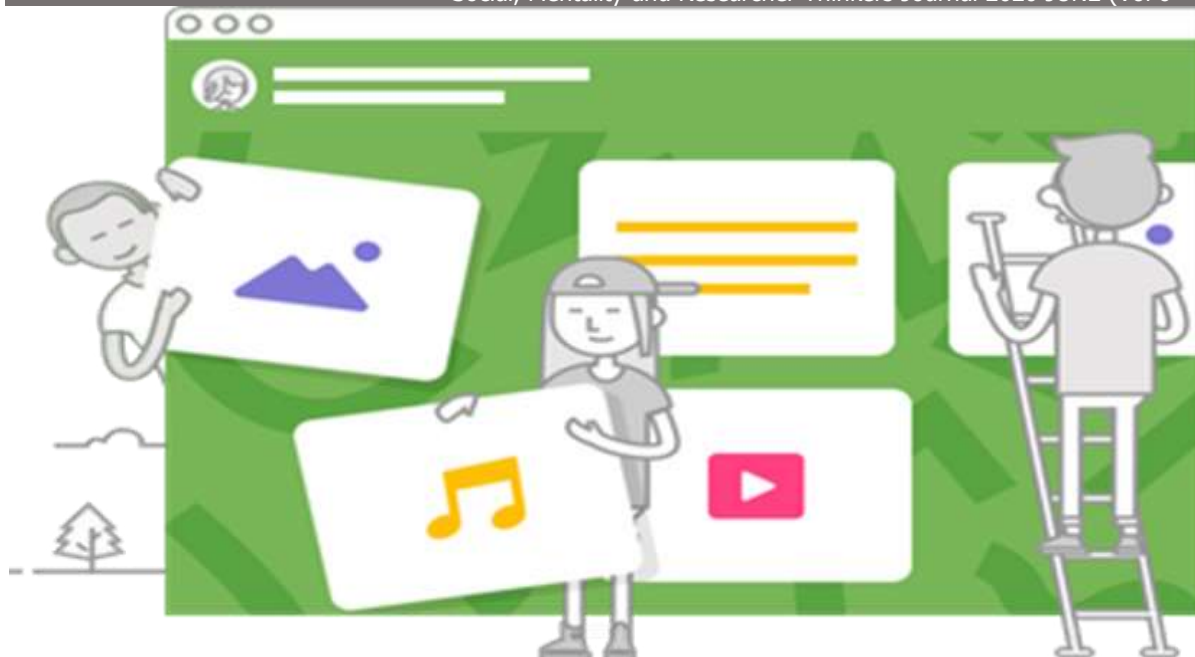


Figure 1. Popplet website description scheme

5.2. Padlet

Padlet is software that people use to make content and share content with others. Somewhere between a document and a full-fledged website, Padlet can be created with either a quick bulletin board, a blog or a portfolio. The padlet, which was inspired by the education boards in schools, works as an education portal that allows students to design a panel electronically and prepare their homework on this board and make a presentation.



Figure

2. Graphical representation of the Paddlet website functions.

5.3. Explee

Explee is an application that allows you to prepare a presentation by adding a drawing effect to text and pictures. With Explee, the old board seen in the classroom is updated and modernized. Active animation and drawings can be made with this easy-to-use application

6. DISCUSSION

As a result of the fact that the students are faced with a lot to learn from a young age, the child avoids, moves away, and creates insensitive behaviors. The result is a generation that is considered lazy and unsuccessful. Lack of lesson hours allocated for some lessons, Students 'being outside their interests, being held responsible for subjects and lessons that are not capable, Many of the students coming to high schools are not at a level to support their high school curriculum, Lack of education in areas suitable for students' abilities, inadequate physical orientation, It will be beneficial to try the training program, in which new training methods, where social activities are predominant, are also applied. Especially during the lesson, the student's lesson is adopted and contributes to the lesson process with the flipped classroom method, where the student's effectiveness and responsibility are high. In this way, the learning activity becomes more efficient.

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