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A STUDY ON THE EFFECTIVENESS OF FLIPPED LEARNING MODEL

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Abstract

The development of technology in the field of education has led to the emergence of different teaching methods recently. Flipped Learning (or Inverted Learning) is a recently emerged method in which learners begin to become familiar with the concepts outside the classroom through videotape lessons, articles, and online materials. Unlike traditional learning, in Flipped classrooms, learners actively work on problem-solving activities that require the application of previous knowledge. This descriptive integrative literature review, adopting a qualitative research design, aims to investigate the effectiveness of Flipped Learning. The number of data obtained from online journal articles (Google Scholar, Dergipark, ResearchGate, and Academia), masters and doctoral theses (Thesis Center of Turkish Higher Education Council (YÖKTEZ), and university databases) is 75. Content analysis technique was employed while analyzing the data. The studies examined within the scope of the research were divided into three categories according to their results: The effect of Flipped Learning on a) student achievement b) classroom participation and motivation c) students' attitudes. The results showed that Flipped Learning has a positive effect on student achievement and participation. According to results it is also shown that both learners and teachers have positive attitudes towards Flipped Learning and students are highly motivated in these classrooms.

Article Type: *Research Article*

Key words: *flipped learning, effectiveness, learner achievement, classroom participation, beliefs and attitudes, learning models*

Jel code: *I-20*

Teknoloji Destekli Esnek Öğrenme Modelinin Etkililiği Üzerine Bir Çalışma

Öz

Teknolojinin hızlı gelişimi ve eğitimde öğretim sürecinde aktif olarak kullanılması ile birçok yeni öğretim yöntemi ortaya çıkmıştır. Bu güncel yöntemlerden birisi olan Teknoloji Destekli Esnek Öğrenme (Ters Yüz Öğrenme ya da Dönüştürülmüş Öğrenme Modeli olarak da adlandırılmaktadır), öğrencilerin kavramlara sınıf dışarısında video dersleri, makale ve interaktif materyaller ile aşina olmaya başladığı ve öğrenme süreci içerisinde aktif olarak rol aldığı öğrenci merkezli bir öğretim yöntemidir. Geleneksel öğrenmenin aksine, Teknoloji Destekli Esnek Öğrenme sınıflarında öğrenciler aktif olarak, dersten önce çevrimiçi materyaller sayesinde edinmiş oldukları bilgilerinin uygulanmasını gerektiren problem çözme aktiviteleri üzerinde çalışmaktadırlar. Nitel araştırma desenini benimseyen bu bütünleştirici alan yazını taraması Teknoloji Destekli Esnek Öğrenmenin etkililiğini doküman analizi yolu ile araştırmaktadır. Araştırma kapsamında Google Scholar, Dergipark, ResearchGate, Academia, YÖKTEZ ve üniversite veri tabanlarına erişilmiş ve bu alanda yazılmış makaleler ve tezler incelenmiştir. Araştırma kapsamında incelenen çalışmaların toplam sayısı 75dir. Veri analizi bölümünde ise içerik analizi yöntemi kullanılarak incelenen çalışmalar

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sonuçları bakımından üç temel kategoriye ayrılmıştır. Bu kategoriler Teknoloji Destekli Esnek Öğrenmenin a) öğrenci başarısına, b) öğrencinin sınıf içi katılımı ve motivasyonuna c) öğrencinin derse karşı sahip olduğu tutuma etkisi şeklinde sınıflandırılmıştır. Sonuçlar, Teknoloji Destekli Esnek Öğrenmenin öğrenci başarısı, derse katılım ve sınıf içi motivasyon bağlamında olumlu bir etkiye sahip olduğunu göstermiştir. Ayrıca, sonuçlara göre hem öğretmenler hem de öğrenciler Teknoloji Destekli Esnek Öğrenme yöntemine karşı olumlu bir tutum sergilemektedir.

Makale Türü: *Araştırma Makalesi*

Anahtar sözcükler: *teknoloji destekli esnek öğrenme, ters yüz öğrenme, öğrenme modelleri*

Jel kodu: *I-20*

INTRODUCTION

The rapid development of technology has led to some changes in education as well as in many other fields. Many new teaching methods have emerged with the use of technology in education. Flipped Learning (FL) (Inverted learning, or sometimes referred as The Flipped Classroom Model) is one of these new teaching methods in which learners begin to become familiar with the concepts before the actual lessons with the help of videotape lectures, articles or online materials. Unlike traditional learning, in flipped classrooms, learners actively work on problem-solving activities that require the application of previous knowledge that they have learned before the actual lesson (Bergman and Sams, 2014).

The Flipped Classroom model has four basic pillars associated to the acronym FLIP

Table 1. The Four Pillars of Flipped Learning (FLN, 2014:2).

Flexible Environment: Flexible learning environment refers to the learning environment in which learners are given the flexibility to choose when and where they will learn, and the opportunity to learn in different ways and at different speeds.
Learning Culture: The learners are actively involved in the process while constructing and shaping knowledge through participation and self-evaluation.
Intentional Content: Intentional Content means teachers' preparation of content based on a student-centered approach in order to maximize classroom time.
Professional Educator: The educator plays an important role in preparing, organizing the content and creating the learning environment and monitoring the learning process effectively.

Flipped Learning is a fairly new concept and therefore studies in this field are of great importance for understanding the nature of this method. There are many experimental studies investigating the effect of Flipped Learning on student achievement, and classroom participation. However, in order to understand the effectiveness of this method comprehensively, collecting the documents focusing on Flipped Learning is essential. Hence, this study aims to investigate the effectiveness of Flipped Learning through integrative literature review and document analysis.

Review of Literature

The term 'Flipped Learning' (derived from the word -to flip) or 'inverted learning' refers to "A pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter" (FLN, 2014:1). Flipped Learning is a learner-centered learning and teaching model and it "turns the traditional classroom upside-down" (Harris, Harris, Reed and Zelihic, 2016:327). The main principle of Flipped Learning is that learners begin to become familiar with the new concepts outside the classroom through videotaped lectures, articles, online materials and during the lesson they work actively with their peers on problem-solving activities or discussions that require the application of the knowledge they have learned before the actual lesson (Bergmann and Sams, 2012; Cohen and Brugar, 2013; Milman, 2012).

Table 2. Advantages of Flipped Learning Model (Bergmann and Sams, 2014; Chao, Chen and Chuang, 2015; Educause, 2012; Fulton, 2012; Muldrow, 2013).

It increases the amount of interaction between students and teachers
It allows learners to move at their own pace
It allows teachers to use class time effectively
It promotes group discussions, peer interactions and cooperative learning
It motivates learners and teachers for professional development
It gives more responsibility to learners and increases their metacognitive awareness
It enables deeper learning and promotes active learning
It allows for differentiation

Table 3. Disadvantages of Flipped Learning Model (Bergmann and Sams, 2014; Bergmann and Waddell, 2012; Milman, 2012; Raths, 2014; Roach, 2014).

The application of the method requires that both the teacher and the students have a certain technological equipment and competence.
Learners may find it difficult to prepare before the lesson.
It can be challenging for beginners.
Poor quality of videos may cause problems in learning.
Some learners may not want to watch a video before the lesson.
It may cause problems among students who prefer traditional classroom instructions.

Methodology

Research Questions

This research 'A Study on the Effectiveness of Flipped Learning Model' aims to investigate the following research questions:

a) What is the impact of Flipped Learning on student achievement?

b) What is the impact of Flipped Learning on student motivation and class participation?

c) What are the attitudes of teachers and students towards learning Flipped Learning?

Research Design

This research is a descriptive integrative literature review adopting a qualitative research design. Integrative literature review refers to "a review method that summarizes past empirical or theoretical literature to provide a more comprehensive understanding of a particular phenomenon" (Broome, 1993:231-250).

Data Collection, Analysis and Procedure

Making use of document analysis from the articles and theses, this integrative literature review adopting a qualitative research design aims to investigate the effectiveness of The Flipped Learning Model. The data for this research was obtained from online journal articles (Google Scholar, Dergipark, ResearchGate, and Academia), masters and doctoral theses

(Thesis Center of Turkish Higher Education Council (YÖKTEZ), and university databases.)

Content analysis was employed while analyzing the data and themes and categories were formed according to the findings. Content analysis refers to a research technique based on naturalistic and interpretive approach for making inferences objectively and systematically (Holsti, 1968). The number of articles and theses obtained from various sources are as follows:

Table.4 Number of Articles and Theses with Sources

Data Source	Evaluation Studies	Number of Studies
Google Scholar	Amiryousefi, 2019; Basal, 2015; Bauer-Ramazani, Graney, Marshall and Sabieh, 2016; Bergmann, Overmyer and Wilie, 2013; Chen Hsieh and Wu, 2017; Chuang, Weng and Chen, 2018; Engin, 2014; Hao, 2016; Huang and Hong, 2016; Hung, 2015, 2017; Hwang, Lai and Wang, 2015; Lin and Hwang, 2018; Loucky and Ware, 2016; Webb, Doman and Pusey, 2014; Wong and Chu, 2014; Wu and Hsieh and Yang, 2017; Zainuddin and Attaran, 2016.	**18**
Dergipark	Akgün and Atıcı, 2017; Boyraz and Ocak, 2017; Ekmekci, 2017; Güvenç, 2015; Karaaslan and Çelebi, 2017; Karadeniz, 2018; Kaydet and Özkan, 2019; Kırmızı and Kömeç, 2019; Özdemir and Açık, 2019; Özkurkudis and Bümen, 2019; Sarıgöz, 2017; Şenel and Kahramanoğlu, 2018; Talan and Gülseçen, 2019.	**13**
ResearchGate	Abdelshaheed, 2017; Bang, 2017; Day and Foley, 2006; Fauzan and Ngabut, 2018; Jauasooriya, 2016; Kastuhandani, 2016; Kim, 2018; Leis, 2016; Meibom, Sadler, Moses and Litzkow, 1994; Moffett and Mill, 2014; Simko, Pinar, Pearson, Huang, Mutch, Patwary and Ryan, 2019.	**11**
Academia	Al-Harbi and Alshumaimeri, 2019; Alwaqdani, 2018; Al-Zahrani, 2015; Angelini and García-Carbonell, 2019; Buitrago and Díaz, 2018;	**14**

	Chavarro and González, 2019; Cukurbasi and Kiyici, 2017; Durán-Bautista, 2019; Girmen and Kaya, 2019; Goda, Yamada, Hata, Matsukawa and Yasunami, 2016; Karaoğlan Yılmaz and Öztürk, 2017; Lee and Davis, 2018; Sohrabi and Mohammadi , 2019; Su and Chen, 2018.	
Thesis Center of Turkish Higher Education Council (YÖKTEZ)	Akçor, 2018; Alpat, 2019; Aydemir, 2019; Bulut, 2018; Çalışkan, 2016; Çavdar, 2018; Göksu, 2018; Gürlüyer, 2019; İyitoğlu, 2018; Karakurt, 2018; Kömeç, 2018; Köroğlu, 2015; Özkal, 2019; Öztürk, 2018; Özüdoğru, 2018; Qader, 2017; Seçilmişoğlu, 2019; Tuna, 2017; Yurdagül, 2018.	**19**
Total		**75**

Results

Table 5. Detailed Analysis of the Articles and Theses

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Abdelshaheed, 2017;	Mixed Research Design	Pre and post tests and online surveys about students' feelings	Student achievement Classroom Participation and Motivation Students' attitudes
Akçor, 2018;	Mixed Research Design	Perception of Flipped Learning Experience Questionnaire and Learning Experience Survey (LES), interviews	Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Akgün and Atıcı, 2017;	Mixed Research Design	Pre and post tests, interviews and surveys	Student achievement Classroom participation and Motivation Students' attitudes
Al-Harbi and Alshumaimeri, 2019;	Mixed Research Design	Pre and post tests, student questionnaire and semi-structured interviews	Student achievement Classroom participation and Motivation Students' attitudes
Alpat, 2019;	Experimental Research Design	The California Critical Thinking Level Inventory survey, questionnaire, and interviews	Student achievement Classroom participation and Motivation
Alwaqdani, 2018;	Mixed Research Design	Semi-structured interviews and student questionnaire	Classroom participation and Motivation Students' attitudes
Al-Zahrani, 2015;	Mixed Research Design	A survey questionnaire	Student achievement Classroom participation and Motivation Students' attitudes
Amiryousefi, 2014;	Mixed Research Design	Achievement tests, Learning Experience Questionnaire, open-ended questions	Student achievement Classroom participation and Motivation Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Angelini and García-Carbonell, 2019;	Experimental Research Design	Pre and post tests	Student achievement
Aydemir, 2019;	Mixed Research Design	Learning Experience Questionnaire (LEQ), pre-post-tests and Self-Regulated Learning Scale, interviews, observation, journals	Student achievement Students' attitudes
Bang, 2017;	Mixed Research Design	Pre and post tests, questionnaire and interviews	Student achievement Classroom participation and Motivation Students' attitudes
Basal, 2015;	Qualitative Research Design	Open-ended questions	Students' attitudes
Bauer-Ramazani, Graney, Marshall and Sabieh, 2016;	Qualitative Research Design (Literature Review)	Document Analysis	Student achievement Classroom participation and Motivation Students' attitudes
Bergmann, Overmyer and Willie, 2013;	Qualitative Research Design (Literature Review)	Document Analysis (3 Research)	Classroom participation and Motivation Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Boyraz and Ocak, 2017;	Quasi Experimental Research Design	Pre and post tests, and interviews	Student achievement Classroom participation and Motivation Students' attitudes
Buitrago and Díaz, 2018;	Qualitative Research Design (Book Chapter)	Document Analysis	Student achievement Classroom participation and Motivation Students' attitudes
Bulut, 2018;	Experimental Research Design	Pre and post test	Student achievement
Chavarro and González, 2019;	Action Research	Teacher's journal (TJ), Students' reflections (SR) and students' exam results, group interviews	Student achievement
Chen Hsieh and Wuh, 2017;	Mixed Research Design	Pre and post tests, focus group interviews	Student achievement Classroom participation and Motivation Students' attitudes
Chuang, Weng and Chen, 2018;	Mixed Research Design	Pre and post tests, Motivation Scale	Student achievement Classroom participation and Motivation Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Çalışkan, 2016;	Mixed Research Design	Pre and post tests, observations and interviews	Student achievement Classroom participation and Motivation Students' attitudes
Çavdar, 2018;	Mixed Research Design	Pre and post tests, teaching journal, attitudes questionnaire and interviews	Students' attitudes
Cukurbasi and Kiyici, 2017;	Qualitative Research Design	Open-ended questions	Students' attitudes
Day and Foley, 2006;	Quasi Experimental Research Design	Pre and post test	Student achievement
Durán-Bautista, 2019;	Qualitative Research-Based (Book Chapter)	Document Analysis	Students' attitudes
Ekmekci, 2017;	Mixed Research Design	Pre and post tests, semi-structured interviews	Student achievement Classroom participation and Motivation Students' attitudes
Engin, 2014;	Qualitative Research Design	Open-ended questions, interviews, students' feedback	Students' attitudes
Fauzan and Ngabut, 2018;	Survey Research Design	Likert type questionnaire and open-ended questions	Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Girmen and Kaya, 2019;	Action Research Design	Observation, diaries, semi-structured interviews	Student achievement Classroom participation and Motivation
Goda, Yamada, Hata, Matsukawa and Yasunami, 2016;	Experimental Research Design	Pre and post-FLCAS assessments	Student achievement Classroom participation and Motivation Students' attitudes
Göksu, 2018;	Mixed Research Design	Pre and post tests, English Attitude Scale, English Learning Anxiety Scale, student diaries, observations, interviews	Student achievement Classroom participation and Motivation Students' attitudes
Gürlüyer, 2019;	Mixed Research Design	Pre and post tests, questionnaire and diaries	Student achievement Students' attitudes
Güvenç, 2015;	Mixed Research Design	Teacher's observational field notes, students' reflections, a final survey	Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Hao, 2016;	Scale Development Study	The Flipped Learning Readiness Scale of Foreign Language Classes of the Middle School Students	Students' attitudes
Huang and Hong, 2016;	Mixed Research Design	Pre and post tests, observations, interviews	Student achievement Classroom participation and Motivation
Hung, 2015;	Quasi Experimental Research Design	Pre and post tests	Student achievement
Hung, 2017;	Mixed Research Design	Speaking test, observation, satisfaction survey	Student achievement Classroom participation and Motivation Students' attitudes
Hwang, Lai and Wang, 2015;	Qualitative Research Design (Literature Review)	Document Analysis	Student achievement Classroom participation and Motivation
İyitoğlu, 2018;	Mixed Research Design	Achievement test, semi-controlled interviews	Student achievement Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Jauasooriya, 2016;	Action Research Design	Pre and post tests, interviews	Student achievement Classroom participation and Motivation Students' attitudes
Karaaslan and Çelebi, 2017;	Mixed Research Design	Focus group meeting, self-report questionnaires	Students' attitudes
Karadeniz, 2018;	Mixed Research Design	Pre and post tests, The attitude scale, the social presence scale	Student achievement Classroom participation and Motivation Students' attitudes
Karakurt, 2018;	Mixed Research Design	Pre and post tests, The attitude scale, semi-structured interviews	Student achievement Classroom participation and Motivation Students' attitudes
Karaoğlan Yılmaz and Öztürk, 2017;	Quasi Experimental Research Design	Pre and post test	Student achievement
Kastuhandani, 2016;	Qualitative Research Design	Observations, and in-depth interviews, students' reflections	Classroom participation and Motivation Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Kaydet and Özkan , 2019;	Mixed Research Design	Pre and post tests, Satisfaction survey	Student achievement Classroom participation and Motivation Students' attitudes
Kırmızı and Kömeç, 2019;	Experimental Research Design	Post test	Student achievement
Kömeç, 2018;	Mixed Research Design	Questionnaire and interviews	Students' attitudes
Kim, 2018;	Experimental Research Design	Pre and post test	Student achievement
Köroğlu, 2015;	Mixed Research Design	Pre and post tests, students' response papers	Student achievement Classroom participation and Motivation Students' attitudes
Lee and Davis, 2018;	Qualitative Research Design (Literature Review)	Document Analysis	Student achievement
Leis, 2016;	Experimental Research Design	Post test	Student achievement
Lin and Hwang, 2018;	Mixed Research Design	Speaking test, students perceptions survey questionnaire	Student achievement Classroom participation and Motivation Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Loucky and Ware, 2016;	Qualitative Research Design (Book Chapter)	Document Analysis	Student achievement Classroom participation and Motivation Students' attitudes
Meibom, Sadler, Moses and Litzkow, 1994;	Mixed Research Design	Pre and post tests, self-assessments, feedbacks.	Student achievement Classroom participation and Motivation Students' attitudes
Moffett and Mill, 2014;	Mixed Research Design	Written test, questionnaire and research project	Student achievement
Özdemir and Açık, 2019;	Mixed Research Design	Pre and post tests, video records	Student achievement Classroom participation and Motivation Students' attitudes
Özkal, 2019;	Mixed Research Design	Pre and post tests, self-efficacy scale, a FL attitude scale, interviews, self-reports	Student achievement Classroom participation and Motivation Students' attitudes
Özkurkudis and Bümen, 2019;	Mixed Research Design	Pre and post test, interviews	Student achievement Classroom participation and Motivation Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Öztürk, 2018;	Mixed Research Design	Pre and post tests, satisfaction questionnaire self-assessment likert survey	Student achievement Students' attitudes
Özüdoğru, 2018;	Mixed Research Design	Achievement Test (AT), Classroom Environment Perceptions Scale, Student Questionnaire and interview	Student achievement
Qader, 2017;	Mixed Research Design	Pre and post tests, questionnaire and interviews	Student achievement Students' attitudes
Sarıgöz, 2017;	Qualitative Research Design (Systematic Literature Review)	Document Analysis	Student achievement
Seçilmişoğlu, 2019;	Mixed Research Design	Pre and post tests, Likert-scale questionnaire and semi-structured interviews	Student achievement Classroom participation and Motivation Students' attitudes
Simko, Pinar, Pearson, Huang, Mutch, Patwary and Ryan, 2018;	Mixed Research Design	Qualitative student surveys and quantitative student opinion surveys	Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Sohrabi and Mohammadi, 2019;	Mixed Research Design	Quick placement test, observations, writing tests, interviews	Student achievement Classroom participation and Motivation Students' attitudes
Su and Chen, 2018;	Scale Development Study	Questionnaire	Classroom participation and Motivation Students' attitudes
Şenel and Kahramanoğlu, 2018;	Qualitative Research Design (Case Study)	Structured interviews, surveys and observations	Students' attitudes
Talan and Gülseçen, 2019;	Mixed Research Design	Pre and post tests, academic achievement tests, Academic Engagement Scale (AES)	Student achievement Classroom participation and Motivation Students' attitudes
Tuna, 2017;	Mixed Research Design	Pre and post tests, student survey, focus group interview, writing task quiz, observation forms, student feedbacks, reflective teacher journals.	Student achievement Students' attitudes
Webb, Doman and Pusey, 2014;	Qualitative Research Design	Questionnaires and teacher reflections	Students' attitudes

Research Author(s)	**Research Design**	**Employed Techniques**	**FL Has Positive Effect on**
Wong and Chu, 2014;	Mixed Research Design	Pre and post tests, open-ended survey	Student achievement Classroom participation and Motivation Students' attitudes
Wu, Hsieh and Yang, 2017;	Mixed Research Design	Pre and post tests, student attitude scale	Student achievement Classroom participation and Motivation Students' attitudes
Yurdagül, 2018;	Mixed Research Design	Interviews, The Computer Programming Self-Efficacy Scale, Classroom Engagement Scale, The Computer Programming Attitudes Scale, surveys	Classroom participation and Motivation Students' attitudes
Zainuddin and Attaran, 2016;	Mixed Research Design	Survey, focus group and individual interviews	Classroom participation and Motivation Students' attitudes

CONCLUSION

The development of technology in the field of education has led to the emergence of different teaching methods recently. The main principle of modern approaches is creating a student-centered learning environment where the learners can construct the new information. Flipped Learning is one of these methods in which learners begin to become familiar with the new concepts outside the classroom, and during the lesson they work actively in the classroom with their peers cooperatively on problem-solving activities or discussions that require the application of the knowledge they have learned before the actual lesson.

Flipped Learning has been the subject of much research. In studies investigating the effectiveness of Flipped Learning on student achievement, a significant difference in the exam/post-test results of learners in flipped classrooms can be seen. Therefore, it can be inferred that Flipped Learning has a positive effect on student achievement while teaching a course subject. The fact that Flipped Learning allows students to practice more in the classroom contributes greatly to the development of students.

Motivation and participation level of students in flipped classrooms is another issue which researchers focus on. Many studies investigated the effect of Flipped Learning on student motivation and classroom participation by means of observations, interviews, scales and questionnaires and the results of these studies showed that participation level of learners is considerably high and learners are highly motivated in flipped classrooms. The reason behind that is Flipped Learning requires pre-study before the actual lesson. During the actual lesson, instead of focusing on theoretical knowledge, learners work on problem-solving activities and discussions which improve learners' communication skills. Therefore, learners' pre-study before the class allows them to participate in lessons actively and effectively and learners can be highly motivated in flipped classrooms. However, it should be considered that lack of preparation before the lesson may adversely affect participation level of learners and their motivation.

The attitudes of learners towards Flipped Learning have been investigated by many researchers. The results of these studies have shown that learners have positive attitudes towards Flipped Learning in these classrooms. As Flipped Learning allows learners to be active in the classroom through various tasks and activities, students may have positive attitudes in such classrooms.

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GENİŞLETİLMİŞ ÖZET

Teknoloji Destekli Esnek Öğrenme Modelinin Etkililiği Üzerine Bir Çalışma

Giriş

Teknolojinin hızlı gelişimi, eğitim alanında ve diğer birçok alanda bazı değişikliklere neden olmuştur. Eğitimde teknolojinin kullanımı ile birçok yeni öğretim yöntemi ortaya çıkmıştır. Teknoloji Destekli Esnek Öğrenme (Ters Yüz Öğrenme veya bazen Dönüştürülmüş Sınıf Modeli olarak da adlandırılır), öğrencilerin videokaset dersleri, makaleler veya çevrimiçi materyaller yardımıyla gerçek derslerden önceki kavramları öğrenmeye başladıkları güncel öğretim yöntemlerinden biridir. Geleneksel öğrenimin aksine, Teknoloji Destekli Esnek Öğrenme sınıflarında, öğrenciler aktif olarak, dersten önce öğrendikleri önceki bilgilerin uygulanmasını gerektiren problem çözme etkinlikleri üzerinde çalışırlar.

Çalışmanın Amacı ve Yöntem

Teknoloji Destekli Esnek Öğrenme oldukça yeni bir kavramdır ve bu nedenle bu alandaki çalışmalar bu yöntemin daha iyi anlayabilmek için büyük öneme sahiptir. Teknoloji Destekli Esnek Öğrenmenin öğrenci başarısı ve derse katılım üzerindeki etkisini araştıran birçok deneysel çalışma bulunmaktadır. Ancak, bu yöntemin etkililiğini kapsamlı bir şekilde anlamak için, Teknoloji Destekli Esnek Öğrenmeye ilgili yapılmış olan çalışmaların alan yazını taraması ile toplanması bu modelin daha iyi anlaşılmasına oldukça katkı sağlayacaktır. Bu nedenle, bu çalışma alan yazını taraması ve doküman analizi yoluyla Teknoloji Destekli Esnek Öğrenme Modelinin etkililiğini araştırmayı amaçlamaktadır.

Bu araştırma aşağıdaki araştırma soruları üzerine odaklanmaktadır.

a) Teknoloji Destekli Esnek Öğrenme Modelinin öğrencinin başarısı üzerindeki etkisi nedir?

b) Teknoloji Destekli Esnek Öğrenme Modelinin öğrenci motivasyonu ve derse katılım üzerindeki etkisi nedir?

c) Öğretmenlerin ve öğrencilerin Teknoloji Destekli Esnek Öğrenme Modeline karşı tutumları nelerdir?

Bulgular ve Sonuç

Teknoloji Destekli Esnek Öğrenme Modeli birçok araştırmanın konusu olmuştur. Bu modelin öğrenci başarısı üzerindeki etkisini araştıran çalışmalarda, Teknoloji Destekli Esnek Öğrenme sınıflarındaki öğrencilerin başarısında geleneksel yöntemlerle öğrenim görmekte olan sınıftakilere kıyasla önemli bir fark gözlenmiştir. Bu nedenle, Teknoloji Destekli Esnek Öğrenme modelinin öğrencinin başarısını olumlu yönde etkilediği sonucuna varılabilir.

Öğrencilerin Teknoloji Destekli Esnek Öğrenme sınıflarındaki derse katılım düzeyleri, araştırmacıların odaklandığı başka bir konudur. Pek çok çalışma, Teknoloji Destekli Esnek Öğrenme sınıflarında öğrencilerin katılım düzeyinin oldukça yüksek olduğunu göstermiştir.

Teknoloji Destekli Esnek Öğrenme Modeline karşı tutumları araştıran çalışmalara bakıldığında ise, öğretmenlerin ve öğrencilerin bu modele karşı olumlu bir tutuma sahip olduğu ve bu sınıflardaki öğrenci motivasyonunda çarpıcı bir artış olduğu görülmektedir.

Sonuç olarak, Teknoloji Destekli Esnek Öğrenme Modeli birçok çalışmada oldukça etkili bulunurken, modelin ön hazırlık ve teknolojik donanım gerektirmesi bu modelin dezavantajları arasında gösterilmektedir. Teknoloji Destekli Esnek Öğrenme Modelinin bu koşullar sağlandığı takdirde etkili öğrenme sağlayacağı görülmektedir. Teknoloji Destekli Esnek Öğrenme Modelinin daha iyi anlaşabilmesi içinse bu alanda yapılacak olan çalışmalar büyük önem teşkil etmektedir.